

SWAHILI COMPLEX PREDICATES WITH BODY PART TERMS

ROSANNA TRAMUTOLI

Complex predicates (CP) have attracted the attention of a number of linguists, and their syntactic properties have been widely investigated cross-linguistically. This paper describes Swahili “complex predicates”, that is, verbal constructions (V+N) which resemble a typical verb-object relation, but function like a single lexical verb. In particular, we will deal with a specific type of CP, involving body part terms as part of the predicate, such as *-fa moyo*, lit. die heart, ‘despair’; *-kata ini*, lit. cut liver, ‘cause suffering’; or *-toka damu*, lit. go out blood, ‘bleed’. We show how body part nouns differ from other nominal elements typically employed in complex predicates, both in their syntactic properties (e.g. object marking and possessor raising) and in their semantic characteristics (e.g. degree of semantic compositionality). Indeed, body part terms are often employed to conceptualize more abstract entities and ideas which belong to different semantic domains. Unlike other nominal elements, they seem to occupy the slot of regular objects, while they are not syntactic arguments of the verb, but rather define the scope, range, character or extent of the process.

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Complex predicates

This paper aims to analyse particular Swahili constructions (complex predicates), involving body part terms, such as *pa mkono*, lit. give hand, ‘support’ or *piga miguu* lit. hit feet, ‘walk’, which resemble a typical verb-object relation, while at a closer look, behave like single lexical verbs. In other words, *piga miguu* does not actually imply to ‘hit feet’, but simply ‘walk’.

Complex predicates (henceforth “CP”) are variously described in the literature as “support verb constructions”, “compound verbs” or “composite predicates”, with a syntactic structure [V+N]. They are verbal constructions that function like lexical verbs in the sense that they refer to a single action or process. Examples of Swahili CPs are, for instance, *piga pasi* ‘iron’ (clothes), *fua dafu* ‘be able, manage’, *tia utambi* ‘instigate’, *fa moyo* ‘despair’, *piga mkasi* ‘cancel’, *pata jiko* ‘get married’, *ezeka makofi* ‘box/slap sb’, *poa moto* ‘relax’, *acha mkono* ‘die’ (Kiango 2003:20).

Let us now compare sentences 1 and 2:

1. *Hamisi a-li-m-pig-a mwizi.*
C1.Hamisi C1.SM-PST-C1.OM-hit-FV C1.thief
‘Hamisi hit the thief.’
2. *Hamisi a-li-pig-a magoti.*
C1.Hamisi C1.SM-PST-hit-FV C6.knees
‘Hamisi kneeled.’

We notice that they apparently both resemble a typical verb-object relation. However, a closer and a more detailed morphosyntactic analysis shows that the grammatical relation between the verb and the postverbal NP in (2) is different from that in (1).

If we compare the two sentences, we observe that, while *mwizi* ‘thief’ is a direct object (ex. 1), *magoti* ‘knees’ (ex. 2) does not behave like a typical direct object, either syntactically or semantically: it can’t be passivized and it does not have the semantic role of a patient.

Cross-linguistically, some body parts typically occupy the slot of objects (like *magoti*) in sentences like ex. 2.

This type of V+N sequence has attracted the attention of a number of linguists and their syntactic properties have been widely investigated cross-linguistically (Butt 2010, Olejarnik 2009; 2011, Simone & Masini 2009, Ganfi & Piunno 2019, Gross 1993).

Butt (2010), who has done extensive research on CP in Urdu, gives the following definition: “a construction that involves two or more predicational elements (such as nouns, verbs, and adjectives) which predicate as a single element, i.e., their arguments map onto a monoclausal syntactic structure” (Butt 2010:49). Indeed, CP are particularly interesting in that the noun [N] does not behave as a regular object of the verb, being neither a patient nor a beneficiary.

Several scholars (Kiango 2003, Olejarnik 2009, 2011) assert that CP came into existence as a strategy on the part of language systems to counter the paucity of vocabulary, filling gaps in the Swahili lexicon and enriching it with new verbal concepts that are easily acquired by native speakers.

According to Olejarnik, since Swahili strongly relies on V(erb) + N(oun) combinations, and especially those with the verb *piga* ‘to beat; hit; strike’, it is impossible to omit them in neutral dialogues; thus, they differ from “idioms” which are not likely to appear in such ordinary contexts. In fact, looking at the Swahili examples listed above, we could raise the question whether they should be classified as idioms rather than CP. In discussions of CP, scholars often ask whether examples of these type should be considered as idiomatic structures, rather than creating an ontological distinction between the two (Martin 2019:26)

In her investigation of CP, Olejarnik (2009:171-180) points out that in the case of Swahili we are incapable of reliably distinguishing the two from a syntactic point of view:

“...the border line between idioms and complex predicates of the type V+N may be drawn mainly on the basis of semantics and the predictability of meaning of their constituents, whereas syntactical behaviour of both, idioms and complex predicates, does not always speak in favour of one category or the other, and not in every case does it serve as a credible criterion (cf. passivization facts)” (Olejarnik 2009:180).

