Object marking in Swahili is topic agreement*

This paper discusses object marking in Swahili, a Bantu language. After presenting the contexts in which object marking is optional and obligatory, respectively, it is shown that it is the information structural status of the object that determines the presence of the object marker. If the object is Given, the object agreement marker is present. This is derived via assuming the presence of a Topic head in the left periphery of the vP, in which a topic feature is bundled with phi-features. This head then enters into an agree relation with the Given object, suggesting that the object marker in Swahili is the result of agreement and not a clitic co-referent with the object.

Key words: Swahili; object marker; agreement; cliticization.

1. Introduction

In Swahili, a Bantu language spoken predominantly in Tanzania and Kenya, but frequently used as a lingua franca in East Africa in general, object marking (OM) on the verb appears to be optional. If it is present, it surfaces as the prefix immediately preceding the verb stem cross-referencing the noun class of the object, with the other prefixes for tense and subject agreement to its left.

(1) Mwanamke a-li-(ki)-vunja kikombe.
‘The woman broke the cup.’

* I would like to thank Prof. Dr. Rainer Voßen and my informant Maureen Mwende. If not explicitly stated otherwise, all examples below are Swahili and were provided by my informant. For comments and suggestions at various stages of the paper, I would like to thank Katharina Hartmann, Jenneke van der Wal, Jochen Zeller, Jennifer Tan, Fenna Bergsma, Peter Smith, and Zheng Shen, as well as the two anonymous reviewers. All remaining errors are mine.
The optionality of OM is not restricted to Swahili but found in several other Bantu languages (Marten & Kula 2012) and has spawned a lively debate, which mostly revolves around two questions:

- How can the optionality of the object marker be accounted for?
- What is the syntactic status of the object marker?

Regarding the first question, the optionality of object marking in Bantu has often been attributed to differential object marking (Woolford 1999; van der Wal 2017). Thus arguments that are highly animate, specific and/or definite are object-marked while those that are low in these properties are not. What counts as high in definiteness for example is determined by a certain scale or hierarchy with the point on the respective hierarchy forcing object marking being subject to cross-linguistic variation (Aissen 2003). In this paper, I will argue that object marking in Swahili is driven by a specific kind of topicality reflecting Givenness in the discourse, which frequently correlates with definiteness and animacy. Thus, in line with current research on object marking in Bantu languages and in general, this paper highlights the important role played by information structure (cf. Seidl & Dimitriadis 1997; Bax & Diercks 2012; Sikuku et al. 2017).

The second question concerns the syntactic status of the object marker, whether it is best analysed as a clitic or agreement marker. In their seminal paper, Bresnan & Mchombo (1987) discuss object marking in Chichewa, arguing that it is best analysed as a clitic incorporated into the verb stem. This assumption is mostly based on the observation that object marking cannot co-occur with an object in its base position and the object consequently needs to be dislocated. Under a clitic analysis of OM, this can easily be explained as a Principle C effect, (2) (Chichewa, from Bresnan & Mchombo 1987: 751) exemplifies this. The authors argue that in the base order, the indirect object precedes the direct object and OM is impossible (2a). If the indirect object is extraposed, however, (2b), OM becomes possible. Analysing the object marker as a clitic provides an account for this observation, since in its base position, the indirect object is in the c-command domain of the clitic, which leads to a Principle C violation. Extraposing the indirect object removes it from the c-command domain of the clitic and thus avoids this violation.¹

¹ OM in Bantu shows much more variation than can be discussed in this paper. Relying on van der Wal (2018), Bantu languages differ not only with respect to the status of the OM but also with respect to the number of OMs allowed (one, two, more) and their behaviour in ditransitives. Some languages only allow marking of the highest object (asymmetric), others allow marking of either object (symmetric). Chichewa is an asymmetric single object marking language.
(2) a. ?? Ndi-ku-fún-á kutí mu-wa-páts-é alenje mphâtso.
   1SG-2SG-want-FV that 2.S-2.o-give-SUBJ 2.hunters gift
   int.: ‘I want you to give the hunters a gift.’

   1SG-2SG-want-FV that 2.S-2.o-give-SUBJ gift 2.hunters
   ‘I want you to give them a gift, the hunters.’

Interestingly enough, a great deal of variation can be observed in Bantu languages with respect to the co-occurrence of OM and the doubled object in its base position. On the one end of the possible spectrum, Otjiherero completely prohibits the co-occurrence of the two (3), independently of the position of the object.

(3) *Mb-é vé mún-ù ová-nátjé.
   1SG.S-PST 2.o see-FV 2-children
   int.: ‘I saw the children.’ (Marten & Kula 2012: 240)

In contrast to Otjiherero, other Bantu languages, like Swahili and Sambaa (Riedel 2009) allow overt objects in their base positions to co-occur with object markers on the verb. The example in (4), from Sambaa (Riedel 2009: 60), an asymmetric multiple object marking language, shows OM for both objects and the locative. Since both objects precede the locative, they most likely have not been extraposed and are in their base positions.

(4) N-za-ha-chi-m-nka Stella kitabu haja.
   ‘I gave Stella a book here.’

The same is observed in Swahili. Swahili is an asymmetric single object marking language and only the highest object can be coreferenced on the verb. For this, it is not necessary to dislocate the object, the indirect object precedes the direct object and the locative in (5a). Similarly, in (5b) from Seidl & Dimitriadis (1997: 384) the coreferenced object precedes the adjunct, suggesting that it has not been dislocated.

(5) a. Ni-me-m-pa Juma vitabu vyote vitatut pale.
   1SGS-PERF-1.o-give 1.Juma 8.books 8.all 8.three 16.there
   ‘I have given Juma all three books there.’ (Riedel 2009: 62)

   b. Wote wa-li-o-pokea habari hiyo kwa njia mbalimbali
   na [....].
   and [....]
   ‘Everyone sent this news in various ways and [....]’
However, dislocation as a diagnostic for the status of the OM has been disputed in the literature. Henderson (2006: 173) contests the analysis of Chichewa, assuming that the movement of the object is simply triggered by checking of the φ-features associated with the object marker, i.e. the object marker is indeed an agreement marker, similar to the analysis to be developed below, but additionally associated with an EPP feature, causing the agreed-with object to move. Similarly, Zeller (2014; 2015) argues for Zulu that even though object marking always involves dislocation, it still needs to be analysed as agreement. He claims that this agreement is based on an anti-focus feature and therefore, the dislocation needs to be analysed as A’-movement into a low information-structurally related position. This dislocation is evidenced in (6a) by the disjoint verb form, which usually suggests that the VP has been evacuated, occurring with the object marker. In addition, the object in (6b) occurs following the manner adverbial, which also suggests that the object has been dislocated.

