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# Bantu Verbal Extensions Between Morphology and Syntax

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**Abstract**

Bantu languages represent a typical example of how morphology and syntax are deeply intertwined. Indeed, these agglutinative languages employ affixes, hence morphemes, to express relations that in other languages—like Italian or English—are conveyed by independent words, in syntax. In particular, in this work, I am going to discuss Bantu causative and applicative constructions, which are formed by means of verbal extensions, i.e., affixes that adjoin to verb stems in order to derive complex syntactic structures. Through the comparison with other languages, in particular Italian and English, we will argue that a biclausal analysis of Bantu causatives is tenable and, even more, this analysis can be extended to applicative and ditransitive verbs, taking into consideration the different behaviour of symmetrical and asymmetrical Bantu languages. Finally, we will discuss the peculiar situation of Italian, which behaves like symmetrical Bantu languages as concerns object pronominalization in the complex constructions under analysis; we will conclude that the co-occurrence of clitic pronouns is linked to their different morphological forms, which suggests that they occupy different positions in the clitic/affix string, underlying once more how morphology and syntax feed each other.

**Keywords:** Bantu languages; verbal extensions; causative; applicative; clitics; affixes



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## 1. Introduction

In this work I am going to analyze verbal extensions, the typical Bantu morphemes that adjoin to verb stems in order to form derived structures. However, we will see how not all extended verbs behave alike, and, in particular, I will discuss two constructions where morphological derivation has important syntactic implications, i.e., causative and applicative.

Building on Baker's (1985, 1988) Mirror Principle, which states that the order of morphemes in words should reflect the order of syntactic operations, i.e., morphological derivations should match syntactic ones, I will also speculate on the different status of the DPs which qualify as objects of these complex structures in different Bantu languages: some (asymmetrical languages) admit only one object which can passivize and pronominalize by means of an affix, while others (symmetrical languages) admit two or even three objects in multiple derivations.

Crucially, while for languages like Italian or English, there is a debate in the literature on the status of causative constructions, i.e., whether to consider them monoclausal (Wurmbrand, 2001; Folli & Harley, 2007 among others) or biclausal (Burzio, 1986; Belletti, 2020 among others), Bantu languages apparently favour a monoclausal analysis, once we consider the causative extension as a derivational morpheme rather than a separate verb (Cocchi, 2009). However, recent studies have speculated on the differences between these

two constructions, which point to a biclausal analysis of causatives vs. a monoclausal analysis of applicatives (Pylkkänen, 2008; Baker et al., 2012). In this work I am going to argue that a biclausal analysis of both constructions is tenable.

Interestingly, Italian seems to mirror Bantu asymmetrical languages regarding causative, in that only one DP can passivize, but important differences emerge as to which of the two (patient/theme or causee) is chosen. However, in Italian, both objects can pronominalize with clitics, as in Bantu symmetrical languages; interestingly, even in structures roughly corresponding to Bantu applicatives, both objects can pronominalize, though they cannot passivize. This is due to the special nature of Italian clitic pronouns, which behave like Bantu affixes, though the former are free and the latter are bound morphemes: they are at the same time arguments and agreement markers. Indeed, an analysis along the lines of Manzini and Savoia (2004, 2011)—already applied to Bantu in Cocchi (2020, 2022)—which assumes the same set of inflectional projections at both morphological and syntactic level, seems to be on the right track to account for these complex constructions, where morphology mirrors syntax, in both Bantu and Romance.

This work proceeds as follows. In Section 2, Bantu verbal extensions are presented, with a special emphasis on the different degrees of syntactic import they may exhibit. In Sections 3 and 4, we discuss, respectively, causative and applicative, i.e., two among the most widely studied Bantu constructions with verbal extensions, while Section 5 tackles the different behaviour exhibited by symmetrical and asymmetrical languages. In Section 6 we discuss whether causative and applicative are best analyzed as monoclausal or biclausal, and, in Sections 7 and 8, we propose a biclausal analysis for both causative and applicative/ditransitive verbs in Bantu. In Section 9 we draw a comparison between Bantu and Romance as concerns the similar behaviour of object clitics/affixes in complex constructions; finally, Section 10 summarizes the conclusions that have been reached thus far.

Throughout the paper, Bantu symmetrical languages will be exemplified by Tshiluba, a rather conservative Bantu language spoken in Congo,[1] which I have extensively investigated in previous work,[2] while asymmetrical languages will be illustrated by Swahili.

## 2. Verbal Extensions

One of the most typical features of Bantu languages is the presence of verbal extensions, i.e., affixes that adjoin to verb stems in order to form complex derived structures (cf. Alexandre, 1981; Schadeberg, 2003; Zeller, 2017; Schadeberg & Bostoen, 2019). However, though verbal extensions are sometimes treated as a unitary phenomenon in the literature on Bantu languages, several important differences concerning function, productivity, combinatory possibilities and mutual exclusion patterns can be observed.[3]

In particular, some extensions are very productive and could in principle apply to any verb with which they are semantically compatible, typically causing a change in the grammatical functions and the linear order of constituents; among them we find causative, applicative, passive and reciprocal, given in (1–4) for Tshiluba:[4]

| | | | | | |
|---|---|---|---|---|---|
| (1) | mukaji | u-sumb-ish-a | muana | tshimuma[5] | Causative |
| | woman | 1.su-buy-CAUS-fv | boy | fruit | |
| | 'the woman makes the boy buy fruit' | | | | |
| (2) | mukaji | u-sumb-il-a | mfumu | tshimuma | Applicative |
| | woman | 1.su-buy-APPL-fv | chief | fruit | |
| | 'the woman buys fruit for the chief' | | | | |
| (3) | tshimuma | tshi-sumb-ibu-a | (kudi muana) | | Passive |
| | fruit | 7.su-buy-PASS-fv | (by boy) | | |
| | 'the fruit is bought (by the boy)' | | | | |
| (4) | baledi | ba-nang-angan-a | | | Reciprocal |
| | parents | 2.su-love-REC-fv | | | |
| | 'parents love each other' | | | | |

On the contrary, other extensions, like reversive, repetitive, extensive and contactive, occur less frequently and are generally found, in an almost idiosyncratic way, together with certain verbs or certain semantic classes of verbs, with no import on argument selection (see also Dom et al., 2023a):[6]

| | | | | |
|---|---|---|---|---|
| (5) | muana | u-kang-ul-a | mulangu | Reversive |
| | boy | 1.su-close-REV-fv | bottle | |
| | 'the boy opens/uncorks the bottle' | | | |
| (6) | muana | w-amb-ulul-a | bulelela | Repetitive |
| | boy | 1.su-say-REP-fv | truth | |
| | 'the boy repeats the truth/tells the truth again and again' | | | |
| (7) | bidia | bi-kwat-akan-a | | Extensive |
| | maize pudding | 8.su-stick-EXT-fv | | |
| | 'the maize pudding sticks completely' | | | |
| (8) | kamelo | ka-lam-at-a | ku mutshi | Contactive |
| | camel | 12.su-tie-CONT-fv | to tree | |
| | 'the camel is tied to the tree' | | | |

In virtue of the mentioned differences, Cocchi (2009) labels those in (1–4) syntactic extensions and those in (5–8) lexical extensions. In both cases, the contribution provided by extensions is generally regular and predictable, though sometimes the meaning of the complex word formed by radical + extension may be unpredictable.