In this paper, we will indicate under the label CP, a special instance of idiomatic structures, which are likely to appear in ordinary language and which semantic classification is not always straightforward. In particular, we will explore Swahili CP (that is, constructions similar to ex. 2 presented above), involving a body part noun as post-verbal elements, such as *pa mkono*, lit. give hand, ‘support’; *kata maini*, lit. cut liver, ‘make to suffer’; *shuka moyo*, lit. go down heart,¹ ‘be discouraged’; *piga miguu* lit. hit feet, ‘walk’; or *piga magoti*, lit. hit knees, ‘kneel’.

The study starts from the assumption that body part nouns differ from other nominal elements typically employed in support verb constructions, in that (i) they do not constitute an argument of the verb, rather they are “range elements” which semantically extend the process of the verb, often involving possessor promotion of the affected human argument: for instance, in *ameshuka moyo*, lit. ‘go down heart’, ‘be discouraged’, *moyo* specifies the subject affected by the experience (unlike other post-verbal nominal elements, such as *ngazi* in *shuka ngazi* ‘go down the stairs’); (ii) they are highly referential, although they may undergo semantic bleaching when they occur in a support verb construction (Ganfi & Piunno 2019:187).

Furthermore, bodily CP often involve idiomatic constructions, in which the body, particularly *moyo* ‘heart’ and *maini* ‘liver’, is metaphorically conceptualized as the *locus* of emotions (see exs. 3 or 4)²:

3. *A-me-kufa* ***moyo***
 3S-PAST-INF-die **cl3.heart**
 s/he died **heart**
 ‘s/he was discouraged’

4. *A-me-ni-kata* ***maini***
 3S-PAST-OBJ.1S-cut **cl6.liver**
 s/he cut me **liver**
 ‘s/he hurt me’

In examples 3 and 4, the body terms *moyo* (heart) and *maini* (liver) occur in postverbal position: while *moyo* follows the intransitive verb *-fa* (die), *maini* follows the transitive verb *-kata* (cut) and apparently occupies the slot of a syntactic object.

¹ It is difficult to give a literal translation of this expression, since the Swahili verb *-shuka* ‘descend, go down’ rarely takes an argument different from a locative source: Cf. *shuka ngazi* ‘go down the stairs’; *shuka chini* ‘go down’.

² Most of the Swahili CP examples analysed in this paper have been collected during my PhD research on the description of emotions in Swahili (cf. Tramutoli 2020). Examples in Table 3 and their meanings are taken from Kiango (2003).

However, it is evident that both body terms *moyo* ‘heart’ and *maini* ‘liver’, even though they seem to occupy the slot of a syntactic object, are not regular objects, since they are not associated with the semantic role of patient. Indeed, cross-linguistically in similar experiential constructions, there is a widespread tendency to associate the patient role with the direct object position (Dąbrowska 1994). However, if we pay more attention to their syntactic properties, we notice that this “causation scheme” does not satisfactorily fit the semantics of body part terms in CP, as in examples 3. and 4.

In this study, we will investigate both syntactic (e.g. object marking; possessor raising) and semantic properties (e.g. degree of idiomaticity) of Swahili CP (N+V), including body part terms in postverbal NP.

The next section describes the properties of particular Swahili postverbal NPs (“range elements”), considering the inalienability of body parts. The third section then discusses the different syntactic patterns of CPs, by presenting both examples involving possessor promotion to subject or object position, and CP not involving possessor promotion. The last section elucidates the semantic properties of CP involving body parts. Finally, the conclusions summarize the overall arguments and results.

Swahili range elements

Starting from the consideration that in CP, such as ex. 2 - 4 previously presented, the postverbal NPs (*magoti* ‘knees’; *moyo* ‘heart’; *maini* ‘liver’) are not arguments of the verb, we now need to describe the specific features of these elements. In his study of transitivity in Swahili, Abdulaziz refers to this type of postverbal nominals as “range elements”. According to him, “ranges” are nominal elements that define the scope, range, character or extent of the process, and differ in their syntactic behaviour and meaning from subjects, complements and circumstantials; that is, they “extend the underlying meaning of the process” (Abdulaziz 1996:132). Range elements can be of several types; for instance, in the expression *alipita njia* (lit. s/he passed the way; ‘s/he passed by’), *njia* is a range element of location (Abdulaziz 1996:132).