(6) a. U-mama u-*(ya)-yi-phek-a i-n-yama.
   ‘Mother is cooking it, the meat.’ (Zulu, Zeller 2015: 22)

   b. Si- yi-bon-a kahle i-n-kosi.
   1PL.S-9.O-see-FV well AUG-9-chief
   ‘We are seeing him well, the chief.’ (Zulu, Zeller 2015: 23)

Consequently, also taking further cross-linguistic research on object agreement outside of Bantu languages into account, several positions can be distinguished in the literature. Recently, many researchers have argued that object agreement in general is based on (incorporated) clitics (Nevins 2011; Kramer 2014; Johns & Kučerová 2017) with some scholars arguing for an intermediate position, allowing both clitic doubling and proper agreement, depending on the language (Oxford 2014; Baker 2016). On the other hand, Riedel (2009) notably argues for the position that all object marking should be considered agreement. In this paper, I will argue that object marking in Swahili needs to be analysed as agreement, in line with Baker (2016) & Riedel (2009). Thus, reducing all object marking cross-linguistically to incorporation of clitics cannot be on the right track.²

In order to achieve these two goals, arguing that Swahili object marking is agreement and also that it is agreement based on a low topic feature, the paper is

² Note, however, that in a system of clitic incorporation as presented in Roberts (2010) and developed by van der Wal (2017) for object marking in Bantu languages, the distinction between those two analyses becomes blurred.
structured as follows. In Section 2, I will discuss several contexts in which OM in Swahili is, contrary to what has been claimed in the literature, optional, followed by contexts in which it is obligatory. Section 3 will then present the analysis in more detail, before I evaluate the analysis against the possible alternative, namely that OM in Swahili is cliticization in Section 4. Section 5 concludes the paper.

2. OM in Swahili

In this section, I discuss several cases of OM in Swahili. Starting with cases in which OM is possible but not obligatory, I show that neither animacy nor definiteness are sufficient to force object marking, contra claims in the older literature on Swahili and also unexpected under a DOM view of OM in Swahili.

2.1. Optional OM

In the literature on Swahili, two factors that have frequently been assumed to force object marking on the verb are definiteness and/or animacy of the object. However, as I show in this section, neither factor is enough to require the presence of OM (cf. Nicolle (2000) for an overview). Starting with definiteness, Allan (1983) already observed that definiteness cannot be the decisive factor for object marking in Swahili, since it is possible to find examples with clearly definite objects without OM on the verb. In (7), the object noun is accompanied by a demonstrative, responsible for the definite interpretation, but still, OM on the verb is absent.

(7) Hu-wez-I ku-nunua motokaa hii bila fedha nyingi.
   NEG.2SG.S-can-NEG INF-buy 9.car this without money many
   ‘You can’t buy this car without much money.’ (Allan 1983: ex. 8a)

Similarly, specificity cannot be the determining factor, since, in the right context, specific objects can occur without the corresponding OM on the verb. In (8a), context forces a specific interpretation of the object, since there is only one specific university in Dar. Comparably, the nominal object in (8b) is modified by a genitive, and, in an out-of-the-blue context, does not require OM on the verb.

   1PL.S-PST-16.REL-go Dar, 1PL.S-PST-visit university
   ‘When in Dar, we visited the university.’ (Allan 1983: ex. 8c)

3 Concerning example (7), note that infinitives in Swahili can show object marking. Thus, if OM were to occur in this example, the OM would appear between ku- and the verb stem.
b. *Peter a-me-kula mkate wangu.*
   Peter 1.S-PERF-eat sandwich my
   ‘Peter has eaten my sandwich.’

Additionally, Wald (1979) shows that the converse does not hold either. He presents several examples in which OM is present on the verb, even though an indefinite interpretation of the referenced object is preferred.

(9) a. *a-ka-m-kuta mzee mwangine, ndugu wa yule.*
   1.S-PST-1.O-meet 1.old.one 1.other, sibling 1.GEN that.one
   ‘(and then,) he met another old lady, sibling of the first one.’

   5.frustration COP INF-1.O-hit person
   ‘For them, the way to get the frustration out is to punch someone.’

Turning to animacy, again it is easy to find examples in which animate objects do not trigger OM (10). Noun class 1/2 is usually used to refer to animates, both humans and animals. The noun class for animals switches to 9/10 if the animal is dead. Corpus examples provided by Maw (1974) (*apud* Nicolle 2000: 683) further corroborate this claim (11). Additional evidence for the insignificant impact of animacy is provided by a larger corpus study presented in Seidl & Dimitriadis (1997) who show that for 144 animate objects, OM was present only 104 times, suggesting a correlation, but not obligatory OM with animate objects.

(10) *Mbwa a-li-ona mbuzi.*
   1.dog 1.S-PST-see 1.goat
   ‘The dog saw a goat.’

(11) a. *ku-saidia watu wetu wa vijiji-ni.*
   inf-help 2.people our 2.GEN 8.village-LOC
   ‘...to help our people from the villages’

   b. *a-na-tukana binadamu hivi.*
   1.S-PRS.PROG-insult people thus
   ‘...he is insulting people by doing this.’

