On the Implications of Inalienability for Double Object Structure*

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Abstract

It is the purpose of this paper to consider the double object construction in the light of some data of Kihaya and Sesotho, two Bantu languages in which the objects display symmetrical behaviour with respect to word order, cliticisation, passivisation, unspecified object deletion, and raising to subject. In some special circumstances, though, such as those where a relation of inalienability holds between the two objects, they cease to behave in the same way. An analysis of inalienability as an anaphoric relation leads us to expect the existence of asymmetry between the two objects; the word order patterns and associated syntactic phenomena encountered in these Bantu languages can be accounted for if a structure such as the one proposed by Larson (1988, 1990) for multiple complementation is assumed. This does not require appeal to a directionality parameter, since word order is derived from the hierarchical structure postulated; thus the theory of binding becomes instrumental in the establishment of structure.

Key words: African languages, double object structure, inalienability.

Resum. Sobre les implicacions de la inalienabilitat per a l'estructura d'objecte doble

L'objectiu d'aquest article és de prendre en consideració la construcció d'objecte doble a la llum de les dades que proporcionen el kihaya i el sesotho, dues llengües bantus en què els objectes dobles es comporten de forma simètrica quant a ordre de paraules, clitització, passivització, elisió d'objecte inespecífic i elevació a la posició de subjecte. Hi ha circumstàncies, però, en què els dos objectes deixen de comportar-se de la mateixa manera, com ara quan s'estableix una relació d'inalienabilitat entre ells. L'anàlisi de la inalienabilitat com a relació anafòrica ens fa esperar aquest tipus d'asimetria entre els dos objectes; l'ordre de paraules i els fenòmens sintàctics que s'hi

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associen en aquestes llengües bantus poden explicar-se si s'adopta l'estructura de Larson (1988, 1990) per a la complementació múltiple. Així no cal recórrer a un paràmetre de direccionalitat a l'anàlisi, perquè l'ordre de paraules deriva de l'estructura jeràrquica postulada; la teoria del lligam esdevé instrumental en l'establiment de l'estructura sintàctica.

Paraules clau: llengües africanes, estructura d'objecte doble, inalienabilitat.

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This paper deals with some constructions involving inalienable possession in two Bantu languages, Sesotho and Kihaya. Sesotho and Kihaya present double object constructions, i.e. sentences in which two direct objects accompany the verb; the two objects display the same syntactic behaviour, except in some special circumstances, one of which occurs when inalienability is conveyed. It is our purpose to account, within a principles-and-parameters framework, for the grammaticality conditions of the sentences in which inalienability is expressed, bearing in mind the formalisation of inalienability proposed by Guéron (1984), which correctly leads us to expect some asymmetry in the syntactic behaviour of NPs denoting entities one of which is inalienably possessed by the other. Moreover, these results have implications for the assignment of structure to the double object construction.

1. The Double Object Construction

Let us start by illustrating the kind of double object construction allowed in these Bantu languages, according to Hyman and Duranti (1982); most of the data presented originates from this source.² In (1), neither the theme object nor the goal bear any marking distinguishing them, nor does the verb bear any object marker identifying which of the two object occurrences is the theme and which is the goal.

(1) A-ka-h' ómwáán' ébitooke. (Kihaya) he-PR-give child bananas 'He gave the child bananas.'

 Sesotho is spoken in the high grasslands of Southern Africa, in Lesotho and South Africa; Kihaya is spoken between the Kagna River and Lake Victoria, in NW Tanzania.

Some abbreviations used arc: AP = applicative, ASP = aspectual, DAT = dative, DEM = demonstrative, FOC = focus, FV = final vowel, PASS = passive, POSS = possessive, PR = preterite. The numbers prefixed to nominals are noun class markers.

The possibility of alternation in word order of the two objects is exemplified by the fact that in Kihaya (1) can be paraphrased as (2).

(2)A-ka-h' ébitook' ómwáana. he-PR-give bananas child 'He gave bananas to the child.'

In sentences (1) and (2), the theme theta role, bananas, can appear either immediately after the verb, or follow the goal theta role, child. Hence, the sentence is verbinitial but the order of the two complements is free. All this indicates, in fact, that if the two objects in (1) and (2) had been animate the sentences would have been ambiguous. So the construction types in (1) and (2) differ from their English counterparts because the English double object constructions are not ambiguous (a sequence [V NP NP] is unequivocally interpreted as V + goal + theme, while [V NP PP] is interpreted as V + theme + goal).

