

ON TRUE DOUBLE OBJECT CONSTRUCTIONS IN TSHILUBA

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1. Introduction

In this paper I am going to examine Double object constructions (DOCs henceforward) in Tshiluba, a Bantu language spoken in South-east Zaire. DOCs are indeed typical of the whole Bantu family: in these languages, in fact, two prepositionless DPs may follow a ditransitive or complex verb. But differently from what happens in most Bantu languages (Swahili, Chichewa or Chimwiini, to mention just the most widely studied), both internal arguments of a Tshiluba DOC show a symmetrical behaviour: both DPs can in fact be sentence initial and trigger subject agreement in a passive sentence, and V^o may show optional object agreement infixes with either of them, and even with both at the same time. An example of a DOC in Tshiluba is given in (1), with the prototypical ditransitive verb, *kupa* 'give'; we can see the peculiar behaviour of the two DP-objects as regards passivization ((2)) and optional affix-doubling ((3)):

- (1) mukaji u-p-a muana tshimuma
woman su-give boy fruit
'the woman gives the boy fruit'
- (2) a. muana u-p-ibu-a tshimuma kudi mukaji
boy su-give-pass fruit by woman
'the boy is given fruit by the woman'
b. tshimuma tshi-p-ibu-a muana kudi mukaji
fruit su-give-pass boy by woman
'The fruit is given the boy by the woman'
- (3) a. mukaji u-mu-p-a muana tshimuma
woman su-io-give boy fruit

- b. mukaji u-tshi-p-a muana tshimuma
 woman su-do-give boy fruit
- c. mukaji u-tshi-mu-p-a muana tshimuma
 woman su-do-io-give boy fruit
 'the woman gives the boy fruit'

The contrast is evident with a language like Swahili in (4)-(5), where only the indirect object displays such properties, while the direct object exhibits an inert behaviour with respect to passivization and affix-doubling:

- (4) a. mtoto a-na-m-p-a¹ mwanamke matunda
 boy su-tns-io-give woman fruit
- b. *mtoto a-na-ya-p-a mwanamke matunda
 boy su-tns-do-give woman fruit
- c. *mtoto a-na-ya-m-p-a mwanamke matunda
 boy su-tns-do-io-give woman fruit
 'the boy gives the woman fruit'
- (5) a. mwanamke a-na-p-ew-a matunda na mtoto
 woman su-tns-give-pass fruit by boy
 'the woman is given fruit by the boy'
- b. *matunda ya-na-(m)-p-ew-a mwanamke na mtoto
 fruit su-tns-(io)-give-pass woman by boy
 'the fruit is given to the woman by the boy'

The deep contrast between the two groups of Bantu languages as regards object properties of the two internal arguments in a DOC is well known and has been widely studied in different times and different frameworks, from purely descriptive analyses to Relational Grammar, Lexical-Functional Grammar and Generative Syntax.² The aim of this paper is to analyse Tshiluba DOCs by means of an alternative theory, stemmed from Minimalist program (as delineated in Chomsky (1993), (1995) and subsequent works), but substantially different from it in that Chomsky's VP-shells are substituted by Clitic shells (as in Manzini and Savoia (1997), (1998), Savoia and Manzini (in prep.)). Not accidentally, VP-shells have been first proposed

¹ Differently from Tshiluba, in Swahili the affix doubling the (human) indirect object (-*m*-) is indeed obligatory, or at least strongly preferred.

² See for instance Gary and Keenan (1977), Perlmutter and Postal (1984), Marantz (1984, 1993), Baker (1988, 1995), Kiparsky (1988), Bresnan and Moshi (1990), Cocchi (1991, 1992), Collins (1997), Nakamura (1997).

in order to analyse a particular DOC, English dative shift (see Kayne (1984), Larson (1988)). Notwithstanding, I will show that a VP-shell based system does not offer a satisfactory account of the Bantu data (especially as concerns Tshiluba), while a framework which employs Clitic shells seems to be more promising.

I will first present some further Tshiluba data which confirm that the symmetrical behaviour of the two internal arguments of a ditransitive verb extends to other constructions, like applicatives and causatives.³ Then I will review some of the proposals put forward in the generative framework in order to account for ditransitives in general. I will show how the Tshiluba data raise some problems for most theories on DOCs, and I will partly modify the current hypotheses in an attempt to account for these peculiar data.

2. Further data

2.1. Applicative constructions

Similar to ditransitives is the case of applicatives. These constructions, typical of Bantu languages, involve complex verbs composed of a verb stem plus an applicative affix which introduces a new internal argument. This second object, which is generally called applied object for brevity, may have different semantic roles benefactive/malefactive, goal/recipient, instrumental or locative.⁴ In many languages, like Tshiluba, it is also possible to have a parallel construction involving a morphologically simple verb selecting a DP-do and a PP-io.⁵

It is interesting to notice that the order of the two internal arguments of a transitive applicative verb (the theme and the applied object) is the opposite with respect

³ Also transitive verbs with a locative complement may be considered as DOCs, since the locative-DP can passivize and trigger affix-doubling, as well as the theme-DP. Due to space problems I will not address this issue here.

