OBJECT FUNCTIONS AND THE SYNTAX OF
DOUBLE OBJECT CONSTRUCTIONS
IN LEXICAL FUNCTIONAL GRAMMAR

by
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It has long been observed that, in a double object construction (DOC), the two objects exhibit different syntactic behaviour. In Lexical Functional Grammar (LFG), these two objects are characterized as two distinct grammatical functions. The object that syntactically patterns with the monotransitive object is the unrestricted object OBJ. The one that does not is the restricted object OBJ_θ. The goals of this dissertation are to investigate the syntax of DOCs, and to explore the two object functions in LFG.

When thinking about DOCs, the verb that almost invariably comes to mind is GIVE. This verb, however, may not be as prototypical as is commonly assumed. In Cantonese, it is the only verb whose objects are in an anomalous order, with the object that bears the theme role preceding the object which expresses the recipient role. Cantonese as a language does not uniformly have the direct (theme) object
preceding the indirect (recipient) object. Other than the difference in their linear order, the objects in the GIVE-construction pattern with those in all other DOCs in the language.

In some languages, there is a possibility of having more objects than is required by the underived form of a verb. An additional object can be licensed by the affixation of an applicative morpheme to the verb root. The syntax of the objects in an applicative construction is directly related to the type of semantic role that is applied. This has posed challenges for previous accounts of applicative constructions, as a change in the morphological structure of a verb is accompanied by a change in its argument structure. A new proposal is offered to account for this.

A study of the syntax of DOCs involves much more than merely acknowledging the presence of two object functions in the construction. The morphology of the verb, the semantic roles that are required by the verb and the linear order of the arguments that express these roles are all relevant. Assuming various parallel but inter-related levels of representation, the theory of LFG has the suitable tools to take all these into consideration. Reference can be made straight-forwardly to the information at the different levels of representation, including the a-structure, the c-structure, the f-structure and the m-structure.
# List of Abbreviations

<table>
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<tr>
<th>Abbr</th>
<th>Meaning</th>
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<th>Meaning</th>
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<tbody>
<tr>
<td>Abl</td>
<td>absolutive case</td>
<td>OM</td>
<td>object marker</td>
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<td>Acc</td>
<td>accusative case</td>
<td>Part</td>
<td>partitive case</td>
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<td>Ag</td>
<td>agent</td>
<td>Pass</td>
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<td>Appl</td>
<td>applicative affix</td>
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<td>article</td>
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<td>Pl</td>
<td>plural number</td>
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<td>benefactive</td>
<td>Poss</td>
<td>possessor</td>
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<tr>
<td>Caus</td>
<td>causative affix</td>
<td>PRED</td>
<td>predicate</td>
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<tr>
<td>CL</td>
<td>classifier</td>
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<td>Prn</td>
<td>pronoun</td>
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<td>definite</td>
<td>Prop</td>
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<td>experiencer</td>
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<td>F</td>
<td>feminine gender</td>
<td>Recp</td>
<td>reciprocal affix</td>
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<tr>
<td>Fv</td>
<td>final vowel</td>
<td>Rel</td>
<td>relative clause marker</td>
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<td>Rpt</td>
<td>recipient</td>
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<td>gender</td>
<td>Sfp</td>
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<td>sg</td>
<td>singular number</td>
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<td>instrument</td>
<td>SM/SB</td>
<td>subject marker</td>
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<td>SUBJ</td>
<td>subject</td>
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<td>Th</td>
<td>theme</td>
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<td>negation marker</td>
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<td>tense</td>
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<td>Nom</td>
<td>nominative case</td>
<td>1</td>
<td>first person</td>
</tr>
<tr>
<td>Num</td>
<td>number</td>
<td>2</td>
<td>second person</td>
</tr>
<tr>
<td>OBJ</td>
<td>unrestricted object</td>
<td>3</td>
<td>third person</td>
</tr>
<tr>
<td>OBJ₀</td>
<td>restricted object</td>
<td></td>
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</table>
Chapter 6

More Objects: The Case of Chichewa Applicatives

There are at least two types of double/ multiple object constructions in Chichewa. One involves an inherently ditransitive verb root such as *patsa* ‘to give’, while in the other type, one of the two objects is an applied object:

(1) a. **DOC with an inherently ditransitive verb root**
Mkango u-na-pats-a fisi nyemba
lion(3) 3SM-pst-give-fv hyena(1) beans(10)
‘The lion gave the hyena beans.’

b. **DOC with one of the objects being an applied object**
Mkango u-ku-phik-il-a ana nyemba
lion(3) 3SM-pres-cook-appl-fv children(2) beans(10)
‘The lion cooks the children beans.’

We will first consider the applicative affix in section 6.1, before moving on to the syntax of the applied type of double object construction in section 6.2. Section 6.3 focuses on the other type of double object construction where the two objects are licensed by an inherently ditransitive verb. Section 6.4 presents a formal analysis of the effect that the applicative affix has on argument structure within the LFG framework. Section 6.6 ends the chapter with a summary.

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1 All the examples are from Chichewa unless otherwise specified. I thank Sam Mchombo for all the discussions that we had on Bantu/ Chichewa morphosyntax, and for many of the Chichewa examples and their corresponding grammaticality judgments reported here.

2 The morpheme *-ku-* encodes the present tense, and may also encode the progressive aspect.
6.1 The Applicative Affix

The applicative affix introduces a non-agentive phrase/ clause that is not directly associated with the SUBJ function, unlike the causative affix, for instance (Mchombo 2004). It is an argument-structure-augmenting verbal affix, and most frequently it introduces a benefactive, instrument or locative role into the a-structure. In Chichewa, this affix has two allomorphs: -il- and -el-. Which allomorph is selected and affixed to the verb is constrained by rules of vowel harmony. The phrase/ clause introduced by the applicative affix may have one of the following five thematic roles: benefactive, instrumental, locative, circumstantial and malefactive\(^3\). Among these roles, the benefactive role seems to be the role that is most commonly associated with the applied argument cross-linguistically and historically. If the applicative morpheme introduces one type of semantic role only in a language, it is invariably be the benefactive role (Trithart 1983, in Mchombo 2004).

Furthermore, even in languages where more than one type of semantic role can be licensed by the applicative affix, it is not the case that each verb root allows the full range of possible applied semantic roles to be introduced into the clause/

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\(^3\) In this chapter, we will only consider the range of semantic roles that are commonly assumed in LFG, and leave aside the applied roles labelled ‘circumstantial’ and ‘malefactive’. Furthermore, in the case of the ‘circumstantial’ role, it has been shown in Mchombo (2004:88) that the grammatical function that realizes this role does not display object properties. It cannot, for instance, become the subject under passivization, and it cannot be object-marked on the verb root.
argument structure. Independently, the applicative affix does not contribute semantic content\(^4\) (Thwala 2006). Rather, it introduces an additional semantic role into the argument structure. It is the semantics of this extra role that is added to the meaning of the clause. The semantics of the applied argument must therefore be compatible with the lexical semantics of the verb root.