For instance, let us observe examples 5 and 6 below (Abdulaziz 1996:103):

5. *Hamisi a-li-ku-fa maji*
 Hamisi 3S-PAST-INF-die cl6.water
 ‘Hamisi drowned’

6. *A-li-paka rangi*
 3S-PAST-apply paint
 ‘S/he painted’

Abdulaziz argues that in Swahili clauses such as those presented above, the range elements (*maji*, *rangi*), which are part of the CP, have specific features: they cannot become the subject of the sentence (for instance, there is some resistance to accepting *rangi* ‘paint’ as subject of clause 6: **Rangi ilipakwa nyumba na Hamisi* ‘Paint was applied (to the) house by Hamisi’); they are semantically attached to the process expressed by the verb and their syntagmatic position seems to be restricted in that they normally come after the process.

Similar Swahili CP containing range elements are, for instance, *lia machozi* (lit. cry tears, ‘cry’), *pita njia* (lit. pass the way, ‘pass by’), *lala usingizi* (lit. sleep a sleep, ‘sleep a long sleep/lay in sleep’). These CP are (fossilized) forms in which the postverbal element often occupies the object slot, but functions as a range element.

Syntactic constructions of this kind also frequently occur with verbs expressing material processes involving part-whole relationships (or inalienable possession) (Abdulaziz 1996:133-134), as in ex. 7-10:

7. *Juma alivunjika mguu* (lit. Juma was broken leg; ‘Juma broke his leg’)

8. *Hamisi aliumia kichwa* (lit. Hamisi hurt head; ‘Hamisi hurt his head’)

9. *Nyumba ilianguka paa* (lit. The house was fallen roof; ‘The roof of the house fell’)

10. *Gari itatengenezwa taa* (lit. The vehicle will be repaired lights; ‘The lights of the vehicle will be repaired’)

We should point out that in Swahili the range of items involved in this type of constructions goes beyond strictly inalienable items, such as body parts, to include other items that are intimately connected to the affected person, such as emotions, mental and psychological states, body fluids and gases, and clothing worn on the body (Dzahene-Quarshie 2013:123).

Body parts as ranges of inalienable possession

In this paper we will concentrate on a particular type of CP involving body part terms as postverbal range elements. There are several reasons for concentrating on this particular lexical domain: firstly, it is well known that all languages have terms to refer to the human body (Enfield et al. 2006; Wierzbicka 2007). Secondly, there is cross-linguistic evidence that body part terms are often employed to conceptualize more abstract entities and ideas which belong to different semantic domains, like space, emotions, personality features (Lakoff & Johnson 1980; 1999, Goddard 1998, Heine 1997, Brenzinger & Kraska-Szlenk 2014). This has been investigated in the extensive research conducted by Kraska-Szlenk on the semantic analysis of Swahili body parts (Kraska-Szlenk 2014a; 2014b).

Swahili CP often involve body part-whole relationships, for instance, *alimea nywele* ‘s/he grew hair’, *alitetema mwili* ‘s/he shook his/her body’, *alivunjika mguu* ‘s/he broke his/her leg’, *aliumia kichwa* ‘s/he hurt his/her head’, where *nywele*, ‘hair’, *mwili* ‘body’, *mguu* ‘leg’, *kichwa* ‘head’, can be considered ranges of inalienable possession (Abdulaziz 1996).

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These constructions relating to inalienable possession are particularly common in Swahili, especially when involving body parts and body fluids, as in exs. 11-13 (Abdulaziz 1996:135):

11. *Alitoka damu* (lit. S/he came out blood, ‘S/he bled (oozed blood)’)

12. *Alitoka jasho* (lit. S/he came out sweat. ‘S/he sweated’)

13. *Alitetema mwili* (lit. S/he shook body; ‘S/he trembled’)

Sometimes they can also be expressed in passive forms, as in 14 and 15:

14. *Juma alitokwa na damu* (lit. Juma was come out with blood. ‘Juma bled’)

15. *Alitetemwa na mwili* (lit. S/he was shaken with his/her body; ‘S/he trembled’)

The above sentences are typical Swahili (and probably Bantu) constructions involving ranges of inalienable possession (Abdulaziz 1996:135).

Constructions of this type involving body parts often encode emotional states, like *fa moyo*, lit. die heart, ‘be discouraged’; *kata ini*, lit. cut liver, ‘make to suffer’, where the body part-possessor strategy is associated with the inalienability of experience semantically (Kießling 2017:190).

Some examples of emotional CP involving body parts (or bodily fluids) as range element are shown in Table 1.