The preliminary conclusion that can be drawn is the following: lexical extensions are simply suffixes which modify the meaning of a verb, generally without changing its argument structure, in line with all cases of morphological derivation, while syntactic extensions have important implications on argument structure: in particular, causative and applicative add an argument to the verb they adjoin to, while passive and reciprocal subtract one, converting a transitive verb into an intransitive.[7] Not accidentally, in case more extensions co-occur, lexical extensions are always adjacent to the verb stem and precede syntactic ones.

Note in passing that also syntactic extensions may be lexicalized, i.e., some verbs change their basic meaning when one of these extensions is present, and are listed as such in dictionaries (e.g., Tshiluba *ku-long-a* 'to learn' vs. *ku-long-esh-a* 'to teach'; Willems, 1960):[8]

| | | | |
|---|---|---|---|
| (9) | mfumu | u-long-esh-a | muana |
| | the chief | 1.su-learn-CAUS-fv | boy |
| | 'the chief teaches the boy' < lit. 'the chief makes the boy learn' | | |

Finally, Cocchi (2009) outlined a sub-group of extensions (neutro-passive, neutro-active/impositive and stative), labelled lexical-argumental extensions, which, in spite of having many features in common with lexical extensions (e.g., they are not very productive and always attach to the verb stem, eventually preceding syntactic extensions), also have syntactic import, in that the number of arguments of the clause is linked to their presence:

| | | | | |
|---|---|---|---|---|
| (10) | tshibi | tshi-kang-ik-a | | Neutro-passive |
| | door | 7.su-close-NP-fv | | |
| | 'the door closes/the door is shut' | | | |
| (11) | muntu | u-shik-ik-a | muana | Neutro-active/impositive |
| | man | 1.su-sit-NA-fv | boy | |
| | 'the man seats the boy' | | | |
| (12) | muana | u-shik-am-a | | Stative |
| | boy | 1.su-sit-STAT-fv | | |
| | 'the boy sits' | | | |

Indeed, these extensions do not provide a regular semantic contribution, like lexical extensions, but their function is simply to signal the (in)transitivity of a clause (see also Dom et al., 2023a): neutro-passive converts a transitive predicate into an intransitive, while neutro-active and stative generally affix to the same stem,[9] respectively signalling transitivity and intransitivity.

Hence, Bantu verbal extensions represent a perfect example of how morphology deeply interacts with syntax. Indeed, these morphological elements, though homogeneously treated as derivational suffixes in the literature on Bantu languages, may have a varying degree of syntactic import: they range from lexical extensions, which simply add semantic information, to syntactic extensions, which introduce or subtract arguments, passing through lexical-argumental ones, which are situated somehow in between the other two groups.

At this point, since lexical extensions do not behave differently from derivational suffixes in all languages, we will now concentrate on two of the most widely studied Bantu extensions, i.e., causative and applicative, which we analyze in detail, speculating on their syntactic implications.

## 3. Bantu Causative Constructions

Causative is a widely studied syntactic construction, commonly found across languages, which roughly means 'to make someone do something'. Interestingly, different languages employ different means to express this concept. In particular, while languages like Italian or English employ a verb (like *fare*(It.)/*make*(Engl.)) which selects another predicate,[10] most Bantu languages make use of a specialized verbal extension,[11] which is reconstructed as *-I- in Proto Bantu (Meeussen, 1967; Guthrie, 1967–1971)[12] and appears as -ish- [iʃ] or -ij- [iʒ] in Tshiluba, with possible variants due to vowel harmony.[13] Since this extension does the same job as a separate verb in other languages, Baker (1985, 1988) treats Bantu causative as an instance of verb incorporation (V+V), i.e., he treats the extension as if it were a verbal element.

The causative extension is very productive and can adjoin to all verb stems when semantically compatible, both transitive and intransitive. Crucially, a verb extended by the causative affix will contain an extra argument with respect to its non-causative counterpart. Hence, the causative of a transitive verb will have three arguments (semantically agent/causer, causee and theme), while the causative of an intransitive verb will have two (semantically agent/causer and theme/causee), as exemplified in (13)–(14) from Tshiluba:

| | | | | |
|---|---|---|---|---|
| (13) | Mukaji | u-sumb-ish-a | muana | tshimuma |
| | woman | 1.su-buy-CAUS-fv | boy | fruit |
| | 'the woman makes the boy buy fruit' | | | |
| (14) | Mukaji | u-lu-ish-a | muana | |
| | woman | 1.su-come-CAUS-fv | boy | |
| | 'the woman makes the boy come' | | | |

With causative intransitive verbs, Bantu languages generally behave alike: the DP-theme behaves as the object of the complex verb. Baker (1988) proposes two diagnostics for 'true objecthood': the possibility for the DP-object of an active clause to become the subject of the corresponding passive clause, and the possibility for such a DP to pronominalize by means of an object infix.[14] This is illustrated by (15)–(16) below:[15]

(15) Muana u-lu-ish-ibu-a kudi mukaji
boy 1.su-come-CAUS-PASS-fv by woman
'the boy is made to come by the woman'

(16) Mukaji u-mu-lu-ish-a
woman 1.su-1.ob-come-CAUS-fv
'the woman makes him come'

Conversely, as concerns causative transitive verbs, Bantu languages may show a different behaviour. On the one side there are languages, like Swahili or Chichewa (the latter also illustrated by Baker (1988)), where only the causee can passivize or pronominalize, while the patient/theme cannot, unlike what occurs in simple transitive clauses (see (17–18) below for Swahili). Due to the different behaviour exhibited by the two DP-objects in these languages, Bresnan and Moshi (1990) call them 'asymmetrical languages':

(17) a mwanamke a-na-m-nunu-ish-a[16] (mtoto) matunda
woman 1.su-t/a-1.ob-buy-CAUS-fv (the boy) fruit
'the woman makes the boy/him buy fruit'

b *mwanamke a-na-ya-nunu-ish-a mtoto
woman 1.su-t/a-6.ob-buy-CAUS-fv boy

c *mwanamke a-na-ya-m-nunu-ish-a
woman 1.su-t/a-6.ob-1.ob-buy-CAUS-fv

(18) a mtoto a-na-nunu-ish-ew-a matunda na mwanamke
boy 1.su-t/a-buy-CAUS-PASS-fv 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 6.su-t/a-buy-CAUS-PASS-fv boy by woman

On the other side, in other languages, called 'symmetrical languages', the two objects behave alike: both can pronominalize—even the two at the same time—and passivize. Among them we find Kichaga, analyzed by Bresnan and Moshi (1990), and Tshiluba, whose relevant data are presented in (19–20):[17]