⁴ In the examples I will gloss applied objects with *io*, due to their similarity of behaviour with indirect objects and abstracting from different semantic roles. Actually, only a subclass of locative complements may be expressed by an applicative, namely those which Baker (1988: 244) calls 'inner' locatives. Cf. the contrast in (i) and (ii):

(i) I slept in the bed
 The bed was slept in (inner locative)
(ii) I slept in New York
 * New York was slept in (outer locative).

⁵ Languages vary on this point. Some languages like Kichaga do not have independent (applicative) prepositions at all, while other languages like Chimwiini or Kinyarwanda have them for some roles (instrumental) and not for others (benefactive). Cf. Nakamura (1997).

to the order exhibited when the applied object is a PP, as in (6) below. This difference patterns exactly with the alternance we find in English ditransitive verbs between the non-shifted and the shifted sentence, as seen in the translations:

- (6) a. mukaji u-sumb-il-a muana tshimuma
 woman su-buy-appl boy fruit
 'the woman buys the boy fruit'
 b. mukaji u-sumb-a tshimuma bua muana
 woman su-buy fruit for boy
 'the woman buys fruit for the boy'

As we can already expect, both internal arguments of an applicative clause like (6a) behave symmetrically, similarly to what we saw for ditransitives. Both can be passivized, as in (7), and the verb may exhibit optional affix-doubling with either (and both), as in (8). Furthermore, when one of the objects is passivized, the other can still show affix-doubling, as in (9):⁶

- (7) a. muana u-sumb-id-ibu-a⁷ tshimuma kudi mukaji
 boy su-buy-appl-pass fruit by woman
 'the boy is bought fruit by the woman'
 b. tshimuma tshi-sumb-id-ibu-a muana kudi mukaji
 fruit su-buy-appl-pass boy by woman
 'The fruit is bought for the boy by the woman'
- (8) a. mukaji u-mu-sumb-il-a muana tshimuma
 woman su-io-buy-appl boy fruit
 b. mukaji u-tshi-sumb-il-a muana tshimuma
 woman su-do-buy-appl boy fruit
 c. mukaji u-tshi-mu-sumb-il-a muana tshimuma
 woman su-do-io-buy-appl boy fruit
 'the woman buys the boy fruit'

⁶ Bresnan and Moshi (1990), who analyse applicative constructions in another symmetrical language, Kichaga, evince other properties which characterize symmetrical languages like unspecified object deletion (deletion of patient in presence of another object) and reciprocalization (possibility to reciprocalize the patient, as well as the beneficiary). Due to space limitations I will not discuss these issues here.

⁷ The applicative suffix [-il-] changes into [-id-] when followed by a palatal vowel.

- (9) a. muana u-tshi-sumb-id-ibu-a tshimuma kudi mukaji
 boy su-do-buy-appl-pass fruit by woman
 'the boy is bought fruit by the woman'
- b. tshimuma tshi-mu-sumb-id-ibu-a muana kudi mukaji
 fruit su-io-buy-appl-pass boy by woman
 'The fruit is bought for the boy by the woman'

The situation is, again, different in Swahili, where only the applied object can be passivized ((10a)) and (must be) affix-doubled ((11a)). Expectedly, when the applied object is passivized the patient cannot be affix-doubled, as in (12):

- (10) a. mtoto a-na-m-nunu-li-a mwanamke matunda
 boy su-tns-io-buy-appl woman fruit
 b. *mtoto a-na-ya-nunu-li-a mwanamke matunda
 boy su-tns-do-buy-appl woman fruit
 c. *mtoto a-na-ya-m-nunu-li-a mwanamke matunda
 boy su-tns-do-io-buy-appl woman fruit
 'the boy buys the woman fruit'
- (11) a. mwanamke a-na-nunu-li-w-a matunda na mtoto
 woman su-tns-buy-appl-pass fruit by boy
 'the woman is bought fruit by the boy'
- b. *matunda ya-na-m-nunu-li-w-a mwanamke na mtoto
 fruit su-tns-io-buy-appl-pass woman by boy
 'the fruit is bought for the woman by the boy'
- (12) *mwanamke a-na-ya-nunu-li-w-a matunda na mtoto
 woman su-tns-do-buy-appl-pass fruit by boy
 'the woman is bought fruit by the boy'

To complicate the matter further, in Tshiluba we can have an applicative construction out of an unaccusative verb, namely a verb which normally does not select any object. The new argument introduced by the applicative, namely the applied object, behaves also in this case as a real object of the unaccusative verb: it can passivize and trigger optional affix-doubling, as shown in the following examples:

- (13) a. muana u-lu-il-a mfumu
 boy su-come-appl chief
 b. muana u-mu-lu-il-a mfumu
 boy su-io-come-appl chief
 'the boy comes for the chief'

- (14) mfumu u-lu-id-ibu-a (kudi muana)
 chief su-come-appl.pass (by boy)
 'the chief is come for (by the boy)'

In symmetrical languages on the contrary, not only it is not possible to have sentences corresponding to (13b) or (14), but even (13a) is ill-formed. I exemplify this fact with Chichewa sentences (from Baker 1988: 255):

- (15) a. chiphadzuwa chi-a-fik-a
 beautiful woman su-tns-arrive
 'the beautiful woman has arrived'
 b. *chiphadzuwa chi-a-fik-ir-a mfumu
 beautiful woman su-tns-arrive-appl chief
 'the beautiful woman has arrived for the chief'

2.2. Causative constructions

Differently from what happens in many languages, where causative constructions generally make use of a separate verb form (cf. English *make/get*, Italian *fare*, etc.), Bantu languages employ a verbal suffix, placed after the root like the applicative suffix seen above. Also in this case, the morphosyntactic operation has the effect of introducing an extra argument with respect to the number of arguments selected by the base verb: the *causer*, namely the person/entity which causes the action encoded in the main verb to take place.