Consider now the following examples in Chichewa:

(2) a. With the underived verb root \(-pika\) ‘cook’:

\[
\text{mkango u-ku-phik-a nyemba} \\
\text{lion(3) 3SM-pres-cook-fv beans(10)}
\]

‘The lion cooks beans.’

b. A-structure: \(-phika\ <\ Ag, Pt >\)

(3) a. Benefactive role introduced by the applicative affix

\[
\text{Mkango u-ku-phik-il-a ana nyemba} \\
\text{lion(3) 3SM-pres-cook-appl-fv children(2) beans(10)}
\]

‘The lion cooks the children beans.’

b. A-structure: \(-phik-il-a <\ Ag, Ben, Pt >\)

(4) a. Instrument role introduced by the applicative affix (Mchombo 2004:87, e.g. 48b)

\[
\text{Kalulu a-ku-phik-il-a mkondo maungu} \\
\text{hare(1) 1SM-pres-cook-appl-fv spear(3) pumpkins(6)}
\]

‘The hare is cooking pumpkins with (using) a spear.’

b. A-structure: \(-phik-il-a <\ Ag, Instr, Pt >\)

\(^4\) See Simango (1995), however, for an analysis that treats the applicative affix as a ‘predicate’ and the affixation of the applicative affix to a verb as ‘predicate union’. It seems that the term ‘predicate’ used in his work is quite different from the LFG-typical ‘semantic content’ sense of the term. Simango has never attributed, or attempted to attribute, any semantic content to his applicative affix ‘predicate’. His assumption that it is a ‘predicate’ seems to be couched within the Relational Grammar framework and is based on his claim that it is capable of assigning grammatical functions.
(5) a. Locative role introduced by the applicative affix (Mchombo 2004:87, e.g. 49b)

Kalulu a-ku-phik-il-a pa chulu maungu
hare(1) 1SM-pres-cook-appl-fv on(16) anthill(7) pumpkins(6)
‘The hare is cooking the pumpkins on the anthill.’

b. A-structure: -phik-il-a < Ag, Pt, Loc >

In (2a), the verb root is in its most basic form, without any a-structure-changing morpheme affixed to it. The verb root -phika ‘cook’ is (mono)transitive, and subcategorizes for one object. The a-structure of the verb -phika is shown in (2b). Examples (3) to (5) show that an extra argument is licensed by the affixation of the applicative morpheme. In each of these cases, with the applicative affix -il- attached to the verb root -phika, the applied verb form becomes -phik-il-a, which subcategorizes for two objects. In (3), a benefactive argument ana ‘children’ is introduced. In (4), an instrument argument mkondo ‘spear’ is added, while in (5), the additional argument that is licensed is a locative argument pa chulu ‘on anthill’.

Which semantic role is introduced into the argument structure has a direct bearing on the object status of the postverbal arguments. It is not always the case that the introduced argument maps invariably to the unrestricted object function OBJ or to the restricted object function OBJθ. The relative prominence of the non-agentive semantic roles in the a-structure, as observed on the thematic
hierarchy assumed in LFG, is crucial. In the next section, we will consider in detail the complicated issue of unrestricted/ restricted objecthood in the applied type of double object constructions in Chichewa.

6.2 The Object Status of the Applied Argument - Restricted or Unrestricted?

It is not at all easy to identify the unrestricted object OBJ and the restricted object OBJ_{θ} in an applicative construction. Standard tests for unrestricted/ restricted objecthood (or primary/ secondary objecthood in the more general literature) in Bantu languages, including adjacency to the head verb, object-marking, extraction/relativization and passivizability give different results depending on the semantic role of the applied argument. As a quick summary and as mentioned in sections 3.2, 4.4 and 4.5, the object that behaves like the monotransitive object is the unrestricted object. The other object(s) is/ are the restricted object(s). We shall consider a few studies on the object status of the postverbal arguments in an applicative construction in Chichewa. These include Alsina and Mchombo (1990, 1993) and Simango (1995). Let us begin with a summary of the observations in Alsina and Mchombo (1990, 1993):
(6) How the applied argument behaves under tests for objecthood (assuming the object of the verb without the applicative affix bears the theme role)

<table>
<thead>
<tr>
<th>Semantic Role of Applied Argument</th>
<th>Benefactive (Ben)</th>
<th>Instrument (Instr)</th>
<th>Locative (Loc)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Object-marking</td>
<td>Ben only</td>
<td>either Instr or Th</td>
<td>either Loc or Th</td>
</tr>
<tr>
<td>Extraction/relativization</td>
<td>Not without an incorporated resumptive pronoun</td>
<td>OK</td>
<td>OK</td>
</tr>
<tr>
<td>Passivization</td>
<td>Ben</td>
<td>Instr</td>
<td>Loc / Th</td>
</tr>
<tr>
<td></td>
<td>SUBJ</td>
<td>SUBJ</td>
<td>SUBJ</td>
</tr>
</tbody>
</table>

### 6.2.1 Adjacency to Verb

We will first look at the position of the applied argument:

(7) Word order of the applied argument and the theme argument in three types of applicative constructions

a. In an applied benefactive construction (Alsina and Mchombo 1993:21, e.g. 3)
   (i) The benefactive argument is adjacent to the verb:
   
   chitsiru chi-na-gul-ir-a atsikana mphatso fool(7) 7SM-pst-buy-appl-fv girls(2) gift(9)  
   ‘The fool bought a gift for the girls.’

   (ii) The theme argument is adjacent to the verb:
   
   *chitsiru chi-na-gul-ir-a mphatso atsikana fool(7) 7SM-pst-buy-appl-fv gift(9) girls(2)
b. In an applied instrumental construction (Alsina and Mchombo 1993:21, e.g. 4)
   (i) The instrument argument is adjacent to the verb:
       anyani a-ku-phwany-ir-a mwala dengu baboons(2) 2SM-pres-break-appl-fv stone(3) basket(5)
       ‘The baboons are breaking the basket with a stone.’
   (ii) The theme argument is adjacent to the verb:
       anyani a-ku-phwany-ir-a dengu mwala baboons(2) 2SM-pres-break-appl-fv basket(5) stone(3)
       ‘The baboons are breaking the basket with a stone.’

c. In an applied locative construction (Simango 1995:37, e.g. 13)
   (i) The locative argument is adjacent to the verb:
       Joyce a-ku-phik-ir-a mu nyumba nyemba J SM-prog-cook-appl-fv in house beans
       ‘Joyce is cooking beans in the house.’
   (ii) The theme argument is adjacent to the verb:
       Joyce a-ku-phik-ir-a nyemba mu nyumba J SM-prog-cook-appl-fv beans in house
       ‘Joyce is cooking beans in the house.’

Of the three types of applied arguments, only the one that bears a benefactive role has to immediately follow the verb. An applied argument that has an instrument or locative role is free to be either in between the verb and the theme argument, or to follow both the verb and the theme argument. Given the SVO word order of Chichewa, the benefactive argument seems more likely to be the unrestricted object, since it has to be adjacent to the verb and behaves like a monotransitive object in this respect. This, however, cannot be maintained for an applied argument that bears an instrument or locative role. In some cases, they do pattern with the
monotransitive object in that they are the argument that is adjacent to the verb. But in others, it is the object that bears the theme role that is closer to the verb and thus behaves more like the monotransitive object.

### 6.2.2 Object-Marking

Object-marking is a common diagnostic for objecthood in natural languages. It is often applied to Bantu languages, too. The idea is that object-marking targets the unrestricted object. In other words, in a construction where there is more than one object, the object which can have a corresponding object marker on the verb is the unrestricted object. In languages which have symmetric objects, any of the objects may trigger agreement on the verb.

The term ‘object-marking’ is indeed quite misleading if the language under consideration is Chichewa. This is because, as shown convincingly by Bresnan and Mchombo (1987:745), what is commonly regarded as an ‘object marker’ in other languages is indeed a functionally unambiguous incorporated object pronoun in Chichewa. The NP that is co-referential with the incorporated object pronoun is not an argument, but is a phrase that lies outside the minimal clause and is related to the pronoun by anaphoric binding. This analysis successfully accounts for the acceptability of (8a), and the unacceptability of (9a):
Example (8a) has the structure shown in (8b). The verb root -phika ‘cook’, whose argument structure has been augmented by the applicative affix, requires two non-agent arguments - a theme and a benefactive. That the full NP that bears the benefactive role appears not in its canonical position but after the verb and the theme-NP, which clearly marks the clause boundary in a benefactive applicative construction, shows that the benefactive-NP in fact lies outside of the minimal clause that contains the verb and its arguments. The a-structure requirements of the verb are satisfied by the theme-NP and the object affix, which are both inside the minimal clause structure as shown in (8b). This constitutes evidence for the status of the ‘object marker’ -wa- as an incorporated pronoun, and not an agreement marker. If -wa- was an agreement marker, and was triggered by the benefactive NP argument, the unacceptability of (9a) would be left unaccounted for. There would not be any reason why the benefactive-NP in (9a) cannot be in its canonical position, which is immediately after the verb and before the theme-NP (c/f (7a)), and be
adjacent to the verb that is affixed with its agreement marker.