(19) a Mukaji u-mu-sumb-ish-a tshimuma
woman 1.su-1.ob-buy-CAUS-fv fruit
'the woman makes him buy fruit'

b Mukaji u-tshi-sumb-ish-a muana
woman 1.su-7.ob-buy-CAUS-fv boy
'the woman makes the boy buy it'

c Mukaji u-tshi-mu-sumb-ish-a
woman 1.su-7.ob-1.ob-buy-CAUS-fv
'the woman makes him buy it'

(20) a Muana u-sumb-ish-ibu-a tshimuma kudi mukaji
the boy 1.su-buy-CAUS-PASS-fv fruit by woman
'the boy is made to buy fruit by the woman'

b Tshimuma tshi-sumb-ish-ibu-a muana kudi mukaji
fruit 7.su-buy-CAUS-PASS-fv boy by woman
*lit.:'the fruit is made to buy to the boy by the woman'

## 4. Bantu Applicative Constructions

Applicative is also a complex syntactic construction attested in many Bantu languages. It is characterized by the use of a specialized verbal extension, reconstructed as *-ID- in Proto-Bantu (Meeussen, 1967; Guthrie, 1967–1971); in Tshiluba it appears as –il-, with possible variants due to vowel or consonant harmony.[18] It is employed to add an extra-argument to the verb, called the applied object, whose semantic role is beneficiary/recipient, but also instrumental or internal location. However, since the beneficiary is the primary function of the applicative, in this work we will concentrate only on this and leave a discussion of other semantic roles aside.[19]

Since these extra-arguments are generally introduced by prepositions cross-linguistically, Baker (1988) analyses applicative as an instance of preposition incorporation (V+P). Indeed, some Bantu languages may feature prepositions to introduce beneficiaries, as shown in the Tshiluba example in (21), but the applicative construction in (22) is by far the preferred one, and the sole possibility in other languages:

| | | | | |
|---|---|---|---|---|
| (21) | Mukaji | u-sumb-a | tshimuma | bua mfumu |
| | woman | 1.su-buy-fv | fruit | for chief |
| | 'the woman buys fruit for the chief' | | | |
| (22) | Mukaji | u-sumb-il-a | mfumu | tshimuma |
| | woman | 1.su-buy-APPL-fv | chief | fruit |
| | 'the woman buys fruit for the chief' | | | |

As we may expect, symmetrical and asymmetrical Bantu languages behave differently. In the applicative construction of transitive verbs, symmetrical languages exhibit two DPs, applied object and theme, which may both passivize and pronominalize like the sole object of a transitive clause,[20] as exemplified in (23–24) from Tshiluba—a situation which mirrors the causative seen above:

| | | | | | |
|---|---|---|---|---|---|
| (23) | a | Mukaji | u-mu-sumb-il-a | tshimuma | |
| | | woman | 1.su-1.ob-buy-APPL-fv | fruit | |
| | | 'the woman buys fruit for him' | | | |
| | b | Mukaji | u-tshi-sumb-il-a | mfumu | |
| | | woman | 1.su-7.ob-buy-APPL-fv | chief | |
| | | 'the woman buys it for the chief' | | | |
| | c | Mukaji | u-tshi-mu-sumb-il-a | | |
| | | woman | 1.su-7.ob-1.ob-buy-APPL-fv | | |
| | | 'the woman buys it for him' | | | |
| (24) | a | Mfumu | u-sumb-id-ibu-a[21] | tshimuma | kudi mukaji |
| | | chief | 1.su-buy-APPL-PASS-fv | fruit | by woman |
| | | 'the chief is bought fruit by the woman' | | | |
| | b | Tshimuma | tshi-sumb-id-ibu-a | mfumu | kudi mukaji |
| | | fruit | 7.su-buy-APPL-PASS-fv | chief | by woman |
| | | 'the fruit is bought *(for) the chief by the woman' | | | |

Conversely, in asymmetrical languages only the applied object can pronominalize and passivize, again on a par with causatives. The situation is exemplified in (25–26) from Swahili:

| | | | | | |
|---|---|---|---|---|---|
| (25) | a | mtoto | a-na-m-nunu-li-a | matunda | |
| | | boy | 1.su-t/a-1.ob-buy-APPL-fv | fruit | |
| | | 'the boy buys her fruit' | | | |
| | b | *mtoto | a-na-ya-nunu-li-a | mwanamke | |
| | | boy | 1.su-t/a-6.do-buy-APPL-fv | woman | |
| | c | *mtoto | a-na-ya-m-nunu-li-a | | |
| | | boy | 1.su- t/a-6.ob-1.ob-buy-APPL-fv | | |
| (26) | a | mwanamke | a-na-nunu-li-w-a | matunda | na mtoto |
| | | woman | 1.su-t/a-buy-APPL-PASS-fv | fruit | by boy |
| | | 'the woman is bought fruit by the boy' | | | |
| | b | *matunda | ya-na-m-nunu-li-w-a | mwanamke | na mtoto |
| | | fruit | 6.su-t/a-1.ob-buy-APPL-PASS-fv | woman | by boy |

However, it is in the applicative construction of intransitive verbs that the two groups of languages exhibit the greatest differences. Indeed, while in Tshiluba this construction is admitted, and the applied object can pronominalize and passivize, as in (27), in asymmetrical languages this construction is altogether ungrammatical, as shown in (28) from Swahili:

| | | | | |
|---|---|---|---|---|
| (27) | a | Mukaji | u-lu-il-a | mfumu |
| | | woman | 1.su-come-APPL-fv | chief |
| | | 'the woman comes for the chief' | | |
| | b | Mukaji | u-mu-lu-il-a | |
| | | woman | 1.su-1-ob-come-APPL-fv | |
| | | 'the woman comes for him' | | |
| | c | Mfumu | u-lu-id-ibu-a | kudi mukaji |
| | | chief | 1.su-come-APPL-PASS-fv | by woman |
| | | lit: 'the chief is come by the woman' | | |
| (28) | a | mwanamke | w-a-fik-a | |
| | | woman | 1.su-t/a-arrive-fv | |
| | | 'the woman arrives' | | |
| | b | *mwanamke | w-a-fik-ir-a | mfumu |
| | | woman | su-t/a-arrive-APPL-fv | chief |
| | | ('the woman arrives for the chief'). | | |

## 5. Case Considerations

In order to account for these complex constructions in Bantu and the syntactic status of their arguments, Baker (1988) postulates the Case Frame Preservation Principle (CFPP), which states that a complex verb should maintain the same Case-assignment properties of the corresponding simple verb in that language, this possibility being generally limited to one.