When the main verb is unaccusative or unergative, the complex causative verb has only one internal argument (the sole argument of the base verb, semantically the *causee*) and both symmetrical and asymmetrical languages behave alike: such DP can be passivized and affix-doubled (see Baker (1988) for an exhaustive discussion, and Cocchi (1992) for Tshiluba in particular). But when the base verb is transitive, the behaviour of the two objects reflects what we saw for applicatives and ditransitives: in languages like Tshiluba both objects behave symmetrically, except for word order (the causee must precede the theme) (exs. (16)-(18)), while in languages like Swahili only the causee, and not the theme, can be passivized and affix-doubled (exs. (19)-(20)):

- (16) a. mukaji u-sumb-ish-a muana tshimuma
 woman su-buy-caus boy fruit
 'the woman makes the boy buy fruit'
 b. *mukaji u-sumb-ish-a tshimuma muana

- (17) a. muana u-sumb-ish-ibu-a tshimuma kudi mukaji
 boy su-buy-caus-pass fruit by woman
 'the boy is made to buy fruit by the woman'
- b. tshimuma tshi-sumb-ish-ibu-a muana kudi mukaji
 fruit su-buy-caus-pass boy by woman
 '*The fruit is made to buy to the boy by the woman'
- (18) a. mukaji u-mu-sumb-ish-a muana tshimuma
 woman su-io-buy-caus⁸ boy fruit
- b. mukaji u-tshi-sumb-ish-a muana tshimuma
 woman su-do-buy-caus boy fruit
- c. mukaji u-tshi-mu-sumb-ish-a muana tshimuma
 woman su-do-io-buy-caus boy fruit
 'the woman makes the boy buy fruit'
- (19) a. mwanamke a-na-m-nunu-ish-a mtoto matunda
 woman su-tns-io-buy-caus boy fruit
- b. *mwanamke a-na-ya-nunu-ish-a mtoto matunda
 woman su-tns-do-buy-caus boy fruit
- c. *mwanamke a-na-ya-m-nunu-ish-a mtoto matunda
 woman su-tns-do-io-buy-caus boy fruit
 'the woman makes the boy buy fruit'
- (20) a. mtoto a-na-nunu-ish-ew-a matunda (na mwanamke)
 boy su-tns-buy-caus-pass fruit (by woman)
 'the boy is made to buy fruit (by the woman)'
- b. *matunda ya-na-nunu-ish-ew-a mtoto (na mwanamke)
 fruit su-tns-buy-caus-pass boy (by woman)

⁸ Again, I will gloss with *io* also the causee, namely the argument different from the theme, which behaves like an indirect object in asymmetrical languages. In the last section, however, I will introduce a different terminology, and all these arguments (recipient, benefactive, locative, causee, etc.) will be grouped under the more appropriate label of Delimiter (from Borer (1994) and subsequent works), in that all of them share the aspectual/thematic property of delimiting the action expressed by the verb stem.

3. Some reflections on ditransitive clauses and VP-shells

In the earliest GB-literature, the structure of ditransitive verbs like *give*, which obligatorily select two internal arguments, a direct and an indirect object (respectively DO and IO henceforward), made use of tripartite nodes: V' dominated V° and its two arguments, DP-do and DP/PP-io. But since Kayne (1984), the theory allows only binary branching nodes; therefore another solution was needed for verbs containing more than one internal argument.

Kayne (1984) proposes that a ditransitive verb has a complex structure consisting in two distinct clauses, the second of which has a locative meaning. Therefore a verb like *give*, instead of selecting a DP-object (like normal transitive verbs), selects another clause, headed by a (phonologically null) copular element, into which the P° heading the PP-indirect object incorporates when dative shift applies, and this is the reason why the indirect object surfaces as a prepositionless DP. The alternation between the non-shifted sentence (*John gives a book to Mary*) and the shifted one (*John gives Mary a book*), thus, parallels the alternation we find in locative/possessive clauses, along the lines traced by Benveniste (1966), who first argued that the incorporation of P° into BE yields HAVE, as in the well-known Latin alternance *mihi est filius* vs. *habeo filium*. The structure of the two mentioned English ditransitive sentences will thus look as follows:

- (21) a. John gives [a book (is) to Mary]
 b. John gives [Mary (is+P°= has) a book]