Lastly in this section, the possibility of OM being determined by focus on the object needs to be discussed since Creissels (2004) proposes an analysis along these lines for object marking in Tswana. It is easy to show that this cannot be the correct analysis for Swahili. If the object is modified by a focus sensitive particle and must
therefore be interpreted as being in focus, OM is usually not possible.\textsuperscript{4}

(12) a. \textit{Ni-na-ki-penda} \textit{kipindi hiki.}  
\begin{tabular}{llll}
1SG.S-PRS.PROG-7.O-like & 7.series & 7.this \\
\end{tabular}
‘I like this series.’

b. \textit{Ni-na-penda} \textit{ku-angalia kipiki hiki pekee.}  
\begin{tabular}{llll}
1SG.S-PRS.PROG-like & INF-watch & 7.series & 7.this only \\
\end{tabular}
‘I like watching only this series.’

Similarly, object wh-elements, which can occur in their in-situ position, can also not be accompanied by OM on the verb. Under the assumption that wh-elements are inherently focused, it comes as no surprise that it also holds for the corresponding answer (13). Interestingly, d-linked wh-elements behave in the opposite way and even force OM. D-linking is usually achieved by adding \textit{vipi} ‘which’ to the wh-element, while \textit{nani} ‘who’ can be interpreted as d-linked without \textit{vipi} (something similar has been argued for in Krapova & Cinque (2005) for Bulgarian) (14).

(13) a. \textit{Mwanamke a-li-(*)ki-vunja nini?}  
\begin{tabular}{llll}
\end{tabular}
‘What did the woman break?’

b. \textit{A-li-(*)ki-vunja kikombe.}  
\begin{tabular}{llll}
\end{tabular}
‘She broke a cup.’

(14) a. \textit{U-li-*(vi-)ona vitabu vipi?}  
\begin{tabular}{llll}
2SG.S-PST-8.O-see & 8.book & which \\
\end{tabular}
‘Which books did you see?’

b. \textit{Mwanamke a-li-mw-ona nani?}  
\begin{tabular}{llll}
1.woman & 1.S-PST-1.O-see & who \\
\end{tabular}
‘Who (in particular) did the woman see?’

As expected, the same holds for answers to out-of-the-blue wh-questions and their wide focus answers.

(15) Q: \textit{Nini ki-li-tokea?}  
\begin{tabular}{llll}
what & 7.S-PST-happen \\
\end{tabular}
‘What happened?’

\textsuperscript{4} It becomes possible in contrastive focus contexts. However, it can be argued that contrastive focus requires a contextually given set with which something can be contrasted, indicating that contrastive focus in a way builds on Givenness.
Johannes Mursell: 
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A: Ni-me-vunja   kikombe.  
   1SG.S-PREF-break 7.cup  
   ‘I have broken the cup.’

Summing up this subsection, OM in Swahili is neither determined by animacy, nor definiteness, nor specificity. As will become clear in Section 3, even though they are not sufficient to force OM, all these properties correlate with the presence of the object marker since they are typical properties of topics.

2.2. Obligatory OM

While animacy and definiteness do not force object marking, it is possible to identify three contexts in which OM becomes obligatory, namely left-topicalization of the object, pro-drop of the object and applicative constructions. Thus dislocating an object to the left periphery of the clause requires OM on the verb and also leads to an Aboutness interpretation of the moved object. In the first clause of (16), these words are moved to the left periphery and consequently, object marking on the verb becomes obligatory.

(16) Maneo  haya  a-li-ya-sema kwa sauti  kubwa.  
   Rosa  a-li-(ya)-sikia.  
   Rosa  1.S-PST-6.O-hear  
   ‘He said the words loudly. Rosa heard them.’  
   (Seidl & Dimitriadis 1997: 376)

Pro-drop of the object similarly leads to the obligatory presence of OM on the verb. In the second clause of (16), the object pronoun them referring to words is dropped and therefore presence of the OM of noun class 6 on the verb is required. In (17), the second person plural pronoun is dropped and leads to OM of noun class 2 on the verb.

(17) Hao  a-li-*(wa)-pa  uwezo.  
   2.DEM 1.S-PST-2.O-give 2.ability  
   ‘He gave them an ability.’  
   (Joswig 1996: 26)

What both these constructions have in common is topicalization of the object, albeit different kinds of topicalization. Pronouns generally pick up referents that are already part of the discourse, i.e. referents which are given (Krifka 2008). Even if object pro-drop in Swahili is not analysed as topic drop (cf. Erteschik-Shir et al. 2013) but analysed as being conditioned by other factors, for example agreement
(Rizzi 1986, and many others), the observation remains that they overwhelmingly express given referents. Left peripheral topics, in Swahili and in other languages, can fulfil a variety of functions, and have been linked to expressing Aboutness, Familiarity, and other possible meanings (Frascarelli & Hinterhölzl 2007).

Importantly for the analysis in Section 3, in line with Rizzi (1997) and Frascarelli (2007), I assume that left peripheral topics are compositional, encoding Aboutness or Familiarity on top of Givenness.5

The third type of context in which OM in Swahili is obligatory are applicatives, and so far, it is not clear why this should be the case. As (18) shows, the requirement for OM with applicatives is so strong that it is even present in wh-questions. Applicatives without OM seem to be possible but very rare, since Joswig (1996: 23), to my knowledge, provides the only example in the literature which is judged grammatical by my informants (19).

(18)a.  
\[ U-li-m-pik-i-a \quad nani \; nyama? \]
\[ 2SG.S-PST-1.O-cook-APPL-FV \quad who \; meat \]
\‘For who did you cook meat?\’

b.  
\[ Ni-li-m-pik-i-a \quad mtoto \; wangu \; nyama. \]
\[ 1SG.S-PST-1.O-cook-APPL-FV \quad 1.child \; my \; meat \]
\‘I cooked meat for my child.\’

(19)  
\[ Tu-li-pit-i-a \quad upande \; wa \; kisiwa \; cha \; Kupro. \]
\[ 1PL.S-PST-pass-APPL-FV \quad side \; 12 GEN \; island \; 7 GEN \; Cyprus \]
\‘We passed the island of Cyprus.\’

Since several issues remain open in the study of applicatives in Swahili (but cf. Peterson (2007) for an analysis of applicatives in terms of high topicality), I will focus on the other two instances of obligatory OM in Swahili. What these two instances have in common is that Givenness of the object seems to be the determining factor. This conclusion also receives support from Seidl & Dimitriadis (1997: 378), who, in their corpus study on OM in Swahili come to a comparable conclusion, namely that “unfamiliar objects may not be object-marked”. At the same time, based on their corpus data, the authors dismiss the claims that OM in Swahili is based on definiteness and/or animacy, similarly to what has been discussed above. I will capitalize on this observation in the next section, proposing an analysis of OM in terms of a low, vP peripheral topic position that encodes Givenness.