Table 1: Swahili CP with body terms

CP with body terms	English gloss	English translation
<i>shuka moyo</i>	go down heart	be down-hearted (discouraged, depressed)
<i>fa moyo</i>	die heart	be discouraged, depressed
<i>pa moyo</i>	give heart	encourage
<i>tia moyo</i>	put heart (into somebody)	encourage
<i>nuna uso</i>	sulk face	look discontented (sulky)
<i>pata moyo</i>	gain heart	be willing, enthusiastic
<i>kata ini</i>	cut liver	make somebody suffer
<i>lia machozi</i>	cry tears	cry with tears
<i>lengalenga machozi</i>	be tearful tears	be tearful
<i>la jasho</i>	eat sweat	work hard
<i>toka jasho</i>	go out sweat	sweat
<i>toka damu</i>	go out blood	bleed

This type of Swahili CP is particularly important, in that

“if a process affects a part of an animate or inanimate object the syntax of the clause is arranged in such a way that the ‘whole’ becomes the main medium of the process (actor or goal), and the ‘part’ the minor (or range of inalienable possession)” (Abdulaziz 1996:134).

Constructions like *alitoka jasho*, lit. s/he came out sweat, ‘s/he sweated’, or *alivunjika mguu*, lit. s/he was broken his/her leg, ‘s/he broke his/her leg’, are possible only if the range elements are inalienably part of the object in question. It is not just a case of possession; indeed, a sentence such as ex. 16 would be ungrammatical because the possessed element (*kiti* ‘chair’) is not an inalienable part of the whole (Abdulaziz 1996:134):

16. **Juma alivunjika kiti chake* *‘Juma’s chair was broken’

We observe that similar CP can also be found in Swahili with nouns referring to bodily conditions, actions (e.g. *njaa* ‘hunger’; *usingizi* ‘sleep’) or bodily fluids (e.g. *machizi* ‘tears’; *damu* ‘blood’, *jasho* ‘sweat’), and the verb in the active form (see examples in Tab. 1).

We notice, for instance, that, in sentences like those in examples 17 and 18, the noun (*machizi*) occupies the slot of the object, but its semantic function is to expand and specify the meaning of the predicate encoded in the verbs (*lia*; ‘cry’ and *lengalenga* ‘be tearful’), which denote the action of ‘crying’:

17. *Alilia machizi* ‘S/he cried with tears’

18. *Macho yalilengalenga machizi* ‘The eyes were tearful’

Thus, *machizi* (tears) is an example of a “range element”, that is an element which usually is part of Swahili fossilized forms relating to physical activities (Abdulaziz 1996:133). Indeed, the range element *machizi* (tears), like *mapumziko* ‘rest’, *usingizi* ‘sleep’, or *njaa* ‘hunger’, can hardly be considered an object since it cannot act as subject of a passive construction, as in 19a. and 19b.:

19a. *Juma alilia machizi* ‘Juma cried with tears’

19b. **Machizi yaliliwa na Juma* *‘The tears were cried by Juma’

These bodily nouns have been described as so-called ‘cognate’ range, since they are morphologically or semantically derived forms of the process (similar to *alipumzika mapumziko marefu* ‘s/he rested a long resting’; *nililala usingizi* ‘I slept a deep sleep’) (Abdulaziz 1996:136).

Syntactic patterns of CP

By looking at the examples of Swahili CP presented in this paper, we can thus identify four different syntactic patterns of Swahili CP, namely,

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- A)³ intransitive verb + range element (that specifies the subject, e.g. *shuka moyo*);
- B) transitive verb + range element (that specifies the object, e.g. *umiza moyo*);
- C) transitive verb + range element (with «patient» role, e.g. *la jasho*);
- D) ditransitive verb (e.g. *tia* or *pa*) + human argument being object marked on the verb (whether it is a patient or a goal) + body NP (e.g. *moyo*).

- A) *A-me-shuk-a moyo*
3S-PAST-go down cl.3heart
lit. S/he went down **heart**
'S/he was discouraged'
- B) *A-me-ni-um-iz-a moyo*
3S-PAST-OBJ-hurt-CAUS cl.3heart
lit. S/he hurt **me heart**
'S/he made me suffer'
- C) *A-me-kula jasho*
3S-PAST-eat cl.5-sweat
lit. S/he has eaten **sweat**
'S/he has worked hard'
- D) *A-me-ni-pa moyo*
3S-PAST-OBJ-give cl.3heart
lit. S/he has given **me heart**
'S/he encouraged me'

These patterns are characterized by the presence of bodily postverbal nominals (i.e. *moyo*, *jasho*) which resemble a direct object, even though it does not constitute an argument of the verb. In particular, if we compare patterns A and B above, we observe that in both cases the postverbal body noun (*moyo* 'heart') occupies the position of a syntactic object, but has different thematic roles, it is rather a "range element" of the verb, which is semantically needed in order to specify the meaning of the verbs (i.e. 'in terms of the heart/heartwise'. If we look at the function of *moyo/jasho* in these sentences, we notice that they are not regular objects, since they cannot be passivized, nor can they be represented by an object pronoun; in clause A), the range element *moyo* follows the intransitive verb *-shuka* 'go down', thus, specifying the subject

³ For these examples I am using letters, instead of numbers, because A), B), C), D) indicate four Swahili syntactic patterns.

of the clause, while, in clause B), the range element (*moyo*) follows the transitive verb *umiza* ‘hurt’, specifying the direct object marker (*ni-*).