According to the literature, in general Bantu languages may be divided into two groups, depending on the syntactic behaviour of sentences such as (1), given that the two objects may consistently behave as direct objects in related syntactic constructions (as is the case in Sesotho and Kihaya) or may display certain asymmetries whereby only one of the objects is regarded as a proper direct object. The latter language type is known as asymmetrical object type and is exemplified by Kiswahili, Chimwi:ni, Hibena and Chichewa. The former type is known as the symmetrical object type and is exemplified by Kinyarwanda, Kimeru, Mashi, and Luyia, as well as Kihaya and Sesotho. The syntactic tests whereby direct object status is checked are passivisation, object agreement, and word order (see Bresnan and Moshi (1990) and references therein); thus in symmetrical object type languages the following is expected of both objects:

- a) They can be adjacent to the verb.
- b) They can undergo passivisation.
- c) They alternate with object marker clitics on the verb.
- d) They allow for unspecified (object) deletion.
- e) They alternate with a reciprocal suffix on the verb, which satisfies the corresponding theta role.

Moreover, true symmetrical object languages permit these object properties to be displayed by more than one object at a time (e.g. one object may be passivised at the same time that the other is realised by an object marker or a reciprocal marker).

We ignore other asymmetries arising in symmetric type languages, such as those emerging when one of the complements is a benefactive; Marantz' (1993) analysis is consistent with the present proposals, in adopting as basic structure the one put forward by Larson (1988, 1990) for multiple complementation. The possibility of an analysis in terms of preposition incorporation (see Baker (1988)) is not pursued here because, although technically possible, there is no empirical evidence of a preposition appearing in the sentences involved, nor is there indirect evidence for one in the form of applicative morphology on the verb as in the other languages considered by Baker.

2. The Grammaticalisation of Inalienable Possession

Within the symmetrical object languages such as Kihaya and Sesotho, the symmetry between the two direct objects is not necessarily maintained in all circumstances; we concern ourselves with one of these cases, that of two complements related by an interpretation of inalienable possession (i.e. the relation holding between an entity and an inherent part of it, as in *John* and *John's heart*). So, although (3), like (1), is grammatical, (4) is ungrammatical unlike its counterpart (2).

- (3) A-ka-hénd' ómwáán' ómukôno. (Kihaya) he-PR-break child arm 'He broke the child's arm.'
- (4) *N-ka-hénd' ómukón' ómwáana. I-PR-break arm child 'I broke the child's arm.'

The inalienability asymmetry that arises with word order is also found in passivisation, since only the possessor NP can passivise:

- (5) Omwáán' a-ka-hénd-w' ómukôno. child he-PR-break-PASS arm 'The child's arm was broken.'
- (6) *Omukóno gú-ka-hénd-w' ómwáana. arm it-PR-break-PASS child 'The child's arm was broken.'

Equally, only the possessor alternates with an object clitic:

- 3. We will not deal with alienable possession constructions (for which, in any case, no double object construction is reported in the referred literature). Alienable possession is cross-linguistically different from inalienable possession in its grammar and the comparison between the two in Bantu would make a topic for future research.
- 4. The word order pattern in (3-4) is also found elsewhere in Bantu; see the following Kichaga example taken from Bresnan and Moshi (1990) (Kichaga is reported to be another symmetrical object language). This example, though, includes an applicative marker.
 - (i) N-á-l'é-réng-l-à kô-tìmá kú-zrèndè.
 FOC-1s-PR-carve-AP-FV 7-chair 7-leg
 'She/He carved a leg for the chair.'

This is the only interpretation available. If the order of the two objects is reversed, the only interpretation available is 'She/He carved a chair for the leg'.

- N-ka-mu-hénd ómukôno. (7)I-PR-him-break arm 'I broke his arm.'
- *N-ka-gu-hénd' ómwáana. (8) I-PR-it-break child 'I broke the child's one.'

The same tests can be applied to Sesotho with identical results. Thus (9) and (10) are the Sesotho equivalents of the Kihaya examples (3) and (4), respectively:

- (9)Ke-robílé ngoaná letsóho. (Sesotho) child I-broke arm 'I broke the child's arm.'
- *Ke-robílé letsóhó ngoaná. (10)I-broke arm child 'I broke the child's arm.'

The following examples (11) and (12), which illustrate passivisation, are parallel to (5) and (6), respectively.

- (11)Ngoaná ó-robíloé letsóho. he-was-broken arm 'The child's arm was broken.'
- (12)*Letsóhó lé-robíloé ngoaná. it-was-broken child arm 'The child's arm was broken.'