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5 In relation to the analysis to be presented in Section 3, of course the question arises how Givenness is encoded for subjects.
3. Analysis

Before tackling the second question raised in the introduction, the syntactic status of the object marker on the verb, I first present my analysis in more detail in this section, which is crucially based on the assumption that the object marker should be seen as object agreement instead of a clitic. With this analysis in mind, it will then be easier to evaluate arguments in favour of clitichood of the OM in Section 4. In this section, I will first make explicit some theoretical background assumptions related to information structure before discussing the actual analysis. In short, I claim that object marking in Swahili is due to an agreement relation between a vP peripheral topic head with the topical object, whereby this topic position in the vP periphery encodes Givenness.

3.1. Syntactic encoding of information structure

Following a long line of research, I will assume, following Rizzi (1997), that information structure is encoded by topic and focus features. In line with more current theories of features and agreement (Chomsky 2000; 2001) however, those features do not need to move (overtly or covertly) to the specifier of dedicated information-structural projections in the periphery to check the features, but they can be eliminated via agreement between the feature on the information-structurally marked element and the respective dedicated functional head in the periphery.6 Importantly, these peripheral information-structural projections are only projected when needed. Thus, while we assume “it [the Force-Fin system, JM] to be present in all non-truncated clausal structures […], it is reasonable to assume that the topic-focus system is present in a structure only if ‘needed’, i.e. when a constituent bears topic or focus features […].” (Rizzi 1997: 288) For a concrete implementation, I take it to be the case that information-structural notions are combined with lexical elements in the numeration, in line with Aboh (2010). The lexicon does not only contain a dedicated focus or topic head but also a focus or topic feature. Both elements need to be selected together from the lexicon when building the numeration, and while the functional head leads to the projection of the respective phrase, the

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6 This agreement system raises the question of the feature specifications that lead to successful agreement. Assuming an uninterpretable unvalued focus feature in the Foc head in the periphery, for example, seems counter-intuitive, since focus interpretation is tied to the presence of this functional projection. Consequently, I follow Pesetsky & Torrego (2007) and assume that interpretability and valuation are independent and that the heads of topic and focus phrases host unvalued, but interpretable features while the respective constituents carry valued, but uninterpretable information-structural features.
feature needs to be attached to a lexical element that is to be information-structurally marked. Also, following the discussion about different kinds of topics above, I assume that different kinds of topics (and most likely foci as well) are encoded by independent projections and consequently independent features in the lexicon.

In general, information-structural projections are most frequently associated with the periphery of the whole clause, the CP layer. In this paper, I follow Belletti (2004) who argues that the left periphery of the vP (the low IP area) also hosts information-structural projections which show interesting parallels to the projections in the CP. Why vP and CP should host information-structural projections in their respective peripheries can only be answered speculatively. What vP and CP have in common, at least in some accounts, is that they are considered phases, i.e. points in the derivation in which the derived structure is sent to PF and LF. One could assume that spell-out also involves evaluating the structure against the larger discourse, which would require information-structural information. Thus, due to their shared status as a phase, vP and CP both encode this information. Concerning the interpretations of these low information-structural projections, the low focus phrase is often linked to encoding new-information focus in contrast to CP-peripheral contrastive focus. Thus, postverbal subjects in Italian are often interpreted as new information, and Belletti (2004) assumes they are hosted in the low focus position. Similarly, answers to wh-questions in German only surface in sentence initial position, spec-CP, when they are contrastively focussed. Otherwise, they remain low in the clause, with the low focus phrase being a likely host. The interpretation of low topics, however, has not been discussed extensively in the literature. Assuming a parallel to low focus being interpreted as new-information focus, i.e. the unmarked type of focus, low topics are simply interpreted as Given, as the complement to new information, while more marked topic interpretations are restricted to the CP periphery, as discussed above (Frascarelli & Hinterhölzl 2007). A very similar claim can already be found in Kallulli (2000), who argues that Given elements are simply marked [-focus] and constitute the complement of new information. Since then, more fine grained analyses of topic and focus have been discussed, but I assume that, at least for vP internal information structure, this claim holds: topics in the vP are interpreted as given, in contrast to new information marked by focus.

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7 If this argument is on the right track, one would expect information-structural projections in the peripheries of other phases, for example DPs, if they indeed turn out to be phases. For approaches exploring this idea, see Aboh (2004) and Alexiadou & Gengel (2012).

8 With this in mind, the approach of Zeller (2014; 2015) employing an anti-focus feature for the object marking in Zulu, might also be rephrased in terms of Givenness.
Bax & Diercks (2012) capitalise on this idea when discussing object marking in Manyika, another Bantu language, a proposal I discuss in Section 4.

The last point that needs to be addressed before I turn to the analysis of OM in Swahili is actually related to the first question raised in this section, the way information-structural heads enter the derivation. Following Chomsky (2008) and the idea of feature inheritance, only phase heads can introduce functional features into the syntax. Thus, CP is not only responsible for introducing information-structural, δ-features, but also φ-features. In English, while the former remain in C and can project their own functional projections, the latter are inherited by T. Miyagawa (2010; 2017) argues that which features are inherited by T is actually subject to cross-linguistic variation, and the difference between agreement-driven (in the sense of φ-agreement) and discourse configurational languages boils down to Tinheriting φ-features in the former, and δ-features in the latter. Of course, two other logical possibilities exist, either both or none of the features can be inherited by T from C. These options are explored further by Jiménez-Fernández (2010; et seq.) and Jiménez-Fernández & Miyagawa (2014). I will assume that this is the case in the Swahili vP, where a vP peripheral topic head is merged carrying not only a topic feature but also φ-features. In addition to being present on the same head, I also assume that they depend on each other, i.e. the valuation of one depends on the valuation of the other by the same agreement goal. With these theoretical assumptions made explicit, I now turn to the analysis of Swahili OM in the next subsection.