The behaviour of asymmetrical languages like Swahili is, thus, captured by Baker in terms of the CFPP. Indeed, in these languages, morphologically simple ditransitive verbs (like Swahili *kupa* 'give') assign only one accusative Case, and only the indirect object—but not the theme—can pronominalize and passivize:[22]

| | | | | | |
|---|---|---|---|---|---|
| (29) | a | mtoto | a-na-m-p-a | (mwanamke) | matunda |
| | | boy | 1.su-t/a-1.ob-give-fv | (woman) | fruit |
| | | 'the boy gives the woman/her fruit' | | | |
| | b | *mtoto | a-na-ya-p-a | mwanamke | |
| | | boy | 1.su-t/a-6.ob-give-fv | woman | |
| | c | *mtoto | a-na-ya-m-p-a | | |
| | | boy | 1.su-t/a-6.ob-1.ob-give-fv | | |
| (30) | a | mwanamke | a-na-p-ew-a | matunda | na mtoto |
| | | woman | 1.su-t/a-give-PASS-fv | fruit | by boy |
| | | 'the woman has been given fruit by the boy' | | | |
| | b | *matunda | ya-na-p-ew-a | mwanamke | na mtoto |
| | | fruit | 6.t/a-give-PASS-fv | woman | by boy |

Likewise, a causative or applicative verb, though complex, can also assign only one accusative Case, in line with the CFPP; this is given to the primary object (causee/applied object), which can pronominalize and passivize, unlike the secondary object (theme).

However, the CFPP does not seem to be valid in symmetrical languages like Tshiluba, where in causative and applicative constructions, the two DP-objects can both pronominalize and passivize, as seen in (19–20) and (23–24) above.

Baker accounts for this state of affairs by assuming that some languages may admit two 'real' objects even with morphologically simple verbs (ditransitive verbs); hence, their maximal case assignment possibility would be two, as shown in (31–32) below. Therefore, in these languages, also complex verbs which have become ditransitive as a consequence of an incorporation process—like causative or applicative—may feature two DPs which are both able to pronominalize and passivize, as seen above:

| | | | | | |
|---|---|---|---|---|---|
| (31) | a | mukaji | u-p-a | muana | tshimuma |
| | | woman | 1.su-give-fv | boy | fruit |
| | | 'the woman gives the boy fruit' | | | |
| | b | mukaji | u-mu-p-a | tshimuma | |
| | | woman | 1.su-1.ob-give-fv | fruit | |
| | | 'the woman gives him fruit' | | | |
| | c | mukaji | u-tshi-p-a | muana | |
| | | woman | 1.su-7.ob-give-fv | boy | |
| | | 'the woman gives it *(to) the boy' | | | |
| | d | mukaji | u-tshi-mu-pa | | |
| | | woman | 1.su-7.ob-1.ob-give-fv | | |
| | | 'the woman gives it *(to) him' | | | |
| (32) | a | tshimuma | tshi-p-ibu-a | muana | kudi mukaji |
| | | fruit | 7.su-give-PASS-fv | boy | by woman |
| | | 'the fruit is given *(to) the boy by the woman' | | | |
| | b | muana | u-p-ibu-a | tshimuma | kudi mukaji |
| | | boy | 1.su-give-PASS-fv | fruit | by woman |
| | | 'the boy is given fruit by the woman' | | | |

However, Cocchi (1992, 1998) criticizes Baker's CFPP, since it cannot explain the fact that, in complex structures featuring causative and applicative at the same time, Tshiluba may assign a case to three objects (which can all pronominalize and passivize), when no morphologically simple verb possibly admits more than two objects in this language:[23]

| | | | | | |
|---|---|---|---|---|---|
| (33) | Mukaji | u-sumb-ish-il-a | mfumu | muana | tshimuma |
| | woman | 1.su-buy-CAUS-APPL-fv | chief | boy | fruit |
| | 'the woman makes the boy buy fruit for the chief' | | | | |

A possible solution would be to assume that, in these languages, the verb has the property to assign as many cases as the number of case-assigning elements it has incorporated, a possibility that Baker himself had resorted to in order to account for the fact that the causative of an unaccusative verb may have an object (in both groups of languages). Hence, Cocchi (1992, 1998) assumes that, in asymmetrical languages, a morphologically complex verb like (33), composed of three case-assigning elements [V+V(Caus)+P(Appl)], might assign up to three cases.

Furthermore, this assumption permits us to explain the occurrence, in languages like Tshiluba, of the applicative of an unaccusative verb, which assigns no accusative case at all when underived, but may assign one when it incorporates a P-like element, as seen in (27) above, where the applied object can pronominalize and passivize.

## 6. One or Two Clauses?

For what we have seen thus far, Bantu causative and applicative constructions apparently present the same structure, with a single verb derived by means of a verbal extension which increases its argument structure: the complex derived verb will have one extra argument with respect to the underived one, and the behaviour of arguments is the same in the two constructions, consistently with the observed difference between symmetrical and asymmetrical languages.

Hence, Bantu languages would apparently imply a monoclausal analysis for these complex constructions, and this is indeed what has been assumed in previous work (Cocchi, 2009), in the spirit of a cartographic approach.[24] Indeed, also for Romance (and other) languages, many authors have proposed a monoclausal analysis of causatives,[25] suggested, among other things, by the fact that the complex causative construction features a unitary string of preverbal clitic pronouns, which mirror Bantu pre-root affixes, while the possible passivization of objects would indicate no phasal boundary between the causative verb and its complement.

However, the presence of two morphologically independent lexical verbs in languages like Italian or English,[26] unlike in Bantu, may also suggest a biclausal analysis of causatives, and this is indeed the path that has been pursued by many other authors in the course of time.[27] Recently, the comparison between Italian/Romance causative with the same construction in other languages, like Arbëresh and Italiot Greek dialects, strongly supports a biclausal analysis of causatives, as discussed by Manzini and Roussou (2024), since a monoclausal analysis would not be able to capture some relevant facts related to these varieties.[28]

At this point, the question is whether the Bantu causative might also be compatible with a biclausal analysis, which seems to be able to account for a higher number of languages.

In this regard, Baker et al. (2012, p. 4) underline how the two Bantu constructions under analysis, though morphologically similar, are very different for what concerns thematic structure: the causative has two agents—the agent of the causing event (the causer) and the agent of the caused event (the causee)—while in the applicative there is only one agent and the extra argument is a beneficiary/goal. In other words, in the causative, there are two external arguments, and, in the applicative, there are two internal arguments.

Therefore, if the causative comprises two agents and two events, the logical consequence is that it is intrinsically biclausal, as already anticipated (though not in these exact

terms) by Baker (1988), where he analyzed causative as an instance of V+V. On the contrary, the applicative would feature only one event and one agent, thus qualifying as monoclausal. According to phase theory (Chomsky, 2001 and following work), agents are generated in the specifier of a v°-head. Hence, in Baker et al.'s (2012) analysis, Bantu causative constructions feature two vPs, in whose specifiers the two agents are generated. Vice versa, in applicatives, there would be only one agent, hence one vP, and a head introducing the applied object, in line with Pylkkänen (2008).[29]

We are now facing a dilemma. On the one hand, the two constructions, causative and applicative, are very similar under a morphological point of view, both involving a verb derived by means of an extension, eventually featuring a unitary string of pre-root affixes with argument status [subject and (one or more) object(s)], hence suggesting a monoclausal analysis for both. On the other hand, the above-reported considerations on thematic structure convincingly suggest a biclausal analysis of causatives, though not of applicatives, in spite of their morphological similarity. But how can two constructions be so (morphologically) similar and so (syntactically) different at the same time? This sounds incongruous, especially in light of much recent research which assumes that phenomena generally deemed to be morphological are actually syntactic (Manzini & Savoia, 2002, p. 118):[30] morphology and syntax are regarded as two sides of the same coin, and, for some authors, there is even supposed to be no morphological component in UG (Collins & Kayne, 2023).