Larson (1988) develops Kayne's suggestions and postulates that a ditransitive verb consists of two 'VP-shells': the complement of the highest V° (*give*) is indeed a second VP, headed by a phonetically empty verb (which incorporates in the highest one in the course of the derivation), in whose Specifier and Complement positions the two internal arguments are generated:

- (22) [_{IP} I [_{VP1} su V1 [_{VP2} do V2 [_{PP} P io]]]]

According to Larson, in order to derive from (22) the corresponding shifted sentence, we must assume a movement of the NP-io (internal to PP) to Spec(VP2), namely the position occupied in (22) by the direct object; such a movement is made available by means of P° incorporation into V°, as in Kayne (1984). In Larson's analysis, this kind of movement patterns with the derivation of passive sentences, where the direct object moves to subject position, and the subject becomes a 'chomeur' (in Perlmutter and Postal's (1984) terminology, used by Larson): it loses subject properties and has to surface obliquely (or may not surface at all). Analogously, in the case at hand, the IO moves to the 'subject' position of the embedded

VP, where the DO is generated, and the latter becomes a 'chomeur': it loses object properties and surfaces in a right-adjoined position:

(23) [_{IP} I [_{VP1} su V1+V2 [_{VP2} [_{VP2} io_i [_v t_v t_i] do]]]]]

This analysis was proposed in order to account for the fact that in (22) the former indirect object is the NP which shows all the properties of objecthood, while the direct object seems to have lost them. This is shown very clearly by the fact that, while in a passive non-shifted sentence the DO can be promoted to subject position, as in (24), in a shifted sentence this is not possible anymore: only the former IO can move to the subject position, as in (25):

(24) John gives the book to Mary
The book is given to Mary
*Mary is given the book to

(25) John gives Mary the book
Mary is given the book
?*The book is given Mary

Even if Larson's theory has been subject to many changes and reformulations in the past years, it has been generally assumed since then that syntactically complex verbs like ditransitives are composed of (at least) two VP-shells, in order to comply with Kayne's binary branching requirement.

3.1. VP-shells in the Minimalist Program

The use of VP-shells has been recently extended by Chomsky (1995). He assumes in fact that even simple transitive verbs are composed of two VP-shells. In order to motivate such a structure, Chomsky assumes that the configuration v-VP represents the semantic meaning of 'Cause', crucially involved in all transitive sentences. Differently from Larson's proposal (cf. (22) above), Chomsky argues that the lexical verb is generated in the most embedded VP, while the higher shell is headed by a so-called 'light verb' (v°), which is a functional head.

The structure of a transitive verb will thus look as follows:

(26) [_{TP} T[°] [_{VP} su v[°] [_{VP} V[°] do]]]

Chomsky analyses unergative verbs as hidden transitives, along the lines traced by Hale and Keyser (1991), Laka (1993) and subsequent works. Thus their structure will be the same as (26) for transitives. Unaccusative verbs will therefore be the only verbs consisting of a simple VP, as in (27):

(27) [_{TP} T[°] [_{VP} V[°] DP]]

Chomsky (1995) does not make any reference to the structure of ditransitive verbs in a VP-shell based system. Bobaljik (1995) instead, following the previous version of the Minimalist framework (Chomsky (1993)), which still makes use of AGR-heads, assumes that the structure of (shifted) ditransitive verbs consists of three VP-shells, each projecting an AGRP, as in (28) below. In this model, therefore, the number of VP-shells - and agreement heads - strictly parallels the number of arguments selected by a verb.

(28) [TP T [AGR_{SP} AGR_S [VP SU v [AGR_{IO} AGR_{IO} [VP IO v [AGR_{DO} AGR_{DO} [VP DO V]]]]]]]]

In this structure, each DP checks Case in the immediately higher Spec(AGRP) position. In this way it is possible to avoid Equidistance problems and crossing paths when the DPs move from base position to Case-checking position, especially in the case of two internal arguments: the Case-checking position of the DO is lower than the base-position of the IO, and the same holds between IO and SU.

Once AGR-heads are dispensed with, in line with Chomsky (1995), the structure in (28) could be rewritten as in (29), which maintains the symmetry between the number of arguments and VP-shells. This is indeed the structure adopted by Collins (1997):⁹

(29) [TP T [vP₁ SU v [vP₂ IO v [VP V DO]]]]

In absence of AGR-heads, Chomsky (1995) assumes that the internal argument of a transitive structure, like (26) above, checks Case against v° , and a second specifier is projected to accommodate the DP when it checks Case in overt syntax (since the DP-subject, or its copy, already occupies Spec(vP)). For a ditransitive structure like (29), Collins (1997) assumes that the DO checks Case against $v^{\circ}2$ and the IO against $v^{\circ}1$, by projecting a second specifier for each v° -head if necessary. Thus, the Case-checking modality strictly reflects Bobaljik's hypothesis.

3.2. Problems raised by the Tshiluba data

On the basis of Tshiluba data in (1-3) above, it becomes evident that the structures of ditransitives hypothesized in (28) or (29) need re-discussing. We see in fact that both structures are not adequate to capture the situation of symmetrical languages like Tshiluba. These structures, in fact, can only account for DOCs in languages like Swahili, as well as for English Dative shift, namely contexts in which the two objects show an asymmetrical behaviour, and the movement of the

⁹ I am using Chomsky's terminology. Collins, instead, calls v_1 and v_2 respectively Tr° (from Transitivity) and $Appl^{\circ}$ (from Applicative). Furthermore, Collins generates the DO in VP-complement position instead of Spec(VP). This divergence is immaterial for the present purposes.