3.2. OM in Swahili

As already mentioned, I assume that OM in Swahili is conditioned by topicality, more specifically Givenness, of the object. This object agrees with a vP peripheral topic head which, due to it also carrying unvalued φ-features, surfaces as an agreement morpheme on the verb. For the syntactic derivation in general, I follow Julien (2002), Riedel (2009), and van der Wal (2009) in assuming two different ways of how verbal affixes are combined with the verb stem. Suffixes are attached to the verb stem by head movement, i.e. the verb moving up through projections of all those heads that appear as suffixes on the verb, mostly derivational heads like Voice, Causative, and others. Prefixes, on the other hand, are combined with the verb stem via phonological merger. This means that the verb is combined with these prefixes only at PF. While the suffixed heads obey the mirror principle (Baker 1985), i.e. the head closest to the verb stem is the most deeply embedded, the prefixal heads correspond to the actual order of the projections in the syntax. This makes it possible to determine the position of the verb with respect to the object
marker in Swahili: since the object marker is, under all circumstances and in all constructions it can occur in, the prefix closest to the verb stem, the final position of the verb will be the head immediately dominated by the head containing the object marker, i.e. the head immediately below the vP peripheral topic head.

The prefixal heads, I take to encompass Aspect/Tense and a dedicated head for subject agreement. For the suffixal, derivational heads that are combined with the verb by the verb moving through them, I assume the ordering in (20). Conforming to the mirror principle, the highest of those projections hosts the suffix furthest removed from the verb stem and serves as the final landing site of the verb moving up through the tree.

\[(20) \text{[MoodP Mood [VoiceP Voice [Applic1P Applicative1 [CausP Causative [Applic2P Applicative2 [VP ...]]]]]}}\]

Based on corpus data, Ngonyani (2016) shows that the applicative morpheme can precede or follow the causative, suggesting two different applicative heads. The highest of the projections in (20), the assumed final landing site of the verb, is termed Mood by Julien (2002), since it frequently encodes the declarative/subjunctive distinction in different Bantu languages, but is, for example, also affected by negation in the present tense in Swahili. Due to this, and other complications, Riedel (2009) rather assumes that this head encodes aspect. This is, however, also a problematic assumption for Swahili, so that I leave this matter open here, and simply use the label provided by Julien (2002) without being committed to the actual content. Another question that arises from (20) is where the subject is initially merged. It could very well be one of the higher projections of (20), for example the specifier of MoodP or VoiceP, or there could be a different projection within this domain responsible for introducing the subject. Since this discussion is not directly relevant for the goal of the paper, I leave this matter open as well.

Specifically, I assume the following steps in derivation. First, the object is merged, carrying a Givenness feature and a set of φ-features. The derivation proceeds, the VP is built, followed by the vP area that encompasses (some of) the projections in (20). At the end of the vP phase, a topic head is merged. It carries both an unvalued but interpretable Givenness feature and a set of unvalued φ-features. Being unvalued, these features probe and, since valuation of φ-features depends on the valuation of the topic feature, agree with the object marked for Givenness (21).

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9 I assume that the vP similarly to the CP in the sense of Rizzi (1997) corresponds to several projections, for which vP is just a cover term. Alternatively, one could assume that there still is a dedicated vP projection in that area, possibly responsible for introducing the subject (cf. Ramchand 2017).
At some point, the verb starts moving up, moving through all suffixal heads and incorporating them. All prefixes are not merged with the verb stem by the verb moving through them but by phonological merger later at PF, (22). The last suffixal head on the verb is used to encode verbal mood, usually indicative -a or subjunctive -e, often simply glossed as Final Vowel, and thus I assume that the verb moves up to Mood, but nothing in this analysis depends on the exact nature of the head the verb ends up in, as long as the next higher head is the topic head. It is necessary that the TopP immediately dominates the final landing site of the verb since the object marker is the prefix closest to the verb stem, as discussed above.

Consider the example in (23), repeated from (1), with slightly modified glossing to more closely represent parts of the derivation of the vP sketched in (24).

(23) *Mwanamke* a-li-(**ki**)~vunj-/∅-a kikombe.
‘The woman broke the cup.’
The object *kikombe* is merged as complement to V, carrying a set of $\phi$-features and a Givenness feature. The verb moves through the *Voice* into the *Mood* head, and above the *Mood* head, the low topic head encoding Givenness is merged. It carries an unvalued Givenness feature combined with an unvalued set of $\phi$-features. It acts as a probe and agrees with the object due to the Givenness feature, also valuing its $\phi$-features in the process. These features are then spelled-out as the object marker *ki* for noun class 7.

(24)  

Note that the agreement process of the topic head in the $vP$ periphery and the given object is essentially only constrained by locality: the topic head will agree with the closest DP carrying a Givenness and $\phi$-features. This suggests that for verbs taking sentential complements, it should be possible, under the right circumstances, for the matrix verb to show object agreement with the subject of an embedded clause. This is indeed the case in ECM constructions in Swahili, in which the matrix verb can optionally cross reference the noun class of the subject of the embedded verb. Further investigation is required, but I suspect that this is due to the fact that ECM clauses lack certain projections in their left periphery, making them smaller than finite declarative sentences (however, note that the ECM clause is not non-finite but in the subjunctive) and therefore allowing agreement into them.  

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10 These constructions require an overt subject in the embedded clause, since pro-drop in ECM or
Furthermore, under the analysis presented above, object agreement on the verb has a special status compared to the other prefixes for tense/aspect and subject agreement, given that the latter type of prefixes are clearly outside the vp. Interestingly, object marking, behaves differently from tense/aspect and subject marking across Bantu, with the object marker forming the so-called macrostem together with the verb stem, a unit important for phonological processes like tone assignment or reduplication (Hyman 2009; Downing 2009). But there are also syntactic indicators of the special status of the object marker compared to the other prefixes. Swahili disallows monosyllabic verb stems to be inflected for tense or subject agreement, and these stems keep the infinitive prefix ku- so that they are bisyllabic at the moment the tense/aspect marker attaches.