The benefactive-NP appears after the theme-NP and therefore lies outside the minimal clause. The a-structure requirements of the verb, i.e. that the verb requires an agent and two other arguments, are satisfied clause internally, namely by the theme argument and the incorporated pronoun -wa- that is in an anaphoric binding relation with the benefactive-NP. Having the benefactive-NP inside the minimal clause by placing it before the theme-NP would violate the subcategorization requirements of the verb. There would be three non-subject arguments, one of which would be left unsubcategorized by the verb. This explains the unacceptability of (9a).

Only one object pronoun can be incorporated into the verb root in Chichewa. Of the two postverbal NPs, the one whose anaphorically linked pronoun can be incorporated is the unrestricted object OBJ (Alsin a and Mchombo 1993, Bresnan and Moshi 1990).

In a benefactive applicative construction, only the pronoun that is anaphorically linked to a benefactive argument can be incorporated (10a). If the incorporated pronoun is associated with a theme argument, the construction becomes ungrammatical (10b). The benefactive argument is therefore the unrestricted object:
(10) Object-marking in a benefactive applicative construction (Mchombo 2004:83, e.g. 41)

a. The benefactive argument is object-marked:
   Alenje a-ku-wa-phik-il-a zitumbuwa (anyani)
   Hunters(2) 2SM-pres-2OM-cook-appl-fv pancakes(8) baboons(2)
   ‘The hunters are cooking (for) them (the baboons) some pancakes.’

b. The theme argument is object-marked:
   *Alenje a-ku-zi-phik-il-a anyani (zitumbuwa)
   Hunters(2) 2SM-pres-8OM-cook-appl-fv baboons(2) pancakes(8)

Instrumental and locative arguments, once again, behave differently.

According to Alsina and Mchombo (1993), in an instrumental or locative applicative construction, the incorporated pronoun may be one that is anaphorically linked to the applied argument, or one that is linked to the theme argument. This shows that either of the postverbal arguments may be the unrestricted object. In this sense, it can be said the two objects behave symmetrically. See Bresnan and Moshi (1990) for a discussion of the parametric variation between symmetric vs. asymmetric object languages.

(11) Object-marking in an instrumental applicative construction (Alsina and Mchombo 1993:22, e.g. 6)

a. The instrumental argument is object-marked:
   Anyani a-ku-u-phwany-ir-a dengu (mwala)
   Baboons(2) 2SM-pres-3OM-break-appl-fv basket(5) stone(3)
   ‘The baboons are breaking the basket with it (the stone).’

b. The theme argument is object-marked:
   Anyani a-ku-li-phwany-ir-a mwala (dengu)
   Baboons(2) 2SM-pres-5OM-break-appl-fv stone(3) basket(5)
   ‘The baboons are breaking it (the basket) with the stone.’
Object-marking in a locative applicative construction (Alsina and Mchombo 1990:504, e.g. 20)

a. The locative argument is object-marked:
   \[ \text{hunters(2) 2SM-pres-16OM-weave-appl-fv mats(4) 16-3-sand} \]
   ‘The hunters are weaving mats on it, the beach.’

b. The theme argument is object-marked:
   \[ \text{hunters(2) 2SM-pres-4OM-weave-appl-fv 16-3-sand mats(4)} \]
   ‘The hunters are weaving mats on it, the beach.’

It should be noted that the set of observations regarding the phenomenon known as ‘object-marking’ in the literature is much more complex. Simango (1995), for instance, in his discussion of the object-marking of the three types of applied arguments in Chichewa, presents a set of observations that contradict those reported in Alsina and Mchombo (1990, 1993) and Mchombo (2004). While all these studies mentioned agree on the observation that it is only the benefactive argument that can be object-marked in a benefactive applicative construction, Simango (1995) claims that in an instrumental or locative applicative construction, only the theme argument can be object-marked, in contrast to the judgments reported in Alsina and Mchombo (1990, 1993) and Mchombo (2004) that either the theme or the instrumental/locative argument can be object-marked. Consider the

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A note on terminology is needed. The term ‘object-marking’ from this point onwards refers very generally to the phenomenon whereby an affix which shares the same noun class with an object can be found on the verb root. We do not intend for the term to reflect authors’ opinions on the status of the affix, i.e. whether they think it is an incorporated pronoun anaphorically linked to another argument, or an agreement marker in the more traditional sense.
following examples:

(13) Object-marking in a instrumental applicative construction - when the verb root is transitive (Simango 1995:39-40, e.g. 16)

a. Joza a-na-wa-kwapul-ir-a chikoti anyamata
   J SM-pst-OM-whip-appl-fv cane boys\(^6\)
   ‘Joza whipped the boys with a cane.’

b. *Joza a-na-chi-kwapul-ir-a anyamata chikoti
   J SM-pst-OM-whip-appl-fv boys cane
   ‘Joza whipped the boys with a cane.’

In the examples in (13), the object *chikoti* ‘cane’ bears the instrument role, while the object *anyamata* ‘boys’ has the theme role. Example (13a) shows that a theme object can be object-marked, while example (13b) shows that an instrument object cannot be object-marked. Simango (1995) uses these examples as evidence to show that in an instrumental applicative construction, only the theme argument, but not the instrument argument, can be object-marked.

At first glance, Simango’s observations seem to be in direct contradiction to those made in Alsina and Mchombo (1990, 1993) and Mchombo (2004) that, in an instrumental applicative construction, either the instrument or the theme argument can be object-marked\(^7\). Upon closer inspection, however, the difference in their claims about this type of applicative construction can be accounted for straight-forwardly. The postverbal arguments in the instrumental applicative

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\(^6\) The noun classes are not available, as they have not been provided in Simango’s glosses.

\(^7\) I thank Stella Kachiwanda for providing additional native speaker judgments in cases where there seemed to be disagreement in judgments provided by different authors.
examples provided are very different. The two postverbal arguments in Simango’s work have different animacy values - in (13a), the NP *chikoti* ‘cane’ is inanimate while the NP *anyamata* ‘boys’ is animate/human. In all of the relevant examples in Alsina and Mchombo, and Mchombo, however, the two postverbal NPs always have the same animacy value and are always inanimate (cf. (11)). Based on these two sets of observations, it may be the case that, when the two postverbal NPs in an instrumental applicative construction have the same animacy value, either can be object-marked. But when they have different animacy values, i.e. one animate and the other inanimate, only the argument that has a higher value on the animacy hierarchy can be object-marked.

Simango uses the example in (14) to lend further support to his claim that it is the instrument argument that is object-marked. When introducing an instrument argument to an intransitive verb like *-yenda* ‘walk’, the instrument argument becomes the only postverbal argument and thus the only possible candidate for object-marking:

(14) Object-marking in an instrumental applicative construction - when the verb root is intransitive (Simango 1995:40, e.g. 17)

Mbusa a-na-i-yend-er-a ndodo
Shepherd SM-pst-it-walk-appl-fv stick
‘The child walked with a stick.’
The construction in (14) does not pose any challenge to the relative animacy argument made above. While the example in (14) does confirm the possibility of instrument arguments being object-marked, it does not eliminate the possibility of theme arguments being object-marked in other similar constructions where a theme argument is present. Once again, what is of importance is the relative animacy of the two postverbal arguments in an instrumental applicative construction. If there is only one postverbal argument as in (14), there simply cannot be any comparison and the instrument argument is not prevented from being object-marked.