DO to the subject position of a ditransitive passive sentence must be ruled out (see (5b) above).

According to Chomsky (1995), a passive sentence, like an unaccusative one, should lack the highest vP-shell (as well as the eventual AGRsP). As a consequence T^o, under Minimal Link Condition, attracts the higher-generated DP, the indirect object, which moves to Spec(TP) and checks nominative Case, while the direct object checks accusative Case by moving (presumably at LF) to Spec(vP2) / Spec(AGRdoP). The impossibility for the DO to move to Spec(TP) is thus captured by Minimality/MLC reasons: in both (28) and (29) the IO, a potential checker for the D^o-feature in T^o, is nearer to Spec(TP) than DO (cf. Rizzi (1990)). But this explanation does not account for Tshiluba, where the DO can move to subject position even in presence of an IO.

Furthermore, if the asymmetries between IO and DO in Swahili were entirely due to minimality considerations, we could account for the passivization facts but not for the affix-doubling facts, and it is quite unlikely that two so strictly related phenomena should receive completely separate accounts.

4. A tentative proposal: parametrization of multiple Case feature-checking

In an attempt to overcome the problems raised by the Tshiluba data, we may assume that the structure of ditransitives consists in only two VP-shells; the structure with three VP-shells, in fact, does not prove to be universally valid.

Thus, the structure of ditransitives should pattern with that of transitives (cf. (26) above): the DP-subject is merged in the specifier of the highest vP, while the two objects are both generated VP-internally, in the specifier and complement position of the lowest shell, a hypothesis which recalls Kayne's and Larson's proposals discussed above. In this way the two objects are equidistant from subject position, Spec(TP), once the DP-subject is not merged (in passives). The various languages establish, as a means of parameter setting, the relative position of the two objects, as well as whether they are both prepositionless DPs, as in Bantu, or a DP and a PP, as in Romance.¹⁰

The structure of both Tshiluba and Swahili will thus look as in (30):

(30) [TP T [vP SU v [vP IO V DO]]]

¹⁰ In Romance languages, for instance, the DO will be merged in Spec(VP) and the PP-IO in the Complement. In this case the two DPs are not equidistant from Spec(TP), due to the PP-node, and this accounts for the fact that only the DO can passivize. A language like English allows instead for two possibilities, arising from two different numerations: one with a PP-IO in the Complement position, like in Romance, and one with a DP-IO in the Specifier (the so-called shifted sentence), but with an inert DO, like in Swahili.

In absence of the subject-DP, both objects are equidistant from Spec(TP), thus either of them can move to such a position and become the surface subject of the sentence, triggering subject agreement. This is consistent with the Tshiluba data in (2) above, but we must still explain why the movement of the DO is not possible in Swahili ditransitives; in other words, something must block the movement of the DO in asymmetrical languages.¹¹

The contrast between Tshiluba and Swahili could be captured by a parameter concerning the status of the DO in a DOC (as was in Baker (1988), Cocchi (1992)): we can assume that in Tshiluba, but not in Swahili, also the DO is a real object, structurally Case-marked.¹² In Minimalist terms, the parameter relates to the possibility for the accusative Case feature contained in a ditransitive or complex V^o¹³ to erase after being checked once (by the IO), thus admitting (or not) multiple checking.

We can assume that, in languages like Tshiluba, multiple checking is allowed; therefore the derivation of an active ditransitive proceeds as in (31):

(31) [TP SU T [VP S_H [v ff(DO)-ff(IO)-v [VP IO V DO]]]]

In passives, either of the objects can move to Spec(TP), while the other still checks Accusative Case against v^o. Here I assume, following Collins (1997)¹⁴ and

¹¹ To assume a structure with two VP-shells for Tshiluba and one with three VP-shells for Swahili (for the same construction) should go against any principle of Economy, and therefore we reject such a possibility.

¹² This is in fact Baker's (1988) assumption for asymmetrical languages like Swahili. He proposed the Case Frame Preservation Principle (CFPP), which says that a complex verb cannot assign more Cases than a simple one. Therefore the IO receives the sole structural Case, while the DO receives inherent Case or is visible through noun reanalysis into V^o; in both cases it has an inert behaviour. As already noted by Cocchi (1992), such a principle obviously does not hold for Tshiluba.

¹³ Crucially, not every transitive verb in Tshiluba admits multiple objects, but only those verbs which are morphologically complex, namely resulting from the incorporation into V^o (in the lexicon) of a Case-assigning element (P^o in ditransitives and applicatives, V^o in causatives). In other words, the complex verb seems to 'inherit' from its internal constituents the possibility of assigning one Case each. See at this regard the proposals in Marantz (1984) and Cocchi (1992), who argue against Baker's Case Frame Preservation Principle.