Finally, (13) and (14) illustrate the asymmetry between the two objects when cliticisation occurs, as in (7) and (8).

- Ke-mó-robílé letsóho. $\{13\}$ I-him-broke arm 'I broke his arm.'
- (14)*Ke-lé-robílé ngoaná. I-it-broke child 'I broke the child's one.'

Although Hyman and Duranti (1982) point out that an animacy hierarchy may determine the object properties that a complement displays, the inalienable possession construction behaviour is specific and needs to be treated independently, given that the same pattern is found when the NPs are both inanimate, as exemplified in the following word order contrast found in Sesotho:

- (15) a. Ke-robílé sefáté lekala. I-broke tree branch 'I broke the tree's branch.'
 - b. *Ke-robílé lekala sefáte.
 1-broke branch tree
 'I broke the tree's branch.'

Assuming that the grammaticalisation of inalienability cannot be correctly formalised as involving a possessor theta role, but rather that inalienability must be encoded as a relation holding between nominals, we propose a treatment of inalienability for Sesotho and Kihaya along the lines of Guéron (1984). Her approach to inalienability was put forward for French and English, and has also been applied to Catalan (cf. Gavarró (1990)). Guéron's idea is that two nominals in an inalienable possession relation can be construed as entering an anaphoric relation, and thus fall under the scope of the theory of binding. To accommodate for this, the relation between an anaphor and its antecedent is broadened and need not be one of identity of reference, but one of non-distinction; i.e. in the sentence John likes himself the referent of himself has to be interpreted as identical to the referent of John, while in John cut his finger the referent of John and that of his finger are clearly not identical, but are however non-distinct. That is, we consider two properties, identity and non-distinction, which result in three types of relation between two entities: they may be identical and non-distinct, non-identical and non-distinct, and non-identical and distinct. A fourth possibility, that of being distinct and identical, is ruled out since being identical implies being nondistinct. Thus Guéron proposes the following constraint regulating the reference of the links in an anaphoric chain, allowing for a non-distinct non-identical interpretation.

(16) Non-Distinctness Constraint

If A and B are links of a chain, then the referent of A is non-distinct from the referent of B.

NP traces, then, are links of a chain which are interpreted as non-distinct and also identical in reference to their antecedents, while nominals designating inalienably possessed entities are interpreted only as non-distinct from their antecedents. In this latter circumstance, the chains that result are formed by more than one lexical element, and are therefore known as lexical chains. We expect, then, that the conditions on occurrence of inalienably possessed NPs with respect to their possessor NPs are similar to those of anaphors with respect to their antecedents. Their properties, which follow from the binding theory and constraints on chains, are as follows.

a) The antecedent, i.e. the possessor NP, is obligatory (though it need not be phonetically overt).

- b) The possessor NP must c-command the NP designating the inalienably possessed part.
- c) The possessor NP must be in the minimal governing category of the inalienably possessed part.
- d) Only one theta role may be assigned to the lexical chain, because chains are subject to the Theta Criterion.

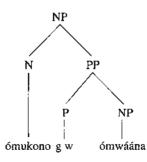
Notice that this analysis of inalienability does not conflict with the idea that the inherent properties of the entities referred to by an expression cannot be the source of grammatical asymmetries (see Woolford (1993)); here the asymmetries have their source in the relation holding between referents (as is the case in general in the theory of binding).

3. Structure and Word Order

Given that this formalisation of inalienability is based on the idea that the relation between possessor and possessed is asymmetrical, it is not surprising to find that in Bantu the positions of the complements denoting the possessor and the possesssed are not interchangeable. In fact, quite a few of the ungrammatical sentences above can be ruled out on the grounds that they violate one or more of the principles that govern lexical chains. For instance, judging by their surface word order, in the ungrammatical sentences (6) and (12) the possessor does not c-command the possessed NP, while in the corresponding grammatical sentences (5) and (11) the possessor c-commands the possessed NP, and thus the first two violate the second condition above, and the second two do not. Similarly, (17) below can also be ruled out with an inalienable possession interpretation on the grounds that the possessor does not c-command the possessed NP, as shown by the partial structure in (18). On the other hand, this sentence is grammatical when no inalienable possession is conveyed, i.e. when the arm is not part of the child, but rather part of his property, and the grammar correctly allows this reading because no chain formation takes place.