That it is the more animate of the two postverbal arguments in an instrumental applicative construction that can be object-marked can be well accounted for in terms of Bresnan and Mchombo’s (1987) analysis in which the incorporated pronoun has been convincingly shown to be anaphorically linked to a topic. In Chichewa, an NP can be object-marked, i.e. be linked to an incorporated object pronoun, and be placed at the clause-final position if it bears the TOP(IC) function. Conversely, only an NP that is associated with the TOP function may have an incorporated object pronoun through anaphoric linking. Since animate entities have long been found to be more topical or ‘topic-worthy’ (Givón 1976) than inanimate entities, an animate NP will be more likely to serve as the topic than an inanimate entity.
There is some indication that grammaticization is at work here. The preference for animate entities over inanimate ones to serve as the topic seems to have been fossilized in the language. Inanimate entities can certainly act as discourse topics given the right context, but the morphosyntactic encoding of topics, i.e. by means of object-marking, is now exclusively reserved for animate entities. This explains the acceptability of (13a) but the unacceptability of (13b). In (13a), the NP *anyamata* ‘boys’ is structurally encoded as a topic - an incorporated object pronoun can be associated with it through anaphoric linking. On the other hand, the NP *chikoti* ‘cane’, being inanimate, cannot be morphosyntactically encoded as a topic. This accounts for the unacceptability of (13b). It would be helpful to consider historical or corpus data, if there is any available, in order to verify our hypothesis about the grammaticization of animate topics. We leave this as a topic for future research.

The case with object-marking in the locative type of applicative construction is slightly different. It seems that object-marking is rendered acceptable in some accounts but unacceptable in others simply because of the different grammaticality judgments provided by different authors. No alternative analysis, such as the one provided above with reference to topicality, seems to be possible for the varied judgments for (15) (cf. (12)).
Object-marking in a locative applicative construction - when the verb root is transitive (Simango 1995:41, e.g. 18)

a. Joyce a-ku-zi-phik-ir-a mu nyumba nyemba
   J SM-prog-OM-cook-appl-fv in house beans
   ‘Joyce is cooking beans in the house.’

b. *Joyce a-ku-mu-phik-ir-a nyemba mu nyumba
   J SM-prog-OM-cook-appl-fv beans in house
   ‘Joyce is cooking beans in the house.’

In (15a), the locative applied argument *mu nyumba ‘in house’ is adjacent to the verb. The theme argument *nyemba ‘beans’ is further away from the verb, and is indexed on the verb by the object marker *-zi- which agrees in noun class with the theme. The structure is acceptable. In (15b), the order of the two postverbal arguments is switched. In this example, it is the theme argument, but not the locative argument, that is adjacent to the verb. The affix *-mu- on the verb agrees in noun class with the locative argument *mu nyumba, but the structure is unacceptable.

The claim about locative arguments in general that they cannot be object marked in a locative applicative construction as Simango proposes seems to hold.

Simango also provides the following example to show that, in a locative applicative construction, the locative argument cannot be object-marked:
(16) Object-marking in a locative applicative construction - when the verb root is intransitive (Simango 1995:30-40, e.g. 20)

*John a-na-pa-khal-ir-a pa mpando
J SM-pst-loc-sit-appl-fv 8 on chair
(To mean: ‘John sat on the chair.’)

The example in (16) alone does seem to suggest the locative applied argument in general cannot be object-marked. A locative argument is introduced to the argument structure of an intransitive verb such that the verb becomes monotransitive, but the example is not accepted. Alsina and Mchombo (1990) have not provided any examples in which a locative applicative is formed out of an intransitive verb, but additional native speaker judgments match Simango’s for the examples in (15) and (16). We thus conclude that, in a locative applicative construction, it is the theme argument that is object-marked. The locative argument cannot be object-marked even if it is the only object in the structure (cf. (16)).

Given all the judgments reported above, it can be concluded that in Chichewa, in terms of object-marking alone, in an applicative construction where the applied argument bears a benefactive role, it is the benefactive argument, but not the theme argument, that can be object-marked. In an instrumental applicative construction, either the theme or the instrument argument can be object-marked. In the locative

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8 In the Bantu literature, any *pa*-marked nominal is a locative and belongs to noun class (NC) 16. The *-pa-* marker on the verb is in fact the NC 16 agreement marker - the verb as it is does agree with the locative object, which is not allowed and accounts for the ungrammaticality of the sentence. The *loc* in the gloss is Simango’s (1995) gloss.
type of applicative construction, the theme argument is the only argument that can
be object-marked.

6.2.3 Relativization

We will now turn our attention to the third diagnostic for objecthood in
Chichewa - relativization. An applied instrument and an applied locative in a double
object applicative construction are relativized in the same way as a theme object
would be relativized in a monotransitive construction. An applied benefactive,
however, cannot be relativized unless there is a resumptive pronoun incorporated
into the verb. Let us first take a look at the primary relativization strategy:

(17) Primary relativization strategy in Chichewa (Mchombo 2004:40, e.g. 2)
   a. anyani a-ku-b-a mikanda
      baboons(2) 2SM-pres-steal-fv beads(4)
      ‘The baboons are stealing beads.’

   b. [anyani a-mene a-ku-b-a mikanda]
      baboons(2) 2SM-REL 2SM-pres-steal-fv beads(4)
      a-ku-dz-ets-a chisokonezo
      2SM-pres-come-caus-fv confusion(7)
      ‘The baboons that are stealing beads are bringing confusion.’

When the subject is relativized, the head N appears at the beginning of the
phrase. The relative clause is post-nominal. The relative pronoun consists of the
relative pronoun root -mene, which is prefixed by the corresponding subject marker
of the relativized head noun (i.e. the relative pronoun has to agree in noun class with the head noun). The resulting relative pronoun is followed by the rest of the relative clause (17b). A gap is left in the position of the subject in a declarative clause, thus the primary strategy for the relativization of subjects in the gap strategy. The form of the verb in a relative clause does not change compared to the form of the verb in a declarative clause (17).

The monotransitive object is also relativized with the primary gap strategy.

Consider the following:

(18) Relativization of the monotransitive object (Mchombo 2004:86, e.g. 46)
   a. anyani  a-na-b-a   maungu  baboons(2) 2SM-pst-steal-fv  pumpkins(6)
      ‘The baboons stole some pumpkins.’
   b. maungu  a-mene  anyani  a-na-b-a  pumpkins(6) 6SM-REL  baboons(2) 2SM-pst-steal-fv
      ‘the pumpkins that the baboons stole’

In a construction where there are two objects, either of the objects can be relativized. In all three types of applicative constructions, the theme-object is always relativized in the same way as a theme-object would be relativized in a monotransitive construction:

(19) a. Relativization of the theme argument in a benefactive applicative construction (Mchombo 2004:86, e.g. 47b)
   chitumbuwa chi-mene  anyani  a-na-phik-il-a  mbuzi  
   pancake(7) 7SM-REL  baboons(2) 2SM-pst-cook-appl-fv  goats(10)
   ‘the pancake that the baboons cooked (for) the goats’
b. Relativization of the theme argument in an instrumental applicative construction (Alsina and Mchombo 1990:496, e.g. 3)

dengu li-mene anyani a-ku-phwany-ir-a mwala
basket(5) 5SM-REL baboons 2SM-pres-break-appl-fv stone(3)
‘the basket that the baboons are breaking with a stone’

c. Relativization of the theme argument in a locative applicative construction (Simango 1995:51, e.g. 36b)

apa ndi pa mwala pa-mene Mary a-na-chap-ir-a malaya
this is on rock which M SM-pst-wash-appl-fv shirt
‘This is the rock on which Mary washed the shirt.’