¹⁴ Collins (1997) assumes that vP is present also in unaccusatives, and hence in normal passives. He motivates such an assumption with data relative to word order in English locative inversion clauses. In the case I am discussing, the presence of vP is further motivated by the need of checking Case on that object which does not check nominative.

contra Chomsky (1995), that the highest vP, in whose specifier the DP-subject is merged, is present also in passives, though in these cases no DP is base-generated in its specifier. The derivation proceeds as in (32):

(32) [TP IO/DO T [vP ff(DO/IO)-v [vP (IO) V (DO)]]]

On the contrary, we can assume that in Swahili multiple accusative checking is not permitted, since the Case feature contained in V° erases after checking the Case of the IO. As a consequence, the DO is not a structural object (and does not have the related properties; cfr. (4)-(5)), and it is visible at PF thanks to other processes, like by receiving inherent Case (cf. the discussion in Baker 1988).

Therefore, the sole DP which can move to Spec(TP) in passives is the IO, which still has an unchecked Case feature:

(33) [TP IO T [vP v [vP ~~IO~~ V DO]]]

The explanation that Chomsky (1995) offers for Multiple Subject Constructions in Icelandic is indeed similar: the (Nominative) Case feature contained in T° does not erase after being checked once. The same, I assume, happens in Tshiluba for the Accusative Case feature contained in V°. Not accidentally, both Multiple Subject Constructions and Symmetrical Double Object Constructions are not very widespread cross-linguistically; indeed they represent exceptions to the rule, as exceptional is the fact that an uninterpretable feature may enter multiple checking relations.

4.1. Residual problems

To sum up, in the preceding section I have assumed that the structure of ditransitives does not consist of three but rather two VP-shells (contra Bobaljik (1995) and Collins (1997)) on the basis of the Tshiluba data, which a structure with three VP-shells is not able to account for. Furthermore, I have argued that the various languages establish, as a matter of parameter setting, the relative position of the two internal arguments (both generated in the lowest VP), as well as the number of structural (accusative) Cases that V° can assign.

Though this proposal might sound attractive, some residual problems remain open.

First, in Swahili, although both DP-objects are equidistant from the accusative Case-checking position (Spec(vP)), as well as from Spec(TP), the data show that only the IO exhibits object properties. We have assumed that the IO checks the sole Case available, while the DO gets inherently Case-marked. At this point we might wonder why it is necessarily the IO, and not the DO, which checks the sole Accusative Case feature of the verb, being the two equidistant from Spec(vP).

Second, though a structure like (32) above can account for the passivization data in Tshiluba in terms of MLC, the connection between passivization and affix-doubling remains unexplained. Furthermore, Baker's assumption of affix-doubling as a diagnostic of true objecthood, namely as a proof of accusative Case marking, is highly speculative and objectable. If Bantu affixes can be considered as the bound counterpart of Romance clitics, in fact, it is evident that the latter do not necessarily double accusative objects.

Third, the DPs which can passivize or be affix-doubled in Tshiluba can even be three in some complex cases, e.g. when a verb is causative and applicative at the same time, as in (34):¹⁵

- (34) mukaji u-sumb-ish-il-a mfumu muana tshimuma
 woman su-buy-caus-appl chief boy fruit
 'the woman makes the boy buy fruit for the chief'

The problem we meet in this case is that, unless we allow ternary branching (as did Baker (1988)), there is no possible way to have three DPs which are equidistant from a certain position, Spec(TP) in this case.

Last but not least, an unaccusative applicative sentence like (13a) above raises many questions once we analyse its structure more in detail. Since we have assumed (30) as the base structure of Tshiluba ditransitives, with the applied object in Spec(VP) and the theme in complement position, the structure corresponding to (13a) should be (35), as the sole argument of an unaccusative is thematically a theme and not an agent:

- (35) [TP T [VP v [VP IO V DO]]]

The problem with this structure is that both DPs are equidistant from Spec(TP); thus T° could in principle attract either of them, to check its EPP feature, in the active sentence. But if the applied object moves, the sentence gets a different semantic interpretation: the theme, which remains *in situ*, is indeed understood as the applied object:

- (36) *mfumu u-lu-il-a muana
 chief su-come-appl boy
 'the boy comes for the chief'
 OK as 'the chief comes for the boy'

¹⁵ This was indeed Cocchi's (1992) main criticism to Baker's (1988) CFPP. Baker said in fact that, since a simple verb (like *kupa* 'give' in (1) above) may assign two Cases in languages like Tshiluba, also a complex verb might do it, and this should account for the symmetrical behaviour in applicatives and causatives. But there are obviously no simple verbs which can assign three Cases.

A possible way out could be to assume that while *kulua* is an unaccusative verb, the applied form *kuluila* is not, because the DO does not have theme properties any longer, but rather agent ones, typically mental volition (cf. Reinhart (1996)). But this analysis is also far from being attractive; besides, it does not explain why a sentence like (13a) is not allowed in languages like Chichewa or Swahili (cf.(15) above).