(26)a. *A-me-la.  
1.S-PERF-eat  
int.: ‘He has eaten.’

b. A-me-ku-la.  
1.S-PERF-INF-eat  
‘He has eaten.’

This restriction, however, is more complex. Altering the verb via suffixes and certain special prefixes allow the ku-prefix to be dropped.

(27)a. A-l-e.  
1.S-eat-SUBJ  
‘He should eat.’

b. A-ki-la...  
1.S-SIM-eat  
‘When he eats …’

Most importantly for the matter at hand, object marking on the verb also requires the ku-prefix to be dropped.

(28)Simba a-me-ni-la.  
1.lion 1.S-PERF-1SG.O-eat  
‘The lion has eaten me.’

Control contexts is simply impossible (Li & Thompson 1989). Thanks to Daniel Hole (p.c.) for bringing this to my attention.
What sets object marking apart from other prefixes in the approach just presented is the place in the derivation at which object marking occurs. While subject agreement and tense/aspect-marking are clearly T related, I have argued that object agreement happens during the vP phase. Thus, I assume that the restriction on monosyllabic stems is a restriction that holds at the end of the vP phase. If the stem is evaluated as bisyllabic at the end of the vP phase, there is no need for the ku- prefix, otherwise the prefix needs to be present for further affixation to the stem.

Based on the theoretical assumptions presented in the previous subsection, the analysis of OM in Swahili as agreement with a low topic which encodes Givenness easily captures the apparently optional distribution of the marker. If the object is not marked as Given, the respective topic head is simply not selected from the lexicon and does not project. This leads to the absence of the object marker without causing any other complications for the rest of the derivation. In addition, this analysis also derives the behavior of the object marking in ECM contexts and the curious distinction among prefixes between the object marker on the one side and tense/aspect and subject agreement prefixes on the other. In the next section, I will argue that this analysis better predicts the general distribution of the object marker than a possible clitic-based analysis (for example the one proposed for Manyika by Bax & Diercks 2012).

4. OM in Swahili is not cliticization

In this section, I compare the agreement based analysis of Swahili OM just presented to a possible alternative, an approach based on cliticization, while remaining uncommitted to the concrete implementation of the clitic approach (Big-DP analysis or otherwise). In general, cross-linguistic research into object marking has led several researchers to the conclusion that object marking should generally be analysed as based on cliticization (Nevins 2011; Kramer 2014; Johns & Kučerová 2017), while, at least for Bantu languages, Riedel (2009) suggests the opposite. Of course, even though a uniform analysis of OM holds a conceptual advantage, it might turn out that a uniform analysis of OM is not possible, a position taken for example by Oxford (2014) or Baker (2016). In this section, I show that an analysis of OM in Swahili is more promising than a clitic-based one, without claiming that this analysis holds for other languages.

11 Van der Wal (2017) applies the cliticization proposal of Roberts (2010) to OM in Bantu. This approach is based on agreement between a probe and a defective goal and therefore blurs the distinction between the two types of approaches.
Before turning to empirical arguments that support the agreement-based analysis, note that following Preminger (2009; 2014), the case of Swahili OM would constitute a clear example of cliticization. In his seminal work, he argues that what distinguishes cliticization and agreement is the optionality of the former. For clitic doubling, the absence of an appropriate element to be doubled simply leads to the absence of the clitic. Agreement on the other hand is an obligatory process and failure of a probe to find a goal leads to the surfacing of a default form. Taken by itself, this reasoning suggests that OM in Swahili needs to be analyzed as clitic doubling of the object with the clitic afterwards being incorporated into the verb stem, since the absence of an appropriate object does not lead to a default form for the object marker but to its absence. If, however, object marking in Swahili is based on information structure, the optionality of the marker can be explained without assuming a clitic status. As discussed above, information-structural heads are only selected from the lexicon if needed. If the agreement is due to an information-structural head combined with a set of $\varphi$-features, then the absence of information-structural marking will lead to a numeration for which the information-structural head is not selected from the lexicon, which in turn will lead to the absence of the object marker in the structure. Thus, if agreement is tied to a head that can be optionally selected from the lexicon, like information-structural heads, then the absence of agreement based on this head cannot be taken to be an indicator of a clitic status of the respective morpheme. Consequently, I do not take the optionality of the object marker as a counterargument to an agreement based analysis.

Turning to more empirical arguments, I have already discussed above that the object marker in Swahili can co-occur with objects in their base position (5). Dislocation of the object to avoid a Principle C violation is the main diagnostic used by Bresnan & Mchombo (1987) to argue for the clitic status of the object marker in Chichewa. Since the object does not need to be dislocated for OM to surface in Swahili, this diagnostic suggests an agreement analysis. However, as mentioned as well, dislocation of the object does not seem to be a reliable indicator for the status of the object marker. Consequently, I will discuss diagnostics proposed by Kramer (2014) to discern the status of object marking in Amharic and apply them to Swahili. This discussion will show that those tests that are applicable to Swahili strongly suggest that OM is based on agreement. Before discussing some of her diagnostics, note that she also mentions three properties of the Amharic object marker that suggest it is based on agreement: only one object marker per clause is possible, it seems to attach very low to the verb stem, in the $vP$ area, and it also always cross-references the highest object. Those three properties are also true of the object marker in Swahili. For Amharic, however, Kramer (2014) goes on to show that
many other properties of the object marker suggest clitic status.