## 7. A Biclausal Analysis of Bantu Causatives

In languages where the causative is expressed by a morphologically independent lexical entry, which is one of the main arguments in favour of a biclausal analysis, the embedded clause has nonetheless been assumed to have an impoverished structure, as indicated, among other things, by the absence of C° and the impossibility of nominative case assignment to the causee, as a consequence of the non-finiteness of the verb of the embedded clause, hence the absence of T°/I°.[31]

For Italian, Manzini and Roussou (2024) assume that the complement clause is a non-phasal vP, which triggers an ergative alignment; as a consequence, the causee can never receive nominative case: with an intransitive verb it receives accusative case from the causative verb, but with a transitive verb it must be introduced by P, as the sole accusative case available is assigned to the theme (a fact which mirrors the situation of ditransitive verbs), as in (34b) below. In English the situation is different, as the causee is not introduced by P and precedes the lower verb. However, we can still maintain that the embedded clause has an impoverished structure lacking C and T: indeed the non-finite lower verb is not preceded by *to*, which is normally interpreted as the lexicalization of T°, and the causee cannot receive nominative case, but it would uniformly receive accusative case by the causative transitive verb (*make*), due to the absence of intervening phases,[32] as seen in the translations to the Italian examples in (34a–b).

| | | | | | | |
|---|---|---|---|---|---|---|
| (34) | a | La donna | fa | arrivare | il ragazzo | |
| | | the woman | makes | arrive | the boy | |
| | | 'the woman makes the boy arrive' | | | | |
| | b | La donna | fa | comprare | la frutta | al ragazzo |
| | | the woman | makes buy | | the fruit | to-the boy |
| | | 'the woman makes the boy buy fruit' | | | | |

As a consequence, in an Italian transitive causative structure, only the theme can passivize, as arguments introduced by P (like the causee) are never allowed in this language;[33] the absence of a lower v*-phase, as assumed, does not block long-distance movement of the theme to the EPP position. Conversely, English patterns with Bantu asymmetrical

languages, like Swahili, in allowing only the higher generated causee, but not the theme, to raise to the subject position, still across the non-phasal lower vP (cf. (18) above):

(35) a La frutta è stata fatta comprare al ragazzo dalla donna
the fruit is been made buy to-the boy by-the woman
'* the fruit has been made (to) buy to the boy by the woman'
b *il ragazzo è stato fatto comprare la frutta dalla donna
the boy is been made buy the fruit by-the woman
'the boy has been made *(to) buy fruit by the woman

Hence, also for Bantu languages we can assume a biclausal analysis similar to the one posited for English—featuring two vPs, in line with Baker et al. (2012)—where the tenseless lower clause is a non-phasal vP (though it does not feature the ergative alignment observed in Italian); hence, the nominative case cannot be assigned and arguments receive the accusative case, consistently with the case-assigning properties that characterize the different Bantu languages (one for asymmetrical languages, two for symmetrical ones, as discussed above). The fact that the causee 'demotes' the theme,[34] rendering it unable to passivize or pronominalize in all cases of double object constructions in Bantu asymmetrical languages,[35] has sometimes been explained in terms of animacy: since the causee (which is always animate) is higher in animacy than the theme,[36] this may account for its higher position in the structure, hence for its possibility to move to the subject position in the absence of the agent/causer, i.e., in passive. Vice versa, animacy considerations do not seem to apply to symmetrical languages, like Tshiluba, where all objects in a complex construction are able to passivize and pronominalize, as seen above. Indeed, this often relates to a freer relative order of such postverbal objects in active clauses, which might overcome minimality restrictions to movement to the EPP position, as noted also in Van der Wal (2017).

## 8. Extending the Analysis to Bantu Applicatives

In Section 7 above, we have come to the conclusion that a biclausal analysis of Bantu causatives (featuring two vPs) is tenable. Hence, in this section, we would like to argue that this can also be assumed for the other complex Bantu construction, the applicative. As observed beforehand, the main difference between these two argument-increasing constructions is that the causative adds an external argument, the causee, while the applicative adds an internal argument, the applied object. In other words, the applicative turns a transitive verb into a ditransitive.

However, ditransitive verbs represent the first construction for which a sort of biclausal analysis has been proposed, in order to accommodate the two internal arguments in obedience to the Binary Branching requirement. Kayne (1984), in fact, assumes that a ditransitive verb has a complex structure consisting in two clauses, the second of which has a locative meaning. In particular, a verb like *give* would select as its complement a constituent headed by a phonetically silent copular element, which represents a kind of link between the two objects; it can be interpreted as *be*, as in (36a) or *have* when, in languages like English, it incorporates the preposition that normally introduces the indirect object, yielding the so-called dative shift (36b):

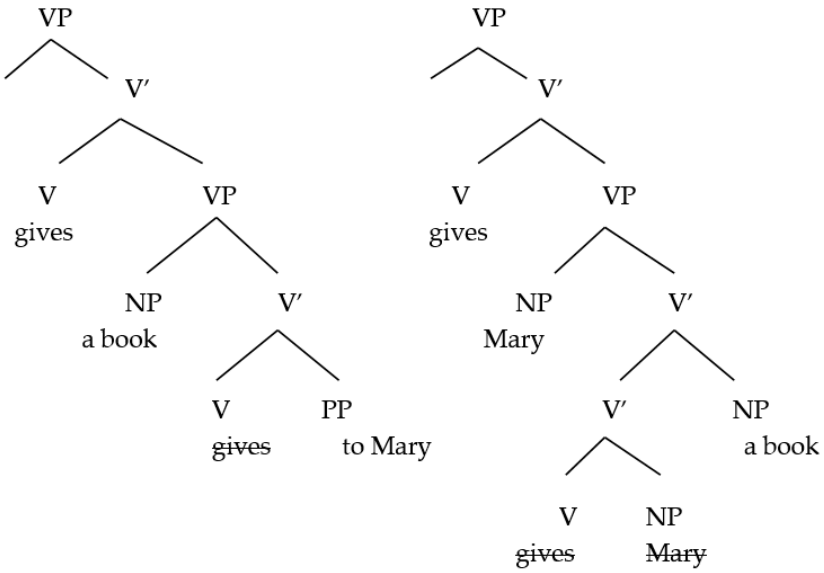
(36) a John gives [$_{VP}$ a book (is) to Mary]
b John gives [$_{VP}$ Mary (is + P° = has) a book]