5. An alternative theory: Clitic shells instead of VP-shells

In the preceding section we have seen that a VP-shell approach to the structure of DOCs in languages like Tshiluba and Swahili leaves some fundamental questions unanswered. Therefore, it might be worthwhile to explore other possibilities offered by current theories of syntax, still in the spirit of Chomsky's (1995) Minimalist program.

One such theories is presently proposed by Manzini and Savoia (1997, 1998), Savoia and Manzini (in prep.), and it is based on a detailed study of clitic constructions in Romance languages, with a particular emphasis on Italian dialects. As discussed before, Bantu subject- and object-affixes present a lot of syntactic similarities to Romance clitics; therefore the assumptions formulated for the latter can prove extremely useful for an analysis of the former.

In their works, Manzini and Savoia substitute the VP-shell module with an articulated set of Clitic projections generated above I° (Clitic shells). Adapting original suggestions of Sportiche (1992), they hypothesize that each clitic heads a separate projection CIP. Since there are clitics which mutually exclude each other (like, for instance, locative and dative clitics), we can reasonably argue that they realize the same CI° ; therefore it is misleading to identify such CIPs in terms of Case: they are better characterized in terms of thematic/aspectual properties of the verb, in the sense of Borer (1994) and related works.¹⁶ In this model the Agent is seen as the Originator (Or) of the event, the Patient/Theme as the Event Measurer (Meas) and the Recipient/Goal, as well as the Locative, as the Delimiter (Del). Therefore, the positions for IO- and DO-clitics can be identified respectively as CI_{Del}° and CI_{Meas}° ; the subject clitic, which is aspectually non-differentiated, can be simply indicated as CI_{D}° .

In (37) below we can see the structure of the various projections assumed for Standard Italian and Italian dialects (from Manzini & Savoia (1997)):

(37) CI_{D}° CI_{Del}° CI_{Meas}° I°/T° V°

¹⁶ See Tenny (1992, 1994), Arad (1995, 1996), Cocchi (1998), Manzini and Savoia (1997, 1998).

As a consequence, Manzini and Savoia assume that the arguments of a verb are not represented by the full DPs present in the sentence, but rather by the clitic pronouns which, obligatorily or optionally, are attached to the verb (preceding or following it according to its finiteness). Thus, the full DPs only 'double' the clitics, similarly to what happens in the widely studied cases of clitic doubling structures in languages like Spanish (cfr. Sportiche (1992), Torrego (1994) and many others).

In this system a clitic gets linked with the respective aspectual feature/ θ role (contained in V°) by attracting it with a covert operation of Attract-F.¹⁷ θ roles, thus, behave like the other pure features (contra Chomsky (1995), who assumes that θ roles are not features). If we assume in fact, as in Platzack (1994) and Manzini and Savoia (1997), that an empty category like *pro* is not justifiable in a Minimalist framework, θ -marking of the clitic cannot be achieved with movement of a *pro* (generated in θ position) to Spec(CIP), and another solution is required. But if θ roles can be attracted like the other features, there is no reason to hypothesize VP-internal generation of the full DPs either; Manzini and Savoia assume indeed that the DPs are generated directly in their spell-out positions. The sentence-initial DP (traditionally seen as the surface subject) is presumably in the Spec of a TopicP above CIDP (in null subject languages like Italian, or in clitic subject languages like Northern Italian dialects, as well as in Bantu languages),¹⁸ while the internal arguments are merged in the specifier position of FocusP or TopicP lower than VP.

5.1. Clitic shells and Bantu languages

The framework I have just delined sheds new light on the problem raised by the Bantu data, and especially by the contrast between symmetrical and asymmetrical languages, and opens new ways towards a satisfying account of the data.

The perspective of the analysis is indeed completely reverted from current accounts. The contrast between languages like Tshiluba and Swahili is in fact generally analysed in terms of Case features, and/or in terms of locality/MLC (for what

¹⁷ Thus CIDel $^{\circ}$ and CIMeas $^{\circ}$ will attract respectively the Delimiter (recipient, locative, applied object, causee, etc.) and the Measurer (patient, theme, partitive, etc.). CID $^{\circ}$, which is aspectually non-differentiated, allows more possibilities: it will attract the Originator (agent, cause, etc.) in transitives and unergatives, but in the case of unaccusatives or passives it may attract one of the other two roles (depending on the language in question), and it may even attract more than one, as in reflexives (e.g. Originator and Measurer).

¹⁸ In overt subject languages, like English, the DP-subject is instead generated in Spec(CID), as it must check the strong D-feature. In fact we cannot assume that such a feature is weak in English, as the presence of the DP-subject is obligatory, and it cannot be checked by a clitic/affix, as English does not have these elements.

concerns passivization), and we have seen that several problems remain unexplained (cf. section 4.1.). In the framework at hand, Case matters have very little - if any - weight, especially if we consider that clitics/affixes are treated as the real arguments of the verb (be they overt or covert), while full DPs are only doubling elements, thus with no Case. Vice versa, locality plays no role at all, as the DP-surface subject of a passive sentence is merged directly in its spell-out position, Spec(TopicP). Therefore, the fact that some passive structures are ill-formed in Swahili, but not in Tshiluba, cannot be ascribed to constraints on movement.