In pattern C), the range element *jasho*, following the transitive verb *la* ‘eat’, although with the role of a patient, it is not a syntactic object; instead, it completes semantically the verb *la*.

Finally, in pattern D), we observe a double object construction with the ditransitive verb *pa* ‘give’ and the human argument being object marked on the verb (*ni-* ‘me’), and the body term *moyo* ‘heart’ as external argument, metonymically standing for the emotional experience (i.e. courage).

Thus, body parts in similar CP patterns syntactically occupy the position of a typical object, but do not have the role of a patient; rather, they are range elements of the verb, that is, they complete the meaning of the verb semantically.

CP and possessor promotion

In Bantu languages possessor relations are often expressed through a process known as “possessor promotion” (or “possessor raising”), which characterizes sentences of the type A) and B).

For instance, sentences a) and b) below represent the underlying structure from which A) and B) derive:

a) *Moyo wake umeshuka* ‘His/her heart went down’ → A) *Ameshuka moyo* lit. S/he went down heart, ‘S/he was discouraged’

b) *Ameumiza moyo wangu* ‘S/he hurt my heart’ → B) *Ameniumiza moyo* lit. S/he hurt me heart, ‘S/he hurt my heart’

Thus, we observe that in sentence type-A) the possessor is raised to subject position, while the possessum NP (*moyo*) specifies which part of the subject is affected, it becomes the range element. In constructions of type-B), the affected possessor is raised to object position (marked on the verb by an object prefix) and the possessum NP (*moyo*) is added as range element of the verb.

The promotion of the affected possessor or personal referent of the verb by introducing it as an extra independent argument (sometimes with a concomitant marking in the verb by object prefixing) to indicate the relationship between the inalienable possession and the person affected by the action of the verb has been described as “possessor raising” (Keach & Rochemont 1994).

Both sentence A) and B) involve possessor promotion, however, while in sentence type-A), the nominal element *moyo* (range element) specifies the subject, in sentence-type B), it specifies the object, thus, standing in a closer relationship to the object.

Similarly, if we compare sentences such as

A.1) *Amekufa moyo* lit. S/he died heart, ‘S/he was discouraged’

B.1) *Amenikata maini* lit. S/he cut my liver (me liver), ‘She made me suffer’

we notice that, in B.1 the range element *maini* (liver) specifies the direct object (i.e. the human argument being object marked on the verb); while in A.1, the range element *moyo* specifies the subject semantically extending the process of the verb.

CP and possessor promotion to subject position

Let us now consider other examples of clause type-A:

20. *Alitetema mwili* lit. S/he shook body, ‘S/he trembled’

21. *Alitoka damu* lit. S/he came out blood, ‘S/he bled’

22. *Alisimama mishipa* lit. S/he stood veins, ‘The vein stood [on his face]’

23. *Amenuna uso* lit. S/he sulk face, ‘S/he looked discontented (sulky)’

Clauses 20-23 above resemble syntactic pattern A), in that the possessor is raised to subject position and the possessee is moved to post-verbal position; furthermore, verbs involved in these verbal expressions are intransitive.

As Vierke (2011) remarks, a relation of semantic contiguity between a syntactically intransitive verb and a following noun holds for similar expressions. In particular, “the body part, the medium, which is primarily involved in the process follows the verb encoding the action, which is – in terms of its valency – intransitive” (Vierke 2011:141).

Thus, adding the meaning of the verb in the predicate, the range elements *mishipa* (veins), *mwili* (body), *damu* (blood), etc. could also be considered in terms of incorporation⁴:

“Both verb and ‘range element’ are so closely linked to each other, are in such close contiguity, that conceptually they cannot be told apart” (Vierke 2011:141).

According to Krifka’s description of Swahili objects, it is obvious that these post-verbal elements (*mwili*, *damu*, *mishipa*, *uso*, *moyo*) are not objects, as they do not pass the objecthood tests: the noun in these constructions cannot be a direct object, since it does not agree with the verb and cannot be promoted to subject by passive (Krifka 1995:1401).