First, it is shown that the object marker in Amharic does not vary according to tense, aspect, mood, or features of \( v \), just as expected of a clitic. The situation is different in Swahili. While the form of the object marker remains the same in all contexts in which it is possible, it always cross-references the noun class of the object or person and number for pronouns, its general availability depends on sentence mood\(^{12}\) and voice, a feature linked to \( v \). Thus, while the object marker is easily possible in imperatives in Amharic, the two are incompatible in Swahili. As shown in (29), the imperative usually simply consists of the verb stem. If an object marker is to be included, the subjunctive must be used (30).

\[(29)\]
\[\begin{align*}
\text{a. } & \text{Soma!} \\
& \text{\hspace{1cm} ‘Read!’}
\end{align*}\]
\[\begin{align*}
\text{b. } & \text{Andika!} \\
& \text{\hspace{1cm} ‘Write!’}
\end{align*}\]

\[(30)\]
\[\begin{align*}
\text{a. } & \text{U-}m\text{-pig-e!} \\
& \text{2SG.S-1.O-hit-SUBJ} \\
& \text{\hspace{1cm} ‘Hit him!’}
\end{align*}\]
\[\begin{align*}
\text{b. } & \text{M-ki-som-e} \text{ kitabu!} \\
& \text{2PL.S-7.O-read-SUBJ 7.book} \\
& \text{\hspace{1cm} ‘You (all) read the book!’}
\end{align*}\]

Furthermore, the Amharic object marker can occur with passives. In Swahili, this is impossible. In (31a), the object marker agrees with the highest object of a ditransitive verb, the indirect object. If the verb is passivized and the indirect object promoted to subject, the object marker cannot agree with the remaining direct object (31b). In fact, the object marker cannot agree at all if the verb is passivized.

\[(31)\]
\[\begin{align*}
\text{a. } & \text{Halima a-li-}m\text{-pa Fatuma zawadi.} \\
& \text{Halima 1.S-PST-1.O-give Fatuma 9.gift} \\
& \text{‘Halima gave Fatuma a gift.’}
\end{align*}\]
\[\begin{align*}
\text{b. } & \text{Fatuma a-li-(\#i-)}p\text{-ew-a zawadi na Halima.} \\
& \text{‘Fatuma was given a gift by Halima.’}
\end{align*}\]

Clearly, object marking in Swahili shows behavior expected from agreement mark-

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\(^{12}\) It is important to note that mood here is not the same mood represented in the structures above as part of the \( vP \) domain, but rather something which is encoded higher in the clause in the C region.
ers but not from clitics. It varies according to verbal mood, being absent in imperatives, and also according to voice, just as expected from an agreement marker linked to the vP domain. One possible reason for this dependence of the object marker on sentence mood and voice could be that the projections that make up the vP domain in these instances simply do not include the low topic projection. A further test concerns the difference in timing between cliticization and agreement, with agreement always preceding cliticization. Thus, while clitics can easily attach to elements that already contain clitics, agreement affixes cannot (Zwicky & Pul- lum 1983), meaning that after cliticization, a host cannot undergo further agreement processes as a probe. As nearly all the examples in this paper show, object marking is the prefix closest to the verb stem, and tense/aspect marking as well as subject agreement attach as prefixes afterwards. From this I conclude that object marking does not prohibit the verb to participate in later agreement processes and therefore cannot be analyzed as clitic incorporation.

Lastly, Bax & Diercks (2012), in their discussion of object marking in Manyika, use the variability of the position of the object marker as indicator for its clitic status, as shown in (32) and (33). In Manyika, the object marker has a very similar distribution compared to OM in Swahili, which leads the authors to argue that it is also based on topicality. They show, however, that in possessive constructions, the object marker does not surface in its usual position directly preceding the verb stem, but post-verbally or even attached to the possessive marker/preposition.

(32) a. \textsc{Ndi-na(-ro)} ruwa \textit{iri}.
   \textsc{1SG.S-with-5.O 5.flower 5.this}
   ‘I have this flower.’

b. *\textsc{Ndi-ri-na} ruwa.
   \textsc{1SG.S-5.O-with 5.flower}
   ‘I have a/the flower.’

(33) a. \textsc{Nda-i-we \textit{na-wo}}
   \textsc{1SG.S-DIST.PST-be with-3.O}
   ‘I had it’

b. *\textsc{Nda-i-u-we} \textit{na}.
   \textsc{1SG.S-DIST.PST-3.O-be with}
   ‘I had it.’

\footnote{The next diagnostic Kramer discusses concerns the similarities of Amharic OM with definite determiners in this language. This test is not applicable to Swahili, since Swahili lacks definite determiners altogether.}
Similar data can be replicated in Swahili. However, it becomes obvious that the marker cross referencing the possessee is clearly not drawn from the paradigm of object markers.\footnote{The status of the marker remains unclear. It appears to be similar to relative clause agreement marker, which might suggest a reduced relative clause analysis, even though it is not obvious how such an analysis would look like. Jenneke van der Wal (p.c.) points out that the marker might be a referential form after a preposition, as it contains the Bantu $o$-of-reference. Since it is only important for the present analysis that the marker is not an object agreement marker, I leave a detailed investigation to further research.}

(34) a. \textit{ni-ko na \textit{ua}.}
\hspace{1em} 1SG.S-be.at with 6.flower
\hspace{1em} ‘I have flowers.’

b. \textit{ni-ko na-\textit{yo}.}
\hspace{1em} 1SG.S-be.at with-6.REL
\hspace{1em} ‘I have it.’

(35) Q: \textit{(Je,) u-ko na mbwa?}
\hspace{1em} Q 2SG.S-be.at with 1.dog
\hspace{1em} ‘Do you have a dog?’

A: \textit{Ndio, ni-ko na-\textit{ye}}
\hspace{1em} 1SG.S-be.at with-1.REL
\hspace{1em} ‘Yes, I have it.’

(36) Q: \textit{(Je,) hu-ko na kitabu?}
\hspace{1em} Q 2SG.S-be.at with 7.book
\hspace{1em} ‘Do you have a book?’

A: \textit{Ndio, ni-ko na-\textit{cho}}
\hspace{1em} 1SG.S-be.at with-7.REL
\hspace{1em} ‘Yes, I have it.’

These data suggest that in contrast to Manyika, the position of the object marker in Swahili is not flexible, again suggesting a status as an agreement marker instead of a clitic.