In an instrument or locative applicative construction, the non-theme object, i.e. the instrument-object and the locative-object respectively, is also relativized like the theme-object in a monotransitive construction. This shows that, with respect to relativization, both the instrument and locative arguments behave in the exact same way as a theme argument would behave in (i) an applicative construction and (ii) an underived monotransitive construction. The unrestricted vs. restricted status of the two objects in an instrument or locative applicative construction cannot be distinguished:

(20) Relativization of the instrument argument in an instrumental applicative construction (Alsina and Mchombo 1990:496, e.g. 3)

mwala u-mene anyani a-ku-phwany-ir-a dengu
stone(3) 5SM-REL baboons 2SM-pres-break-appl-fv basket(5)
‘the stone that the baboons are breaking the basket with’
(21) Relativization of the locative argument in an applicative construction (Alsina and Mchombo 1993:43, e.g. 49)

pa-mchenga pa-mene alenje a-na-luk-ir-a mikeka
16-3-sand 16SM-REL hunters(2) 2SM-pst-weave-appl-fv mats(4)
‘the beach that the hunters wove mats on’

With the benefactive type of applicative construction, it is much easier to distinguish the unrestricted object from the restricted object in relation to relativization. Only the theme argument can be relativized in the same way as the theme-object is relativized in a monotransitive construction. The benefactive argument cannot be relativized unless a resumptive pronoun is incorporated into the verb:

(22) Relativization of the benefactive argument in a benefactive applicative construction (Mchombo 2004:86, e.g. 47)

a. *mbuzi zi-mene anyani a-na-phik-il-a
   goats(10) 10SM-REL baboons(2) 2SM-pst-cook-appl-fv

   chitumbuwa
   pancake(7)

b. mbuzi zi-mene anyani a-na-zi-phik-il-a
   goats(10) 10SM-REL baboons(2) 2SM-pst-10OM-cook-appl-fv

   chitumbuwa
   pancake(7)

   ‘the goats that the baboons cooked the pancake for’

The theme argument in all types of applicative constructions clearly patterns with the monotransitive unrestricted object by being relativized with the primary
gap strategy. The same is true for the instrument and locative arguments in the instrument and locative applicative constructions respectively. The benefactive argument behaves differently under relativization, and can only be relativized if there is a resumptive pronoun in the relative clause.

6.2.4 Passivization

Passivization gives yet different results regarding the unrestricted/restricted object status of each postverbal argument. Like all other tests for unrestricted/restricted objecthood, the argument that patterns with the monotransitive object is the unrestricted object.

According to Alsina and Mchombo (1990, 1993), the applied argument, if it bears the benefactive (23a) or instrument role (24a), is the only one that can be mapped onto the subject function under passivization and thus behaves like the monotransitive object. Mapping the theme argument onto the subject leads to ungrammaticality (23b, 24b):

(23) Passivization in a benefactive applicative construction (Mchombo 2004:82, e.g. 39)
   a. Passivizing the benefactive argument
      Anyani a-ku-phik-il-idw-a maungu (ndi alenje) baboons(2) 2SM-pres-cook-appl-pass-fv pumpkins(6) (by hunters)
      ‘The baboons are being cooked pumpkins (by the hunters).’
Passivization, however, cannot distinguish the two postverbal arguments in the locative type of applicative construction. Either of the arguments, i.e. the locative role (25a) or the theme role (25b), can become the SUBJ of the passivized sentence.

Under passivization, neither can be said to pattern with the monotransitive restricted object:

(25) Passivization in a locative applicative construction (Alsina and Mchombo 1990:504, e.g. 21)

a. Passivizing the locative argument
   Pa-mchenga pa-ku-luk-ir-idw-a mikeka
   16-sand(3) 16SM-pres-weave-appl-pass-fv mats(4)
   ‘The beach is being woven mats on.’

b. Passivizing the theme argument
   Mikeka i-ku-luk-ir-idw-a pa-mchenga
   mats(4) 4SM-pres-weave-appl-pass-fv 16-sand(3)
   ‘The mats are being woven on the beach.’
Passive structures are another type of structure for which Simango (1995) has made different observations. While he agrees that in a benefactive applicative construction, only the benefactive argument can become the subject under passivization, he has different views regarding the instrumental and locative applicative constructions. For the instrumental type, the following examples are provided as evidence in support of his claim that only the theme argument (26a), but not the instrument argument (26b), can be mapped onto SUBJ under passivization.

This is in contradiction to the observations made in (24) by Alsina and Mchombo, where only the instrument (24a), but not the theme (24b), can become the SUBJ:

(26) Passivization in an instrumental applicative construction (Simango 1995:43-44, e.g. 22)

a. Passivizing the theme argument
   Anyamata  a-na-kwapul-*idw-ir-a  chikoti  (ndi Joza)
   Boys  SM-pst-whip-pass-appl-fv  cane  by  J
   ‘The boys were whipped with a cane by Joza.’

b. Passivizing the instrument argument
   *Chikoti  chi-na-kwapul-*idw-a  anyamata  (ndi Joza)
   Cane  SM-pst-whip-appl-pass-fv  boys  by  J

But these examples do not constitute counter-evidence to Alsina and Mchombo’s observation. First, notice that the relative order of the passive affix and the applicative affix in (26a) is different from that in (26b) - the passive affix precedes the applicative affix in (26a), while the applicative affix precedes the passive affix in (26b). As will be discussed in detail in section 6.4, the order of the
applicative and passive (and other argument structure-changing) affixes have significant impact on the well-formedness of a (verb) structure\(^9\). Thus, whether example (26a) is grammatical or not has no bearing on the current discussion of whether an instrument or a theme argument can be passivized in an instrumental applicative construction.

With the same order of a-structure-changing morphemes as in (26b), the theme argument can indeed be passivized, as (27) shows:

(27) Passivizing the theme argument in an instrumental applicative construction

\[
\begin{align*}
\text{Anyamata} & \quad a-na-kwapul-ir-\text{idw-a} & \quad \text{chikoti} & \quad (\text{ndi Joza}) \\
\text{Boys} & \quad \text{SM-pst-whip-appl-pass-fv} & \quad \text{cane} & \quad \text{by J}
\end{align*}
\]

Another reason why this may not counter Alsina and Mchombo’s finding that it is the instrument, but not the theme, that becomes SUBJ under passivization in an instrumental applicative construction is that the issue of animacy may also have a role to play. Similar to the argument made earlier for object-marking, the instrument argument and the theme argument are of different animacy values, with the NP

\(^9\) Our analysis actually predicts that the structure in (26a) is ungrammatical, and this has been confirmed by additional native speaker judgments. The order of morphemes reflects the order of morpholexical processes that are applied. The passive morpheme precedes the applicative morpheme, which is an indication of passivization being applied before applicativization. The passive morpheme (26a) first suppresses the agent argument. The theme argument that remains is the most prominent semantic role in the a-structure. An instrument role, being more prominent than the theme role, cannot be added, because a constraint on applicativization states that the process cannot apply if the applied role is more prominent on the thematic hierarchy than the highest existing role in a-structure. The ungrammaticality of (26a) is due to the order of a-structure-changing morphemes on the verb, independent of other factors. See section 6.4 for a more detailed analysis.

That (26a) is considered acceptable by individual speakers like Simango may be explained by the possibility that the constraint which prevents the applied role from bearing a more prominent semantic role on the thematic hierarchy than the existing role(s) in the a-structure is absent in the grammars of these speakers.
anyamata ‘boys’ being much more animate than the NP chikoti ‘cane’. It is the more animate of the two that can be passivized in (26, 27), whereas in (24), when the two postverbal NPs are of the same animacy value, only the instrument argument can be passivized. As is the case with object-marking, animacy clearly seems to be relevant.