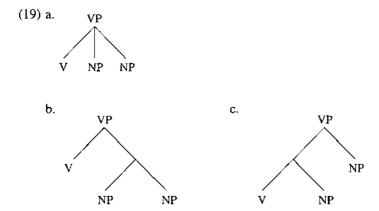
(17) A-ka-hénd' ómukono gw' ómwáána. (Kihaya) he-PR-break arm of child *IA interpretation





Even if all the sentences in which inalienability is implied display the asymmetry that we would expect and which is not found in other double object constructions in Sesotho and Kihaya, the question still remains as to which structure allows us to account for the contrast between e.g. (3) and (4). The analysis of inalienability thus leads us to consideration of structure and word order facts in multiple complement verb phrases in general, and in the Bantu languages at issue in particular.

Work on the double object construction in languages which allow it other than Sesotho and Kihaya, such as English and Dutch,⁵ diverges when it comes to establishing an underlying structure. Baker (1988) considers that the double object construction, when it gives rise to ambiguity, is somehow exceptional in the context of natural language, insofar as it seems to escape the Visibility Condition, that requires for an argument to be unequivocally identified by a Case marker; we assume with him that what characterises a verb taking a double object is its exceptional property of structurally Case marking two complements. This does not predetermine, however, the configurations in which structural Case is assigned in a particular language. In a head-initial language, the following three phrase structures can be considered candidates for a double object construction.



If we were to adopt the structure in (19a) (leaving aside the fact that it does not respect the binary branching constraint of Kayne (1984)), no asymmetry would be predicted between the two objects of a verb when inalienability holds, because in (19a) the objects c-command each other. Barss and Lasnik (1986) also point out, when considering the occurrence of reflexives in English double object constructions, that a flat structure such as that in (19a) is insufficient, when paired with the binding theory, to account for the data, since then no contrasts in grammaticality

Cf. Oehrle (1976), Barss and Lasnik (1986), Larson (1988, 1990), Aoun and Li (1989), Jackendoff (1990).

are expected to depend on the relative order of reflexives and their antecedents. Although (19b) satisfies the binary branching condition, the two object NPs still c-command each other, and again no asymmetry is predicted. Thus the only structure we are left with is that in (19c).6

Suppose that the structure in (19c) is appropriate for the grammatical sentence in (3). Then the possessor, which precedes the possessed, does not c-command the latter, but rather it is c-commanded by it. If the conditions on lexical chains, such as c-command by the antecedent, are truly operative, the sentence should be ruled out. On the other hand, the ungrammatical sentence in (4), where the possessor follows the possessed, should result in grammaticality, because the possessor c-commands the possessed. In consequence, structure (19c) and the formalisation of inalienability above cannot be reconciled.

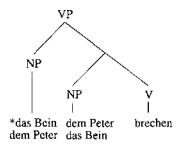
Consider then the following data from German, which follow exactly the same word order pattern found in Sesotho and Kihaya. The order of the accusative theme and the dative goal is interchangable in (20), as in the Kihaya examples (1) and (2) above. In (21), though, das Bein 'the leg' and dem Peter, are no longer free in order, and the possessor must precede the possessed, exactly as in Kihaya and Sesotho, as examples (3), (4) and (9) and (10) demonstrate.

- (20) a. Hans gibt dem Peter das Buch. Hans gives Peter-DAT the book 'Hans gives the book to Peter.'
- (German)
- b. Hans gibt das Buch dem Peter. Hans gives the book Peter-DAT 'Hans gives the book to Peter.'
- (21) a. Hans hat dem Peter das Bein gebrochen Hans had Peter-DAT the leg broken 'Hans broke Peter's leg.'
 - b. *Hans hat das Bein dem Peter gebrochen. Hans had the leg Peter-DAT broken

There is extensive work showing German to be a verb-final language; if we assume then a structure like the one in (22) for the VPs in (21), the ungrammaticality of (21b) is predicted because c-command of the possessed by the possessor does not hold, while it holds in the grammatical (21a).

6. An anonymous reviewer suggests that inalienability may be expressed via an [NP [N]] structure, with the possessor in subject position. However, there is no evidence of such a constituent in Sesotho and Kihaya.

(22)

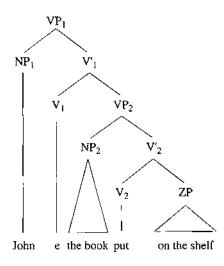


Equally, the hypothesis that Sesotho and Kihaya are underlyingly verb-final languages would allow us to predict the asymmetries encountered in the inalienable possession double object construction while maintaining a very general formalisation of inalienability. I am not aware of studies proposing this structure for Sesotho and Kihaya, although other Bantu languages, such as Tunen, are reported to be overtly SOV (cf. Hyman and Duranti (1982)) and the idea has been put forward that Proto-Bantu was SOV (cf. Givón (1971)). Although it is true of Sesotho that DPs are overtly head-final, as shown in the following example, taken from Demuth (1991), no independent evidence supporting the SOV character of Sesotho and Kihaya has been provided.