An interesting linguistic description of these ‘extra-arguments’ which resemble a direct object, is given by Simango (2007:928) who claims that these so-called “inalienable” possessor constructions can best be accounted for by positing the existence of “enlarged arguments”

⁴ “A regular process by which lexical units which are syntactically complements of verbs can also be realized as elements within the verb itself: e.g. schematically, hunt-rabbit-PROG-3SG ‘S/he is hunting rabbits, is rabbit-hunting’” Matthews (1997:173).

wherein the possessum functions as a nominal predicate which more narrowly pinpoints the locus of the action described by the verb.

Clause type A (20-23) manifests the unique characteristic of Bantu enlarged arguments, i.e. “the verb appears to take an extra argument without the mediation of a transitivizing affix. In such structures [...] intransitive verbs (including passivized and stativized verbs) seem to have the capacity to take a nominal complement” (Simango 2007:937).

CP and possessor promotion to object position

We have already observed that with B-type constructions, the possessor is raised to object position (i.e. the object marker) and the possessee remains in post-verbal position. We have seen that, in clause type-B, the post-verbal element (e.g. *moyo*) is apparently the syntactic object of the transitive verb (e.g. *umiza* ‘hurt’, an applicative-causative form derived from the verb -*uma* ‘bite, hurt’).

Similarly, in CP listed below, we remark that, body NPs (*maini*; *moyo*; *mkono*) become the surface object of the verbs (*kata*; *vunja*; *unga*). In other words, in Swahili, when the possessor is “promoted”, it means that it is transformed into a direct object if the verb is transitive (Hyman 1996:868). While body nouns occupy the post-verbal object position, they can be considered as range elements of the verb (see exs. in Table 2).

Table 2: Bodily CP-type B

CP with body terms	English gloss	English translation
<i>(m)kata maini</i>	cut liver (of someone)	cause suffering
<i>(m)vunja moyo</i>	break heart (of someone)	discourage
<i>(mw)unga mkono</i>	join hand (of someone)	support

Swahili tends to have “possessor promotion” in CP of type-B), nevertheless, we have pointed out that in the case of CP involving the body, it is more than a matter of possession. The body part (the range element) is in a relationship of inalienability with its possessor (the person affected), who is marked as object of the verb, expressing a higher degree of affectedness.

Thus, in constructions similar to B), the promotion of the affected possessor as object marker and the body part (*moyo*) inserted as a range element indicate the relationship between inalienable possession and the person affected by the action of the verb (*umiza*).

CP not involving possessor promotion

From the description of the syntactic patterns of CP it emerges that possessor promotion is particularly relevant in complex verbal constructions. However, it is worth noting that not all CP necessarily entail possessor promotion. Since so far we have only explored the syntactic

features of type A and B clauses, we will now describe pattern C construction, that is CP not involving possessor promotion strategy.

Several linguistic studies have investigated the particular features of Swahili CP (cf. Olejarnik 2009; 2011, Martin 2019, Kiango 2003), such as *piga pasi* ‘hit flatiron’, ‘to iron’; *vunja ndoa* ‘break marriage’, ‘to divorce’; *vunja ungo* ‘break winnowing basket’ ‘to have a first menstruation’; *fanya kazi* ‘do work’, ‘to work’; *funga ndoa* ‘close marriage’, ‘to marry’.

At a first glance, we could assert that in these C-type clauses, the postverbal nominal, following a transitive verb, syntactically resembles a direct object. Unlike clause type-A considered above, C-type constructions contain transitive verbs, nevertheless, a construction like *la jasho* does not actually mean ‘eat sweat’, rather ‘work hard’; similarly, *piga miguu* does not actually imply one to ‘hit feet’, but simply ‘to walk’; moreover, there is possessor relationship between the subject of the verb, that is, the person affected by the action, and the following nominal having the semantic role of a patient (*jasho* or *miguu*).

As pointed out before for clause type-A and B, in these constructions, post-verbal elements can hardly be considered as syntactic ‘objects’. Indeed, according to Krifka’s description of Swahili object, a construction like *piga pasi* has to be analysed as an incorporation of *pasi* into the verb *piga* (Krifka 1995:1401). This becomes even more evident if we compare sentences like 1 and 2 (containing the verb *piga*), as observed at the beginning of this analysis.

In several verbal expressions containing the transitive verb *-piga*, the postverbal noun seems to have an instrumental function (e.g. *piga mswaki*, ‘hit toothbrush’, ‘clean one’s teeth’; *piga simu* ‘hit phone’, ‘telephone’), (Kiango 2003:26). In other cases, the extra argument is an abstract noun [-concrete] which follows a verb with concrete meaning [+concrete], like in *vunja nia* ‘break the mind’, ‘change one’s mind’; *kata urafiki* ‘cut friendship’, ‘sever friendly relations’. According to Kiango (2003:28), for instance, verbal expressions like *vunja nia* ‘break the mind’, ‘change one’s mind’, are formed by violating the rule *vunja* [V{+transitive} +N {+patient + concrete}]. This “violation of selectional restriction rules”, is used as a device for forming verbal expressions of the type [Verb + Patient]. Similarly, in *la jasho*, selectional restriction rules with verb *la* ‘eat’ are violated by introducing the post-verbal element *jasho* {+patient -edible}.