The alternation between (36a) and (36b), thus, mirrors 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 alternation *mihi est filius* vs. *habeo filium*.[37]

Larson (1988) develops Kayne's suggestion and postulates that a ditransitive verb consists of two 'VP-shells': the complement of the highest V° (a phonetically null verb) is indeed a second VP, whose head (the lexical verb) incorporates into the highest one in the course of the derivation, and in whose specifier and complement positions the two internal arguments are generated, as in (37a–b) [cf. (36a–b)]:[38]

(37) a b




Later on, Chomsky (1995, and following work) assumes that even simple transitive verbs are composed of two VP-shells, since the configuration v-VP represents the semantic meaning of 'cause', crucially involved in all transitive sentences.[39] Hence, we can assume that the structure of a ditransitive verb contains three vPs (cf. also Bobaljik, 1995); hence, it is a biclausal construction,[40] where the most embedded vP is non-phasal—like the one we posited earlier for the causative, consistently with Baker et al. (2012)—as the movement of the highest of the two embedded arguments to the EPP position in the corresponding passive clause is not blocked:

| | | | | |
|---|---|---|---|---|
| (38) | a | A book is given to Mary by John | - | cf. (36a, 37a) |
| | b | Mary is given a book by John | - | cf. (36b, 37b) |

Furthermore, the typical ditransitive verb, *give*, can be semantically decomposed into two parts, one of which is causative (cf. Harley, 2002), and the same holds for other ditransitive verbs (see also (9) above for Tshiluba):

| | | |
|---|---|---|
| (39) | a | John gives Mary a book → John makes Mary have/get a book[41] |
| | b | I show you my new car → I make you see my new car |

Therefore, if a biclausal analysis of causatives is tenable, in English as in Italian or Bantu (cf. Section 7), so is a biclausal analysis of ditransitive verbs.

However, the Bantu applicative is nothing else than a construction which adds an internal argument to a transitive verb, thus turning it into a ditransitive like *give*; see the structural parallelism in (40):[42]

(40) a Mukaji u-p-a muana tshimuma
'the woman gives the boy fruit'
b Mukaji u-sumb-il-a muana tshimuma
'the woman buys (for) the boy fruit'

Hence, even for applicatives, we may assume a biclausal analysis, where the embedded clause is a non-phasal vP, as in causatives.

Other authors who have tackled these complex Bantu constructions have proposed something similar, though not exactly in these terms (see also Wechsler, 2000). For instance, Wood and Marantz (2017) assume a reduced inventory of argument-introducing heads and, in particular, they posit that all non-core arguments (i.e., causee or applied object) are introduced by an unspecified head, labelled i*, which might stand for VoiceP, vP, or PP. In their terms, if i* merges with vP (as if it were Voice), it will add an external agentive argument; however, i* can also introduce non-agentive arguments, qualifying as vP (as traditionally assumed for ditransitive verbs) or PP (as in applicatives).

In this work, we have dispensed with ad hoc notations like i* and we have simply labelled as v° the head introducing the extra-argument, in order to highlight the syntactic parallelism among the three structures under analysis.

## 9. Pronominalization: A Comparison Between Italian and Bantu

As discussed earlier, in the causative construction of a transitive verb, the Italian language exhibits an asymmetrical behaviour, as only one of the two embedded arguments—the theme—may passivize (cf. (35));[43] however, with regard to pronominalization, an Italian causative transitive sentence may present a string of object pronouns, interpreted as arguments of the embedded predicate, which cliticize above the higher predicate: either the causee, the theme, or both:

(41) a la donna fa comprare la frutta al ragazzo
the woman makes buy the fruit to-the boy
'the woman makes the boy buy fruit'
b la donna la fa comprare al ragazzo
the woman it makes buy to-the boy
'the woman makes the boy buy it'
c la donna gli fa comprare la frutta
the woman him makes buy the fruit
'the woman makes him buy fruit'
d la donna gliela fa comprare
the woman him-it makes buy
'the woman makes him buy it'

Indeed, these clitic pronouns mirror Bantu object affixes, which also precede the complex causative verb. In this aspect, therefore, Italian patterns with a symmetrical language like Tshiluba, which also allows either or both objects of a causative transitive verb to affix before the verb stem, as seen in (19) above.[44]

Though it has often been advocated in support of a monoclausal analysis of Romance causatives, the occurrence of these clitics—or affixes for Bantu—in pre-verbal position is not incompatible with a biclausal analysis either. Indeed, if we assume, in line with Manzini and Savoia's (2004 and following) work—which develops Sportiche's (1992) original suggestion—that clitics are generated as specialized heads in the inflectional domain, rather than moving there from a VP-internal position, this is also perfectly in line with the biclausal analysis of causatives outlined above, where the complement clause is defective

(simply a vP) and has no inflection at all. Hence, in the complex causative clause, there is only one inflectional domain where clitics/affixes can be generated. Furthermore, a base generation—rather than movement—analysis of these pronominal elements is certainly preferable for Bantu languages, which present bound affixes rather than morphologically free clitics.

As concerns the applicative construction, though Italian has no synthetic applicative, in a prepositional applicative sentence like (42a), either the beneficiary, or the theme, or both elements may pronominalize. This occurs because, in (42c–d), the beneficiary can be expressed with a dative clitic, a fact which confirms the strong syntactic parallelism between applicative and ditransitive verbs:[45]

(42) a La donna compra la frutta per il capo
the woman buys the fruit for the chief
b la donna la compra per il capo
the woman it(acc) buys for the chief
'the woman buys it for the chief'
c la donna gli compra la frutta
the woman him(dat) buys the fruit
the woman buys (for) him the fruit
d la donna gliela compra
the woman him(dat)-it(acc) buys
'the woman buys it for/to him'

In fact, pronominalization is not possible with intransitive verbs which are incompatible with indirect objects:

(43) a La donna balla/viene per il capo
the woman dances/comes for the chief
b * La donna gli balla/gli viene
the woman him(dat) dances/him(dat)comes

Not accidentally, we have noticed above how some languages, like Swahili, do not admit the applicative of an intransitive verb. Conversely, in (at least some) symmetrical languages, this is possible, and the applied object can pronominalize with a usual object affix (cf. (27b) above).

A possible explanation for the symmetrical behaviour in pronominalization, vis-à-vis the asymmetrical behaviour in passivization, can be found in the fact that the Italian language expresses the indirect object/causee/beneficiary with a dative clitic pronoun, which is morphologically different from the accusative clitic employed for themes. Hence, on the one side, the thematic role of the two clitic elements in all sentences in (41–42) is easily recovered, and, on the other, we may argue, in line with Manzini and Savoia (2004, 2005), that dative and accusative clitics occupy distinct positions in the pre-verbal domain, where they are assumed to be generated, since their relative positioning or mutual exclusion patterns with respect to other types of clitics is different.[46]

To confirm this hypothesis, in Italian we cannot have the co-occurrence of two first/second-person clitic pronouns, expressing a direct and indirect object: indeed, they exhibit a single form, unmarked for Case,[47] as in (44b), and are thus assumed to compete for the same position in the clitic string. Conversely, two tonic pronouns may co-occur, as in (44a):

(44) a Gianni fa accusare te a me
Gianni makes accuse you(ob) to me(obj)
'Gianni makes me accuse you'
b * Gianni mi ti/ti mi fa accusare
Gianni me(ob) you(ob)/you(ob) me(ob) accuse

The fact that first/second-person clitics behave differently from third-person ones should not come as a surprise; see Manzini and Savoia (2004, 2005) for a wide excursus on the different positions and mutual exclusion patterns among different types of clitics in Italian and Italo-Romance varieties.