(23) di-kausi tsa-ka 10-socks 10POSS-my 'my socks'

Given the lack of any support for the verb-final character of Sesotho and Kihaya, we consider a structure such as that in (24), proposed by Larson (1988, 1990) and adopted by Chomsky (1992) for the analysis of multiple complement verbs.

(24)



This structure is more complex than those in (19) insofar as it involves the raising of V₂ to V₁ position to theta mark the NP₂ position. Without requiring that verbs be in final position, this kind of structure, in conjunction with the approach to inalienability outlined, can account for the data above. In effect, the possessor NP₂ c-commands the NP dominated by V'₂, but not vice-versa, and thus asymmetry results in the desired manner: (3) and (9) above are grammatical, while (4) and (10) are ungrammatical with an inalienable possession reading. What is more, a structure such as (24) is sufficient to account, paired with the binding theory, for the facts noted by Barss and Lasnik (1986) on the behaviour of anaphors in double object constructions in e.g. English, analogous to the facts of inalienability in Kihaya and Sesotho:

- (25) a. John showed Mary (to) herself.
 - b. *John showed herself (to) Mary.

In another framework, Bach (1979) and Dowty (1979) also propose a dominance/command structure parallel to that in (24) motivated, on the basis of English data, by semantic considerations: it is argued that in object-antecedent reflexivisation (John showed Mary herself; *John showed herself Mary) the verb has to combine first with the (remote) reflexive and second with the (adjacent) referential NP in order for the verb to be reflexivised before combining with the reflexive's antecedent.

Note that the adoption of Larson's basic structure makes it unnecessary to appeal to a directionality parameter, since word order can be derived from the hierarchical structure postulated; hence the approach put forward empirically supports Kayne's (1993) reconsideration of linear order as a product of dominance relations. Naturally, the satisfaction of the lexical requirements of the verbs inserted in this structure determines the wellformedness of the sentence; e.g. verbs with different thematic grids, such as give and break, can give rise to grammatical double object constructions in Sesotho and Kihaya so long as the grammatical principles (the Theta Criterion, the binding principles) are not violated.

The analysis put forward has certain consequences for double object constructions with an inalienable possession reading in Sesotho and Kihaya: the prediction is that object behaviour (cliticisation, passivisation, etc.) by both objects at the same time should result in grammaticality so long as the conditions on lexical chains are preserved. The following Sesotho example fulfills the prediction in displaying simultaneous passivisation and cliticisation with the possessor higher than the inalienably possessed entity:

- 7. Empirical evidence for the structure in (24) can be found in the double object construction in other languages such as Principe Portuguese Creole, in which the verb surfaces twice, a copy remaining in its base position, in one of the alternative word orders:
 - (i) pwe sa dá mínu dyó. father ASP give child money 'Father gives the child money.'
 - da dyó (ii) pwe sa da father ASP give money give child 'Father gives money for the child.'

(26) Popi ó-lé-robilé.
doll it-it-was broken

'The doll had its arm broken.'

Sesotho never allows two object clitics, and so to a certain extent it is unsuitable to test some other predictions made; Kihaya, though, allows two object clitics in general, and so there is the possibility of testing the predictions made by the analysis. Finding the data to check whether these predictions are correct or not remains an issue for future research. Broadly, it follows from this approach that the asymmetries found in the asymmetrical type Bantu languages are of a different nature from those in Sesotho and Kihaya: in the asymmetrical type languages constraints other than those operating in the symmetrical languages must be at play, together with universal constraints on lexical chains when inalienable possession is conveyed.

Here we have attempted to show how relatively marginal data, such as those of inalienable possession, can be fully accounted for on the grounds of general grammatical principles, and how they have implications in determining constituent structure.

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8. An anonymous reviewer points out that Kinyarwanda, a symmetrical type language, exhibits symmetrical behaviour when inalienable possession is conveyed and asymmetrical behaviour with alienable possessors; lacking the relevant data or further knowledge of the syntactic structure of Kinyarwanda, we cannot determine whether this seemingly problematic case constitutes a true counterexample for our approach.

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