Let us also analyse examples of CP of clause type-D, which differently from pattern A and B, do not involve possessor promotion. The examples listed in Table 3, show Swahili double object constructions with ditransitive verbs, such as *pa* ‘give something (to somebody)’ and *tia* ‘put something into (somebody)’:

Table 3: Bodily CP-type D (double object constructions)

CP with body terms	English gloss	English translation

<i>(m)pa mkono</i>	give hand (to someone)	support
<i>(m)pa moyo</i>	give heart (to someone)	encourage
<i>(m)pa kisogo</i>	give the back of the head	turn the back on someone
<i>(m)tia moyo</i>	put heart into (someone)	encourage

According to its syntactic rules, Swahili (like many other Bantu languages) has been described as ‘asymmetrical,’ because it restricts object marking with respect to semantic roles, a restriction usually paralleled by constraints on grammatical processes such as passivization (Bresnan & Moshi, in Bearth 2003:125). When there is an animate object, as in pattern D), lexical animate entities tend to occur as closely as possible to the verb stem (Plessis and Visser, in Bearth 2003:127). Since only one object can be marked on the verb, this will most frequently be the [+human] argument (irrespective of its semantic role, i.e. whether it is a patient or a goal). However, we observe that in most examples of type-D described above the [+human] argument has the semantic role of goal.

In his investigation of the different properties of the direct object and oblique object in Swahili, Schadeberg (1996:67) analyses the specific case of the verb *tia* in CP such as *m-tia mtu moyo* lit. ‘put heart into sb.’, where the syntactic role is not predictive of the semantic role.

He remarks that when you ‘put something into’ an animate being (*mtu*), as in *(m)-tia mtu moyo*, s/he is the *yambwa* (object marked on the verb) which carries the semantic role of goal patient (*LENGO-kitendwa*) affected and modified by the action, while the body term (*moyo*) is the adjunct. As Schadeberg points out:

“Katika Kiswahili ukitia kitu fulani katika mtu, k.m. hofu au adabu, basi mtu atafikiriwa kama yeye ni kitendwa, kitu kinamtokea, anabadilishwa. Kwa hiyo mtu atapata nafasi ya kisintaksia ya yambwa” (Schadeberg 1996:68).

Similar constructions do not exclusively concern body nouns but often involve terms of emotional or physical conditions, (cf. exs. 24-26 given in Schadeberg 1996:68):

24. *kumtia mtu aibu* (to cause somebody shame)

25. *umetulia matata* (you have caused us trouble)

26. *kujitia ugonjwa* (lit. to cause illness to oneself; ‘to claim to be ill’)

Thus, while it is evident that these bodily “enlarged arguments” can’t be described as objects, the question raised here is about the specific nature of these elements, which are generally used to specify or extend the meaning of the verb. After having clarified that these postverbal elements are not syntactic objects as they do not pass the tests of objecthood generally accepted for Bantu languages, we have shown that they can be better analysed as range elements which extend the underlying meaning of the process.

Semantic properties of CP with body parts

The semantic classification of CP is not always straightforward, since their degree of compositionality can vary from CP with unambiguous compositional meaning to predicates with a high degree of idiomaticity in a scale of semantic compositionality.

Some linguists have suggested a semantic distinction between *complex predicates* and *idioms*, mainly based on semantic criteria of compositionality. For instance, Martin (2019) states that where the relationship between the structure and its meaning is of the type of *piga pasi* lit. hit iron; ‘iron’, we deem the construction a compositional complex predicate; where the relationship is more opaque (like in *piga moyo konde*, lit. hit heart fist ‘to have courage’), we deem the construction a non-compositional, idiomatic structure (cf. Martin 2019:27).

However, we claim that no such clear-cut distinction can hold for these verbal expressions on the base of criteria of semantic compositionality, and we would rather consider that, some CP being more idiomatic than others, the more idiomatic they are, the less predictable is their meaning.

Olejarnik (2011:140) also observes that, while some Swahili V+N constructions are unambiguous even for non-native Swahili speakers, others may be more semantically opaque.

Semantic opacity derives from the fact that, by undergoing the process of lexicalization, verb support constructions can lose part of their components’ primary meaning, and acquire an idiomatic meaning (Ganfi & Piunno 2019:210).