In Bantu languages, unlike Italian, third-person object affixes have only one morphological form, and are ambiguous in terms of case, a fact which would suggest that these affixes competed for the same position. This is indeed what occurs in asymmetrical languages like Swahili, which admit only one object affix, the one corresponding to the primary object, which is higher in the animacy scale (Baker, 1988).

It remains to be explained how it is possible for two caseless object affixes to co-occur in symmetrical languages like Tshiluba. We may tentatively assume that these affixes, though unmarked for case, nonetheless occupy different positions in the affix string. Indeed, even in Italo-Romance varieties, we observe that some homophonous clitics may have different interpretations and thus occupy different positions; see, e.g., the different position of the Italian *si-* clitic with respect to an accusative clitic when interpreted as an impersonal rather than a reflexive:

(45) a la pasta la si mangia molto in Italia — acc3p>si-Imp
the pasta acc.f.sg si-Imp eat a lot in Italy
'people eat pasta a lot in Italy'
b Gianni se la mangia sempre (la pasta)[48] — si-Refl>acc3p
Gianni si-Refl accf.sg eats always (the pasta)
'Gianni always eats it (pasta)'

Another explanation may rely on the fact that these Bantu affixes, though unmarked for case, have different morphological forms based on the class of the noun they replace. Since, in symmetrical languages, animacy considerations do not prevent inanimate nouns to pronominalize even in the presence of an affix corresponding to a more animate element (as happens in asymmetrical languages), we may assume that affixes replacing inanimate nouns (themes) occupy different positions with respect to those corresponding to animate nouns (i.e., causees or beneficiaries, which are always class 1 [if singular] or 2 [if plural]), a fact underlined, again, by their different morphology.

As a partial confirmation of this intuition, Baker et al. (2012) report how, even in a symmetrical language like Lubukusu, if one of the two objects in a causative construction is first/second person, hence highest in animacy, it can only be interpreted as a causee and it is the only one that may affix onto the verb.

## 10. Final Considerations

In this work we have tackled verbal extensions, a peculiar feature of Bantu languages, namely morphological affixes which extend the verb stem, add semantic information and, in some cases, also have important syntactic implications for thematic structure. In particular, we have analyzed causative and applicative, which, respectively, introduce an extra external and an extra internal argument.

Crucially, we have compared the Bantu causative with the same construction in languages like Italian or English. We have come to the conclusion that Bantu languages are

not incompatible with a biclausal analysis of causatives—which has also been suggested by Baker et al. (2012)—despite their morphological structure suggesting a monoclausal one. Furthermore, speculating on the many similarities between causative and ditransitive verbs, and among the latter and applicative, we have finally argued for a biclausal analysis for all of these constructions: in all of them, however, the embedded clause has been presumed to have an impoverished structure, i.e., it is a non-phasal vP deprived of inflection.

These complex double-object constructions in asymmetrical Bantu languages like Swahili, thus, can be analyzed in parallel with English: only the non-theme object—which is higher in the animacy scale—can passivize and pronominalize, while the theme does not show this possibility. Conversely, in symmetrical Bantu languages like Tshiluba, the two objects exhibit the same syntactic behaviour in passivization and pronominalization, and this can be explained by assuming a lesser importance attributed to animacy factors, which is also underlined by a freer basic order of postverbal DPs in these languages.

The situation of Italian is somehow weird: as concerns passivization, it behaves as an asymmetrical language, in that it presents only one object that can be passivized in causative transitive verbs, as in ditransitive verbs. However, this object is the theme (unlike what occurs in Swahili or English), due to the mentioned ergative alignment that characterizes all Romance languages, which obliges the indirect object or causee to be introduced by P.

As concerns pronominalization, Italian behaves instead like symmetrical Bantu languages like Tshiluba, in allowing both objects to cliticize onto the verb, at least as far as one of them is 3rd person (or both); indeed, only 3rd person clitics present different morphological forms for dative and accusative, and are consequently assumed to occupy different positions in the clitic string.

Something analogous can also be assumed for symmetrical Bantu languages, where themes can pronominalize even in the presence of another object affix; this can tentatively be related to the different morphological forms that characterize inanimate theme affixes, based on the noun class they belong to, while affixes relating to animate objects always belong to classes 1–2. This fact underlines once more how morphology and syntax are two sides of the same coin, and morphological differences may lead to different syntactic behaviours.

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## Notes

1 Thsiluba is regarded as a conservative Bantu language since it retains a higher degree of features from Proto-Bantu (Guthrie, 1967–1971).

2 See, e.g., Cocchi (1992, 1998, 2000, 2009, 2020, 2022).

3 On the status and behaviour of Bantu verbal extensions, the literature is very vast. See, among others, Guthrie (1962, 1967–1971), Schadeberg (1983), Trithart (1983), Good (2005), Zeller (2017), Schadeberg and Bostoen (2019), Pacchiarotti (2020), Gibson et al. (2023).

4 For more detail see the discussion in Cocchi (2009). For a classification of Tshiluba verbal extensions, see also Burssens (1946), Willems (1949), De Kind and Bostoen (2012), while, for Swahili, Perrott (1957), Miehe (1989), Ngonyani (1998), Lodhi (2002), Racine (2015) among others.

5 In all Bantu glosses, subject prefixes (su) and object affixes (ob) are always preceded by a number, which signals the nominal class each noun belongs to. Nouns referring to humans are all class 1 if singular and class 2 if plural. Other acronyms, besides the abbreviations of extensions, include t/a for tense/aspect infix (when present; for Tshiluba we have always used the unmarked form without t/a) and fv for final vowel, which also contributes to inflection.

6 An anonymous reviewer points out that the repetitive extension (*-ulul-*) is also semantically compatible with a great number of verbs. Actually, it is not very productive, and the main reason why I have classified it together with lexical extensions is that it causes no changes in the argument selection of the verb, unlike syntactic extensions.

7 In particular, the passive extension absorbs the external theta role (as assumed also by Baker et al., 1989), while the reciprocal absorbs the internal one.

8 The meanings of *learn* and *teach* are related through causativization, and Bantu languages transparently code this via the causative extension. On the non-causal/causal alternation, see Haspelmath (1993) and, for Bantu, Dom et al. (2022, 2023b).

9 The verb stems which combine with these extensions are generally unavailable in the underived form (e.g., the verb *ku-shika* does not exist; cf. (11–12)).