As a quick summary, in an instrumental applicative construction, if the instrument and the theme are of the same animacy value, it is the instrument argument, but not the theme, that becomes the SUBJ under passivization. In cases where the theme is more animate than the instrument, the theme becomes the SUBJ under passivization.\(^{10}\)

In the case of locative applicatives, Simango provides the following examples, which closely resemble the examples provided by Alsina and Mchombo (1990) (cf. (25)):

(28) Passivization in a locative applicative construction (Simango 1995:45, e.g. 24)

a. Locative argument becoming SUBJ

   Mu nyumba mu-na-phik-idw-ir-a nyemba (ndi Joyce)
   In house SM-pst-cook-pass-appl-fv beans by Joyce
   ‘In the house was cooked beans (by Joyce).’

b. Theme argument becoming SUBJ

   Nyemba zi-na-phik-idw-ir-a mu nyumba (ndi Joyce)
   Beans SM-pst-cook-pass-appl-fv in house by Joyce
   ‘The beans were cooked in the house (by Joyce).’

\(^{10}\) It will be interesting to conduct an account of these findings within Optimality Theory. We leave this as an area for future research.
The conclusion reached, however, is very different. Once again, it should be pointed out that the order of the applicative and passive affixes in Simango’s examples in (28) is different from that in Alsina and Mchombo’s examples in (25). In (28), the passive affix precedes the applicative affix, while in (25), the applicative affix precedes the passive affix. Simango judges the constructions with the applicative-before-passive affix order on the verb grammatically odd (marked with ‘?’), and takes the passive-before-applicative affix order in his examples as evidence for the passive operation taking place before the applicative operation, claiming that it is an instantiation of Baker’s (1985) Mirror Principle. The example in (28a), in which the SUBJ is a locative, is therefore the result of locative inversion, applied to the locative-applied form of a passive structure.

If the locative becoming SUBJ is the result of locative inversion but not of passivization as Simango suggests, then, in his analysis, passivization is not relevant in deciding the unrestricted/ restricted object status of the theme argument and the locative argument in a locative applicative construction. In this account, the locative argument may become the subject not because of its ability to be passivized, but because of the application of locative inversion which targets the locative role only.

---

11 In a locative applicative construction, it is possible to have the passive affix preceding the applicative affix on the verb root. Passivization suppresses the highest agent role, but the locative role can be introduced via applicativization because the locative is less prominent than the theme on the thematic hierarchy.
Additional native speaker judgments prove the following examples acceptable, in which the applicative affix precedes the passive affix on the verb root:

(29) Passivization in a locative applicative construction

a. Locative argument becoming SUBJ
   Mu nyumba mu-na-phik-ir-idw-a nyemba (ndi Joyce)
   In house SM-pst-cook-appl-pass-fv beans by Joyce
   ‘In the house was cooked beans (by Joyce).’

b. Theme argument becoming SUBJ
   Nyemba zi-na-phik-ir-idw-a mu nyumba (ndi Joyce)
   Beans SM-pst-cook-appl-pass-fv in house by Joyce
   ‘The beans were cooked in the house (by Joyce).’

These judgments are in line with those provided in Alsina and Mchombo (1990) (cf. (25)), and supports their observation that in a locative applicative construction, either the theme or the locative can become the SUBJ under passivization.

6.2.5 Section Summary

Four diagnostics of objecthood have been applied to identify the object in an applicative construction that behaves like the monotransitive object. The goal is to distinguish the unrestricted object from the restricted object in Chichewa. The syntactic behaviour of each of the two postverbal objects in an applicative construction has been investigated in terms of (i) adjacency to the verb; (ii) object-marking; (iii) relativization; and (iv) passivization. The observations, shown
in (6), are repeated below:

(30) Summary of observations according to Alsina and Mchombo (1990, 1993)

<table>
<thead>
<tr>
<th>Test</th>
<th>Role of Applied Argument</th>
<th>Benefactive (Ben)</th>
<th>Instrument (Instr)</th>
<th>Locative (Loc)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Word order</strong></td>
<td></td>
<td>Ben-NP &lt; Th-NP</td>
<td>Instr-NP &lt; Th-NP/Th-NP &lt; Instr-NP</td>
<td>Loc-NP &lt; Th-NP/Th-NP &lt; Loc -NP</td>
</tr>
<tr>
<td><strong>Object-marking</strong></td>
<td></td>
<td>Ben only</td>
<td><em>either Instr or Th</em></td>
<td><em>either Loc or Th</em></td>
</tr>
<tr>
<td><strong>Extraction/relativization</strong></td>
<td></td>
<td>Relativized with the resumptive pronoun strategy; primary (gap) strategy is not allowed</td>
<td>Relativized with the primary (gap) strategy</td>
<td>Relativized with the primary (gap) strategy</td>
</tr>
<tr>
<td><strong>Passivization</strong></td>
<td></td>
<td>Ben</td>
<td><em>Instr</em></td>
<td><em>Loc / Th</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td>SUBJ</td>
<td><em>SUBJ</em></td>
<td><em>SUBJ</em></td>
</tr>
</tbody>
</table>

We have also noted in the object-marking (section 6.2.2) and passivization (section 6.2.4) subsections above that there exists in the literature a slightly different set of observations (Simango 1995):
(31) Summary of observations according to Simango (1995):

<table>
<thead>
<tr>
<th>Test</th>
<th>Role of Applied Argument</th>
<th>Benefactive (Ben)</th>
<th>Instrument (Instr)</th>
<th>Locative (Loc)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object-marking</td>
<td>Ben only</td>
<td>Th only (but it has been shown that animacy matters and it is the more animate/topical that is object-marked)</td>
<td>Th only</td>
<td></td>
</tr>
<tr>
<td>Extraction/relativization</td>
<td>Relativized with the resumptive pronoun strategy; primary (gap) strategy is not allowed</td>
<td>Relativized with the primary (gap) strategy</td>
<td>Relativized with the primary (gap) strategy</td>
<td></td>
</tr>
<tr>
<td>Passivization</td>
<td>Ben</td>
<td>Inconclusive (problems with data provided)</td>
<td>Not an applicable test</td>
<td></td>
</tr>
</tbody>
</table>

(The differences between the two sets of observations are highlighted in bold italics for comparison.)

Combining the two sets of observations, and taking additional native speaker judgments into consideration, the following conclusions are reached:
(32) Unrestricted Object or Restricted Object? - Summary of Results

<table>
<thead>
<tr>
<th>Test</th>
<th>Benefactive (Ben)</th>
<th>Instrument (Instr)</th>
<th>Locative (Loc)</th>
</tr>
</thead>
</table>
| Adjacency to the verb | Ben-NP = OBJ     | Instr-NP = OBJ/OBJ/OBJ
                     |                  | Loc-NP = OBJ/OBJ/OBJ |
| Object-marking        | Ben-NP = OBJ     | Instr-NP = OBJ/OBJ
                     |                  | Loc-NP = OBJ |
| Extraction/relativization | Ben-NP = OBJ/\_ | Instr-NP = OBJ/OBJ/\_ |
                     |                  | Loc-NP = OBJ/OBJ/\_ |
| Passivization         | Ben-NP = OBJ     | Instr-NP = OBJ
                     |                  | Loc-NP = OBJ/OBJ |

These conclusions, again, are based on the widely accepted assumption that the object that behaves like the monotransitive object is the unrestricted object OBJ, while the other object is the restricted object OBJ\_.

It can be seen from the table above that while adjacency to the verb, object-marking and passivization suggest that the benefactive argument in a benefactive applicative construction is the unrestricted object, results from extraction/relativization are contradictory. Under this test, the benefactive argument behaves like a restricted object.