We note that similar idiomatic expressions have also been found in expressions involving the bodily domain in general (not exclusively body part nouns), that is, related to bodily fluids or physical conditions (e.g. *njaa* ‘hunger’; *baridi* ‘cold’, *mafua* ‘cold/flu’, *homa* ‘fever’, *machozi* ‘tears’).

In some cases, the figurative meaning of the whole expression is detectable if we consider the metaphoric shift from the referential meaning, for instance in predicates such as *pa mkono*, which, according to the context of use, means ‘shake hands’ or ‘congratulate’; or *shika tama* ‘rest the cheek on the hand’ or ‘be in deep thought’ (see similar examples in Tab. 4).

The complex nature of body part expressions varies from highly referential meanings to less semantically transparent metaphorical expressions, especially in the description of physical and mental processes. Many of the examples presented here, for instance, involve the bodily lexeme *moyo* ‘heart’, which often metaphorically stands for the centre of emotional and mental activity (cf. Ganfi & Piunno 2019:197).

Kiango points out that some Swahili verbal constructions can be used in non-prototypical contexts, that is, the same phrase can have both a literal meaning (referring to the physical domain) and a non-literal/idiomatic meaning (Kiango 2003:34). This is the case with many CP including body terms (see Tab. 4):

Table 4: Bodily CP with literal and idiomatic meaning

CP with body term ⁵	Literal meaning	Idiomatic meaning
<i>chapa miguu</i>	stamp on the ground	tramp
<i>fumba jicho</i>	close the eye	have a nap or a rest
<i>fyata mkia</i>	put the tail between the legs	hold the tongue, be frightened
<i>fyata ulimi</i>	keep one's tongue between the teeth	shut up
<i>kunja uso</i>	fold the face	frown
<i>pa mkono</i>	give the hand to sb.	congratulate; condole with
<i>shika miguu</i>	hold/grasp someone's feet	salute; pay honour to
<i>shika sikio</i>	hold/grasp someone's ear	reprimand
<i>shika tama</i>	rest the cheek on the hand	be in deep thought
<i>vimba kichwa</i>	have a swollen head	get swollen-headed; be arrogant

The double meaning associated with the examples in Tables 2 and 3 shows the interesting peculiarity of CP including body parts. In other words, this lexical category is naturally employed to conceptualize different domains. The figurative meaning of CP is not always traceable from the literal meaning of its components, but seems to derive from (or imply) the coexisting compositional meaning (Ganfi & Piunno 2019:211). It is clear that most of the bodily CP analysed in this paper are metaphorical expressions which have become semantically opaque; for instance, in the Swahili idiom *pa moyo*, lit. give heart, the 'heart' is not considered as a body part and has lost its metaphorical value.

The meaning of verbal expressions like *piga magoti*, lit. hit knees, 'to kneel' is less opaque than idiomatic expressions such as *pa moyo*, lit. give heart, 'encourage' or *kata maini*, lit. cut liver, 'cause deep sufferance, make (somebody) suffer'. Here, the meaning is non-compositional and cannot be easily inferred by non-native Swahili speakers.

Conclusion

In this paper we have analysed complex V+N constructions, considering both syntactic and semantic criteria. We have focused on a particular type of complex predicates, namely those containing body part terminology. We have noted that elements occurring in postverbal NP, body terms in particular, can be described as "range elements", elements which semantically complete the meaning of the verb (e.g. *fa moyo*, lit. die heart, 'be discouraged'; *shuka moyo* lit. go down heart, 'be discouraged'), while apparently resembling a syntactic object. It has been

⁵ The examples in Table 4 and their idiomatic meanings are taken from Kiango (2003:35).

shown that bodily range elements differ from regular syntactic objects in Swahili V+N constructions, in that, even though they occupy the slot of the object, their semantic function is to expand and specify the meaning of the predicate encoded in the verbs. In particular, four different syntactic patterns of CP have been individuated, where the nominal element following the verb (either transitive or intransitive), does not have the characteristics of a typical Swahili object.

Like other Bantu languages, Swahili tends to consider body parts as “inalienable” elements (like other things, such as emotions, mental activities, clothes and objects) which are semantically associated with the verb, and which thus play a prominent role in CP. The frequent occurrence of possessor promotion strategy in bodily CP can be explained by the fact that body parts are examples of “inalienable possession”, even if it has been shown that possessor raising is not restricted to cases of inalienable possession.

Finally, we have highlighted that, besides their syntactic properties, bodily elements in CP also show interesting semantic features, displaying different degrees of semantic compositionality: while the meaning of some CP can be easily inferred from their referential meaning, other verbal expressions have become semantically opaque, in that body terms are used to conceptualize more abstract entities.

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