10 On the syntactic status of the complement of the causative verb, see the discussion later on.

11 An anonymous reviewer points out that a few Bantu languages, like Kagulu, no longer have a productive causative suffix (see Petzell, 2008); in Mbuun, on the contrary, there is causative-applicative syncretism (see Bostoen & Mundeke, 2011).

12 New research, from Bostoen and Guérois (2022, p. 371), has revised this reconstruction, and proposes three Proto-Bantu reconstructions, namely **-i*, **-ic*, and **-ɪdi*.

13 Some extensions, among which causative, may exhibit different forms, which generally arise from the application of regular vowel harmony rules to the basic form. Thus [i] > [e], and [u] > [o], if the preceding syllable contains a middle vowel (cf. Willems, 1949); see, e.g., (9) in the text. For the alternation of voiceless and voiced palatal fricative consonant in the causative extension, see the historical explanation in Bostoen and Guérois (2022).

14 As an anonymous reviewer points out, the properties characterizing objects are not limited to two. However, in this work we will only discuss the different behaviour of the various languages regarding the passivization and pronominalization of objects.

15 The passive voice is also conveyed by means of a verbal extension, which is –ibu/ebu- in Tsiluba and –w/ew- in Swahili.

16 Perrott (1957, pp. 38–40) assumes that, in Swahili, the object affix must be expressed even in the presence of the DP-object, especially whenever the object is definite. Hence, we have a sort of affix doubling (which recalls the well-known clitic doubling in Spanish), which is absent in Tshiluba, where object affix and full DP object are mutually exclusive. Interestingly, Van der Wal (2017), who examines a high number of Bantu languages, has evidenced a correlation between asymmetry and object doubling and, vice versa, symmetry and lack of object doubling.

17 Though Tshiluba and Swahili have been presented as prototypical examples of, respectively, symmetrical and asymmetrical languages, different Bantu languages may show varying degrees of (a)symmetry. However, this issue goes far beyond the scope of the present work and we refer the reader to the discussion in Van der Wal (2017).

18 On vowel harmony see note 13 above. In addition, [l] in the suffix > [n] if the radical ends with a nasal sound (cf. Willems, 1949).

19 See Pylkkänen (2008) and Pacchiarotti (2020) for a discussion of the various functions and the differences related to it.

20 See also Rugemalira (1993) and Pacchiarotti (2020).

21 In Tshiluba, [l] > [d] whenever [i] follows (thus the suffix -il- > -id- when followed by -ibu-, as in the example). The sequence -di- is always pronounced as a voiced palatal affricate [ʤi].

22 An anonymous reviewer wonders if the situation could be different in case of two animate DP-objects, or with a 1st/2nd person indirect object. Unfortunately, this issue lies beyond the scope of this work and is postponed to future research.

23 For the sake of brevity, we will not report the complete data, i.e., all the possibilities of pronominalization and passivization of the three objects in (32).

24 On the cartographic approach to sentence structure, see Rizzi (2004), Cinque (2006) among others.

25 See Wurmbrand (2001) and Folli and Harley (2007), among others.

26 Indeed, lexical material can—and sometimes must—intervene between the causative verb and the other verb.

27 See, for instance, Burzio (1986) and, more recently, Belletti (2020). Romance languages, like English, have no morphological applicative construction; hence, the literature only discusses causative for these languages.

28 For a detailed discussion of these data, which is far beyond the scope of this article, we refer the reader to Manzini and Roussou (2024) and the literature cited therein.

29 Indeed, Pylkkänen (2008) assumes two different applicative heads (high and low) for different types of applied objects. We will not discuss this issue here.

30 See also Manzini and Savoia (2007, 2011), Kayne (2010), Starke (2020), Manzini (2021).

31 Indeed, within Minimalism, nominative is a reflex of Agree with I/T (Chomsky, 2001 and following work).

32 This is a rephrasing of Chomsky's (1981) original assumption that the causee would receive accusative Case by the higher verb via Exceptional Case Marking.

33 Even in Tshiluba, if the beneficiary is introduced by P°, as in (21) above, it cannot passivize.

34 The concept of argument demotion has a long tradition, ever since Perlmutter (1978) and related work. However, we will not discuss this matter in detail here.

[35] Applicative and ditransitive verbs, for example. In this regard, Baker (1988) assumes that the theme in asymmetrical languages receives an inherent Case, rather than an accusative.

[36] Differential object marking is often analyzed cross-linguistically in terms of the animacy scale: human > animate > inanimate (Aissen, 2003). Accordingly, the higher objects (on the left) can be marked, and the objects in the lower positions (on the right) can either be optionally marked or not receive any marking (Pires, 2021, p. 3).

[37] Kayne (1984, 1993), in fact, analyzes *have* as an instance of *be* + P, speculating on the original assumption by Benveniste (1966), who posits that *be* is universally the primary copula. Indeed, *have* as an independent verb is absent in many languages (including the Bantu family), where it is replaced by *be* + P, exactly as, in Latin, *habeo* emerged as the consequence of the incorporation into *be* of the prepositional element contained in the dative case.

[38] In (37), we have rephrased Larson's (1988) analysis into more modern terms, dispensing with arrows and replacing traces with copies.

[39] Chomsky (1995) argues that the highest shell is headed by a 'light' verb (v°), which is a functional head.

[40] Since a simple clause contains two vPs, in line with Chomsky (1995 and following work), a biclausal construction would contain three vPs.

[41] An anonymous reviewer correctly points out that the meaning of the two clauses in (39a) is not exactly the same, as the second implies that John does not personally hand over the book to Mary. However, these semantic considerations are outside the scope of the present work, where we only want to highlight the structural parallelism between a ditransitive and a causative construction (Harley, 2002).

[42] As in (39a) above, the meaning of (40a–b) is not the same; again, I am abstracting away from semantic differences and concentrating on structural similarities.

[43] Indeed, Italian differs from Bantu asymmetrical languages, which admit the passivization of the sole causee, like English.

[44] The parallelism between Romance (object) clitics and Bantu (object) affixes has been discussed at length in previous work (e.g., Cocchi, 2000, 2022). The main difference between Italian and Tshiluba with regard to pronominalization is that, in Italian, the indirect object/causee clitic must precede the direct object one, while Tshiluba features the opposite order; this situation is, however, not unknown in the Romance domain either, as we observe this order in French (with third-person clitics) and in many Italo-Romance varieties (Manzini & Savoia, 2005).

[45] Cf. (42c–d) with a ditransitive verb with clitic objects: *la donna gli dà la frutta/gliela dà* ('the woman gives him the fruit/gives it to him').

[46] The Italian pre-verbal clitic string may also contain other types of clitics like locative, reflexive, and impersonal. The same can be said for a Bantu affix string (see Cocchi, 2022).

[47] In glosses, I will mark it as ob< object.

[48] Italian *si* is always spelled out as *se* when preceding another clitic, and this also holds for *mi*>*me*, *ti*>*te*.

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