As for the instrumental type of applicative construction, results from adjacency to the verb, object-marking and extraction/relativization are not conclusive, and show that either the instrument or the theme argument may become the unrestricted object. Taking these results into consideration, it can be said that the
two objects in an instrumental applicative construction are symmetric in that they cannot be distinguished morphosyntactically (Bresnan and Moshi 1990). Passivization suggests that the applied instrument object behaves like the unrestricted object.

In the locative type of applicative construction, both the locative and theme arguments behave in the same way with respect to adjacency to the verb, extraction/relativization and passivization. Once again, the objects seem to behave symmetrically. The only test that can distinguish the unrestricted object from the restricted one is object-marking. Under this test, the locative argument behaves like a restricted object, i.e. it cannot be anaphorically linked to an incorporated pronoun like a monotransitive (unrestricted) object12.

In the next section, we will move away from applicative constructions for a while and focus our attention on an inherently ditransitive construction in Chichewa.

12 The results for the object-marking and extraction/relativization tests may not be as neat and convincing as one might have wished. The tests for objecthood presented in this section are tests frequently employed to distinguish the OBJ and OBJθ functions in Bantu languages in the literature (see, for example, Alsina 1999; Alsina and Mchombo 1989, 1990, 1993; and, Bresnan and Moshi 1990, among others), and there have been exceptional results with the object-marking and extraction/relativization tests also. As correctly pointed out by the examiners, the very nature (and perhaps also the communicative function) of these operations is such that they target the more topical/ topic-worthy argument, and this may be one of the major reasons why there are such results. This is worth investigating with the availability of additional data.
6.3 Double Object Constructions Without The Applicative Affix

We have seen in (1a) that the verb root -patsa ‘give’ is ditransitive and in its most basic, underived form, it requires two objects. We refer to this non-applied, non-derived type of ditransitivity as ‘inherent ditransitivity’. In Chichewa, -patsa seems to be the only verb which is inherently ditransitive (Sam Mchombo, p.c.). In this section, we investigate the syntax of the -patsa-construction, and aim to identify the unrestricted object and the restricted object in the construction (section 6.3.1). We will also explore how the applicative affix interacts with the argument structure of the inherently ditransitive verb -patsa (section 6.3.2). Section 6.3.3 ends the section.

6.3.1 The Inherently Ditransitive Verb Root -Patsa ‘Give’

Four aspects of the syntax of the objects in the inherently ditransitive construction with the verb -patsa ‘give’ are discussed in this section. These include (i) the word order of the objects (section 6.3.1.1); (ii) object-marking (section 6.3.1.2); (iii) the syntactic behaviour of the objects under passivization (section 6.3.1.3); and (iv) the relativization pattern of the objects (section 6.3.1.4). We shall also consider the joint effect of object-marking and passivization on the objects (section 6.3.1.5).
6.3.1.1 Word Order of Post-verbal Arguments

With one of the objects realizing a benefactive role, the objects in the inherently ditransitive -patsa-construction have to be in a fixed order, with the benefactive argument adjacent to the V and preceding the theme argument (33a, 33b). Both of the arguments must be realized as NPs. Otherwise, the structure would be ungrammatical (33c):

(33) a. Mkango u-na-pats-a fisi nyemba
    lion(3) 3SM-pst-give-fv hyena(1) beans(10)
    ‘The lion gave the hyena beans.’

    b. *mkango u-na-pats-a nyemba fisi
       lion(3) 3SM-pst-give-fv beans(10) hyena(1)

    c. *mkango u-na-pats-a nyemba kwa fisi
       lion(3) 3SM-pst-give-fv beans(10) to hyena(1)

The order of objects suggests that the benefactive-NP is patterns more closely with the monotransitive unrestricted object than the theme-NP.

6.3.1.2 Object-marking

Object-marking, i.e. having an incorporated pronoun that is anaphorically-linked to a topic outside the minimal clause, also shows that it is the benefactive argument that behaves like an unrestricted object. The benefactive argument may have an anaphorically-linked, incorporated pronoun (34a), but the theme argument may not (34b):
(34) a. Mkango u-na-wa-pats-a nyemba (anyani)
    lion(3) 3SM-pst-2OM-give-fv beans(10) (baboons(2))
    ‘The lion gave them beans, the baboons.’

b. *Mkango u-na-OM-pats-a anyani (nyemba)
    lion(3) 3SM-pst-10OM-give-fv baboons(2) (beans(10))
    ‘The lion gave the baboons them, the beans.’

6.3.1.3 Passivization

Passivization is another diagnostic that targets the unrestricted object. Only
unrestricted objects can be passivized, i.e. become the SUBJ of the corresponding
passive construction. In (35a), the benefactive argument is mapped to SUBJ under
passivization, and the construction is acceptable. In (35b), however, with the theme
argument mapped to SUBJ, the construction is unacceptable. The benefactive
argument, once again, behaves like an unrestricted object.

(35) a. Anyani a-na-pats-idw-a nyemba (ndi mkango)
    baboons(2) 2SM-pst-give-pass-fv beans(10) by lion(3)
    ‘The baboons were given beans by the lion.’

b. *Nyemba zi-na-pats-idw-a anyani (ndi mkango)
    beans(10) 10SM-pst-give-pass-fv baboons(2) by lion(3)
    ‘The beans were given to the baboons by the lion.’

6.3.1.4 Relativization

As shown in section 6.2.3, the primary strategy for relativization in Chichewa
is the gap strategy. The unrestricted object in a monotransitive construction is also
relativized with the gap strategy. In an inherently ditransitive construction, it is the
theme argument that patterns with the unrestricted object in this respect (36a). The
benefactive argument, on the other hand, cannot be relativized without an incorporated resumptive pronoun (36b, 36c), just like the benefactive applied argument in an applicative construction.

(36) a. Relativization of the theme argument without any incorporated resumptive pronoun
Izi ndi nyemba zi-mene mkango u-na-pats-a fisi
10-this be beans(10) 10-REL lion(3) 3SM-pst-give-fv hyena(1)
‘These are the beans that the lion gave to the hyena.’

b. Relativization of the benefactive argument without any incorporated resumptive pronoun
*Uyu ndi fisi a-mene mkango u-na-pats-a nyemba
1-this be hyena(1) 1-REL lion(3) 3SM-pst-give-fv beans(10)
(To mean ‘This is the hyena that the lion gave beans to.’)

c. Relativization of the benefactive argument with an incorporated resumptive pronoun
Uyu ndi fisi a-mene mkango u-na-mu-pats-a
1-this be hyena(1) 1-REL lion(3) 3SM-pst-1OM-give-fv
nyemba
beans(10)
‘This is the hyena that the lion gave beans to.’

6.3.1.5 The Joint Effect of Object-marking and Passivization

Object-marking and passivization both target the unrestricted object. Since Chichewa only allows one object pronoun to be incorporated on the verb root, the argument that is associated with it through anaphoric linking is the unrestricted object. Passivization also identifies the unrestricted object, and makes it the SUBJ of the corresponding passive structure. Object-marking and passivization, therefore,
cannot take place at the same time:

(37) a. *Anyani a-na-zi-pats-idw-a (ndi mkango) (nyemba) baboons(2) 2SM-pst-10OM-give-pass-fv by lion(3) (beans(10))
    (To mean ‘The baboons were given them by the lion, the beans.’)

b. *Nyemba zi-na-wa-pats-idw-a (ndi mkango) (anyani) beans(10) 10SM-pst-2OM-give-pass-fv by lion(3) baboons(2))
    (To mean ‘The beans were given to them by the lion, the baboons.’)

In (37a), the unrestricted object anyani ‘baboons’ has become the SUBJ of the passive structure. The object that is left, i.e. the restricted object nyemba ‘beans’, cannot be anaphorically linked to the incorporated object pronoun. Similarly, in (37b), with the unrestricted object serving as the topic and being anaphorically linked to the incorporated pronoun, the restricted object that remains cannot be passivized. Passivizing the restricted object results in ungrammaticality.