Manzini and Savoia assume that each clitic head contains features, for example a D° -feature,¹⁹ which must be checked in syntax (if strong) or at LF (if weak). The strength of these features are established by the various languages by means of parameter setting. Checking of a strong feature can be achieved by merging a specialized clitic in the head itself, if the language under analysis has clitics (like Romance or Bantu languages), otherwise by merging or moving a DP into the specifier position of the clitic head in question (like Germanic languages).

These assumptions could help account for the different distribution of affixes in Tshiluba and Swahili: for instance we could assume that the two languages parametrize differently with respect to the strength of (some features of) $ClMeas^{\circ}$: it could be strong in Tshiluba and weak in Swahili, thus accounting for the contrast between (3b) and (4b) above.

But this is not the correct prediction either: in (38) we see in fact that a $ClMeas^{\circ}$ can be realized in Swahili, but only if a $ClDel^{\circ}$ is not present, namely in simple transitives:

- (38) mtoto a-na-ki-nunu-a (kitabu)
boy su-tns-do-buy (book)
'the boy buys it (the book)'

There is however a possible way out to this impasse. Cross-linguistic data show indeed that postulating a universal structure like (37) above is too strong a hypothesis, for what concerns either the number or the relative order of clitic shells. We could therefore say that languages parametrize on these two points. For instance, the Tshiluba data in (39a) show that the relative order of $ClDel^{\circ}$ and $ClMeas^{\circ}$ is the opposite of what we find in Italian (39b) and its dialects, or Spanish, but it reflects the French order (39c) (though the order of the clitics is completely rigid within the same language):

¹⁹ This D° -feature encodes categorial feature (all clitics are nominal), as well as definiteness. It patterns with the D° -feature also contained in I°/T° .

Let us start with the lack of passivization of the DO in Swahili, which, I argue, can be made to correlate with the lack of a separate CIMEas° in this language. I assume in fact that, in passives, the position CID° is first unfilled, as there is no Originator; afterwards one of the clitics, base-generated in a lower position (where it gets aspectually identified) moves to CID° (cf. fn.17). In Tshiluba two different affixes/arguments are available, while in Swahili only one, since there is only one clitic head below CID°. Such a head can be filled only by a Delimiter in ditransitives, therefore the subject of a ditransitive passive can only be a Delimiter.²² Since the full sentence-initial DP is, in this view, only a correlate of the affix, and it is base-generated in Spec(TopicP) above CID°, the consequence is that either of the two DP-objects can appear in sentence-initial position in Tshiluba, but only the Delimiter/IO in Swahili, since the sentence-initial DP must agree in features with the affix in CID°.

Another problem was the fact that in Tshiluba we can have up to three DP-objects. In this view, this amounts to saying that in this language we can (exceptionally) have up to three CIPs below CID°, in marked situations. Therefore, in cases like (34) above we have three different clitics which can fill CID° when the sentence is passive, and three different DPs which can be merged in Spec(TopicP). This, of course, is not possible in Swahili, where we can have only one CIP below CID°:

(42) [CIDP u [CIMEasP tshi [CIDelIP mu [CIDel mu [IP sumb-ish-il-a [VP..... (cf. (34))

Last but not least, there is the question of the existence of unaccusative applicatives in Tshiluba. I assume that in this case the two (clitic) arguments are base-generated respectively in CIMEas° and in CIDel°, where they get aspectually interpreted. If CIMEas° moves to CID° position (which is empty, being the verb unaccusative), the theme is understood as the subject (and can be doubled by a DP in sentence-initial position, Spec(TopicP)), while the other affix, generated in CIDel°, represents the applied object, which can be doubled by a DP in a peripheral position lower than VP, as in (43). Of course, if it is the CIDel° which moves to CID° instead, we derive the opposite interpretation.

(43) [TopP muana [CIDP u [CIMEasP ~~u~~ [CIDelIP mu [IP lu-il-a [VP.... mfumu (cf. (13a))

If this sentence is made passive, the Del-affix climbs to CID°, which is now empty, and the applied object can be merged in Spec(TopicP). Once again, in Swahili we cannot have an applicative unaccusative (even in the active form) since CIMEas° and CIDel° are mutually exclusive.

²² Of course, in simple transitives, the Meas/theme can passivize, but we have also seen that in these contexts it can also be affix-doubled. Once again the two properties go together.

Conclusions

To sum up, in this paper I have analysed DOCs in two Bantu languages, Tshiluba and Swahili, which do not behave alike with respect to passivization and affix-doubling in Tshiluba both objects have a symmetrical behaviour, while in Swahili only the indirect object can passivize and be affix-doubled.

I have first shown that most of the current proposals are able to account for the situation of Swahili but not for that of Tshiluba. Afterwards I have discussed several possible sentence structures for ditransitives in terms of a Minimalist, VP-shell-based framework, and I have shown that all of them either do not account at all for symmetrical languages, or they leave some fundamental questions unanswered. Finally I have discussed a Clitic shell-based approach (from Savoia and Manzini (in prep.) and related works), which has proved adequate to overcome most of the problems raised by the Tshiluba data and, furthermore, looks very promising in view of a common account of Bantu affixes and Romance clitics.

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