Summing up this section, I have shown that if tests from the literature to distinguish agreement markers from clitics are applied to the Swahili object marker, it behaves consistently as would be expected from an agreement marker. It is dependent on mood, cannot occur in passives due to its close relation to v, and does not close off the verb stem to further agreement processes. Furthermore, its position...
seems to be restricted to the prefix position closest to the verb stem and it does not show any of the positional flexibility exhibited by the object marker in Manyika. All these results taken together strongly suggest that object marking in Swahili should be analyzed as agreement. To account for its apparent optionality, I have suggested to link this agreement to topicality, more specifically Givenness, of the object. More generally then, it might be the case that for agreement dependent on information structure, simply distinguishing agreement from clitic doubling by the presence of a default form or the complete absence of an agreement marker as suggested in Preminger (2009; 2014) fails to derive the difference.

4.1. OM and NPIs

Before concluding this paper, I want to briefly discuss the relation between object marking and NPIs in Swahili. As pointed out by Riedel (2009), object marking can cross-reference NPIs in object position, which is unexpected in light of the claim of Giannakidou (1998) that NPIs cannot be topicalized to the left periphery and therefore cannot be topical (37).

(37) a. *Anyone, I didn’t see.
   b. *Anything, I didn’t see.

(38) a. Si-ku-mw-ona  
    NEG.1SG.S-NEG.PST-1.o-see  mtu  yeyote.
    ‘I didn’t see anyone.’

   b. *Ni-li-mw-ona  
    NEG.1SG.S-PST-1.o-see  mtu  yeyote.
    int.: ‘I saw anyone.’

(39) a. Si-ku-ki-ona  
    NEG.1SG.S-NEG.PST-7.o-see  kitu  chochote.
    ‘I didn’t see anything.’

   b. *Ni-li-ki-ona  
    NEG.1SG.S-PST-7.o-see  kitu  chochote.
    int.: ‘I saw anything.’

However, taking data from English and German into account, it seems to be possible to topicalize NPIs as part of larger constituents or even by themselves (Hoeksema 2000), with the NPI boldfaced in the following examples. The German examples in (40) and (41) contain an NPI as part of the constituent that occupies the sentence initial position. This position, spec-CP or prefied in more traditional
analyses, is usually associated with a topical constituent. The English examples in (42) and (43) show something comparable: a constituent containing an NPI has been topicalized into the left periphery of the clause, preceding the subject.

(40) *Ein rebellischer oder auch nur undiszipliniert Soldat bin ich nie gewesen.*

I never been
‘I was never a rebellious or undisciplined soldier.’

(Richter & Soehn 2006: 429)

(41) *Einen Hehl hat Hans aber noch nie daraus gemacht,*

a secret has Hans but still never of it made,
*dass er ...* that he...
‘Hans never made a secret of it that he ...’

(Richter & Soehn 2006: 429)

(42) *[That she might have known anything about the murder beforehand], I really don’t believe.*

(D’Angio 2007: 20)

(43) *Tony claimed that he’d been to Belfast but that he actually ever has been, I don’t believe.*

(Peter W. Smith, p.c.)

The relation between NPIs and topicality needs to be investigated further. However, I believe that the data just discussed show that the general claim that NPIs cannot be topical does not hold. If a more fine-grained distinction between different types of topics is taken into account, it might turn out that specific subclasses of topical elements can never be NPIs with element simply marked for Givenness possibly not being subject to this restriction.

5. Conclusion

In this paper, I have discussed object marking in Swahili and focussed on two related questions, namely how the optionality of the object marker can be derived and to which kind of syntactic element, agreement marker or incorporated clitic the object marker belongs.

Concerning the first question, I have shown that proposals that account for the presence of the object marking by appealing to specificity, animacy, or definiteness
scales fail, since neither definite, nor specific, nor animate objects obligatorily trigger object marking on the verb, even though those properties often correlate with object marking. I have argued that instead it is topicality that determines the presence or absence of the object marker. If the object is interpreted as Given in the discourse, a property encoded by a low topic head in the vP periphery, then object marking occurs on the verb. This correctly derives cases in which object marking in Swahili is obligatory, namely if the object is further topicalized to the left periphery or an object pro-noun is pro-dropped.

Since the analysis of OM in Swahili is based on agreement linked to low topic features, the object marker on the verb should behave like an agreement morpheme and not like a clitic. Using tests suggested by Kramer (2014) to determine the status of the object marker in Amharic, I have shown that the object marker in Swahili shows a distribution more likely associated with an agreement morpheme than with a clitic. Additionally, the positional flexibility of the object marker in Manyika, which is used to argue for it to be a clitic by Bax & Diercks (2012), is absent in Swahili, and a relative clause agreement marker is used in Swahili in those positions, in which the Manyika object marker surprisingly surfaces in non-pre-verbal position.

Of course, many open questions remain to be investigated. In addition to the obligatory presence of OM in applicatives mentioned above, object marking seems to interact with the marking of contrast in Swahili. Contrast implies a contextually given set of similar elements from which one element is then contrasted with the others. Thus, in some way, contrast seems to be dependent on Givenness. This assumption is supported by the data in (44), in which an element in the second clause is contrasted with a comparable element in the first clause. For my informant, the object marker is impossible in the first clause but obligatory in the second. This could indicate that the first clause introduces the set on which the contrast is based into the common ground, while the second clause then picks one element out of this given set and contrasts it with the others. The relation between contrast and Givenness with respect to Swahili OM needs to be investigated further.

(44)a. Si-ku-nunua shati, ila ni-li-i-nunua nguo.
   ‘I didn’t buy a shirt, but I bought a dress.’

b. Si-ku-ona nyani, ili ni-li-m-ona mvulana.
   NEG.1SG.S-NEG.PST-see pavian, but 1SG.S-PST-1.O-see 1.boy
   ‘I didn’t see a monkey but I saw a boy.’
Despite these open issues, I believe that an analysis of the object marker in Swahili being based on agreement with a low Givenness topic is on the right track, and contributes to the ongoing discussion of how information-structural features can influence narrow syntax.

In a wider context, the analysis presented in this paper supports the view that information structure plays an important role in the grammatical marking of object (Dalrymple & Nikolaeva 2011), suggesting that differential object marking and differential object agreement are, at least in some languages, dependent on the information structural status of the object (Iemmolo & Klumpp 2014).

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Schlagwörter: Swahili; Objektmarkierung; Agreement; Klitisierung.