In the inherently ditransitive construction with the verb -patsa ‘give’, the two objects exhibit different syntactic behaviour. In terms of word order, i.e. adjacency to the verb, object-marking and passivization, the benefactive argument patterns with the unrestricted object in a monotransitive construction. In terms of relativization, however, it is the theme argument that is relativized like the monotransitive unrestricted object. What is even more interesting is the fact that the benefactive-object and the theme-object, which are inherently subcategorized by the underived verb root -patsa ‘give’, behave exactly like those objects in a benefactive
applicative construction. This seems to suggest that whether the objects are inherently required or applied is relatively less important. The semantic roles in the argument structure of a ditransitive verb seem to be more relevant to the syntax of the objects.

6.3.2 -Patsa ‘Give’ and the Applicative Affix

The a-structure of the inherently ditransitive verb root -patsa ‘give’ may be further augmented by attaching the applicative affix to it. The verb -pats-il-a is the applied verb form of -patsa. In principle, this is how it should work out. Since -patsa is ditransitive, -pats-il-a should become a verb that takes three objects. In reality, however, a construction with -pats-il-a and three full NP objects is only marginally acceptable. In the example below, an additional locative argument is introduced by the applicative affix -il-:

(38) ?mkango u-na-pats-il-a anyani nyemba ku London
    lion(3) 3SM-pst-give-appl-fv baboons(2) beans(10) in London
    ‘The lion gave the baboons beans in London.’

The acceptability increases if the argument anyani ‘baboons’ is pronominalized and incorporated into the verb. The constraint, therefore, seems to be on the adjacent occurrence of three full NPs in the same clause, not on the possibility of having three objects:
The order of the objects in this example needs further investigation. For instance, the speaker seems to have stronger preference for the Th-OBJ to precede the Loc-OBJ. This is not expected as this preference has not been observed in cases where the locative argument is applied to a monotransitive verb (cf. the table in (32)). In such cases, an applied Loc-OBJ is free to either immediately follow the verb and precede the Th-Loc, or to follow both the verb and the Th-OBJ. Whether the transitivity of the verb root, i.e. whether it is inherently monotransitive or ditransitive, has any impact on the order of objects, applied or otherwise, will be a topic for future research.

In (39), that the NP anyani ‘baboons’ can be pronominalized is based on the assumption that it has been mentioned in previous discourse and is serving as a discourse topic. If anyani ‘baboons’ has no prior reference, and therefore reference has to be obtained first, the more acceptable way (cf. (38)) to express ‘the lion gave the baboons beans in London’ would be to have a construction with two clauses in it:

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13 The locative marker ku here is treated as a noun class marker, but not a preposition (see Orr and Scotton 1980, in Simango 1995:6). Ku London ‘in London’ is therefore an NP, not a PP.
It is interesting to note that, even with *anyani* ‘baboons’ and *nyemba* ‘beans’ both acting as topics, their treatment are quite different in the second clause. Here, the more topical benefactive argument is pronominalized and incorporated into the verb (the ‘object marker’ -wa-), while the less topical theme argument is omitted. The theme argument cannot be pronominalized together with the benefactive argument, as only one object pronoun can be incorporated in a Chichewa verb.

In other Bantu languages, the prediction that the argument structure of an inherently ditransitive verb can be further augmented by the affixation of an applicative morpheme is also borne out. In Kinyarwanda, for instance, an inherently ditransitive verb with an applicative affix may take three objects, and the resulting construction is perfectly acceptable (Kimenyi 2008):

(41) Kinyarwanda
   a. (Kimenyi 2008, e.g. 96a)  
   Umugabo  a-r-éerek-a  abáana  amashusho  
   man  he-pres-show-asp  children  pictures  
   ‘The man is showing pictures to the children.’
b. (Kimenyi 2008, e.g. 99a)

Umugoró a-r-éerek-er-a abagabo abakoóbwa abáana
woman she-pres-show-appl-asp men girls children

muu nzu¹⁴
in house

‘The woman is showing the children to the girls for the men in the house.’

It should be pointed out that in languages where applicativization is allowed, DOCs that do not involve an applied verb are not very common. In fact, in these languages the number of inherently ditransitive verbs is very small. The list provided for Runyambo is shown below, and in Chichewa, as mentioned earlier, there seems to be only one such verb and it is -patsa- ‘give’ (Sam Mchombo, p.c.):

(42) List of inherently ditransitive verbs in Runyambo (Rugemalira 1993:226):

kúha ‘give’ kwíma ‘deny’ kwaka ‘deprive’
kwíba ‘steal’ kwóreka ‘show’ kutéera ‘hit’
kujúura ‘undress’ kujwêka ‘dress’ kunyaga ‘cheat’

Most verbs which take double objects are formed by affixing the applicative morpheme to a monotransitive verb root:

(43) a. The Chichewa verb root -phika ‘cook’

-philka < Ag, Pt >

| OBJ

¹⁴ There are four postverbal NPs in this example. Kimenyi (2008) has not indicated whether all four of them are arguments of the verb. With only one instance of the applicative affix on an inherently ditransitive verb, we assume that three of these NPs are arguments, while one of them is an adjunct. Alternatively, it may be possible in Kinyarwanda that a single instance of the applicative affix may license more than one applied argument. Due to the lack of data, we will not speculate about this further.
b. The Chichewa verb root -phika ‘cook’ and the applicative affix, which roughly means ‘cook for’

\[-phik-ir-a \quad < \text{Ag, Ben, Pt}>\]

|     |
|     |
| OBJ OBJ₉ |

6.3.3 Section Summary

In this section, we have seen that in Chichewa, there seems to be only one verb in the language that is ditransitive even in its underived form. The verb is -patsa, which means ‘give’. This echoes Kittila’s (2006) findings, reported in section 3.1.4, that it is quite common for the verb GIVE to exhibit anomalous morphosyntactic behaviour within a language. The verb -patsa ‘give’ is non-prototypical in Chichewa in that all other ditransitive verbs are morphologically derived.

The syntax of the objects in the -patsa-construction, on the other hand, is much more prototypical. Like the objects in a benefactive applicative construction, the ditransitive verb which requires the same semantic roles, it is the benefactive object that patterns more closely with the monotransitive unrestricted object. We will not compare the syntax of the objects in the inherently ditransitive -patsa-construction and that of the objects in a benefactive applicative construction to the syntax of the objects in the instrumental and locative types of applicative construction. As we have shown in section 6.2 and in this section, which semantic roles are in the
(underived or derived) argument structure of the verb affects the syntax of the objects in a significant way. Applicativization is thus a process that affects not only the morphological structure of the verb, but also its argument structure and functional structure. We show how this can be captured in a succinct way by making use of the parallel levels of representation assumed in the architecture of LFG.

6.4 Applicativization - A Formal Analysis\textsuperscript{15}

Applicativization, being a highly productive process in languages which allow it, has posed some serious challenges to theories of syntax.

The biggest challenge lies in the fact that a morphological operation, i.e. the affixation of the applicative morpheme to the verb root, is evidently associated with a change in syntax. Whether this is considered an addition of a semantic role or an introduction of an extra object, the verb root clearly allows one more argument.

Besides, it is quite often the case that there is more than one a-structure-changing morpheme affixed to the verb root. Besides the applicative affix, other a-structure-changing morphemes include the passive, the causative and the reciprocal affixes. When there is more than one such affix on the verb, it is

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\textsuperscript{15} An earlier version of this section was presented at LFG’07 and was published in the proceedings as Lam (2007). I wish to thank the participants of this conference for a number of very useful comments. A special thanks goes to Ron Kaplan for an illuminating discussion on parts of this section.
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