

# Syntax

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of Contemporary Research

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## 78. Swahili

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### 1. Introduction

This cannot be a detailed account of the syntax of Swahili, for reasons of space, but also because the syntax of that language, although it surely belongs to the more familiar languages of the world, is by no means well studied in every detail. In this article, I will outline the basic syntactic properties (section 2.–5.), and discuss some phenomena which might be interesting in the light of current syntactic theories (sections 6.–8.).

Swahili, a Bantu language of Eastern Africa, has been in intensive contact with non-Bantu languages, most notably Arabic and in more recent times English. The influences of these languages, however, is largely confined to the lexicon; as far as syntax and morphology is concerned, Swahili can be considered as a fairly typical Bantu language. The number of speakers exceeds 30 millions, but its situation may be quite unique, insofar as by far the largest group speaks it only as a second language. This reflects its history as

the lingua franca of the East African trade became the official language of Kenya and Tanzania, and an important language in Uganda. Several Swahili dialects can be identified, among them *Amu* on the Lamu island, *Mvita* in Mombasa, *Mtangata* at the northern Tanzanian coast, *Unguja* in central Zanzibar and the neighbouring coast, and *Kingwana* in the Katanga province of Zaire. *Comorian* and *Chimwini*, the language of the Somalian town Brava, are mostly considered as separate languages. Standard Swahili is based on Unguja. (See Polomé 1967, Whiteley 1969, Khalid 1977, Nurse/Spear 1985).

There are quite a few good textbooks (e. g. Wilson 1970, Brauner/Herms 1979, Hinnebusch/Mirza 1979, Maw 1985), dictionaries ("Kamusi", 1981, Höftmann 1979), a few grammatical descriptions (e. g. Ashton 1944, Polomé 1967, Miede 1979 for older stages), which focus mainly on morphology, and some monographs and articles on specific problems. There is a journal, *Kiswahili*, dedicated to the study of the language and its literature which is published by the Institute for Kiswahili Research of the University of Daressalaam. There is, however, no comprehensive reference grammar; the closest to that is still Ashton (1944).

### 2. Noun Classes and Noun Phrases: The Basic Facts

2.1. Bantu languages are famous for their elaborate noun class systems. Although the phenomenon is well-known from gender sys-

tem of languages like Spanish or German, Bantu systems are impressive because of their complexity and the central role they play in syntax. They are morphologically and semantically perspicuous, as they are marked by prefixes and nouns denoting similar entities tend to occur in the same noun class.

In Swahili, every noun belongs to one of 14 classes, which is marked in most cases by the so-called *nominal prefix*, e. g. *m-* in *m-toto* 'child', *ki-* in *ki-kombe* 'cup', or *ji-* in *ji-we* 'stone'. The class of a noun is, by and large, semantically predictable; e. g., nouns denoting human beings, plants, or artefacts tend to belong to specific noun classes. Nearly all classes come in singular-plural pairs, e. g. *m-toto* 'child' *wa-toto* 'children', *ki-kombe* 'cup' *vi-kombe* 'cups', *ji-we* 'stone' *ma-we* 'stones'. A few noun stems occur with different nominal prefixes in different classes not related by the singular/plural distinction; e. g. *m-tu* 'person', *ki-tu* 'thing'. Some nominal prefixes can be combined with a wide range of nouns and express such semantic notions as augmentatives and diminutives (cf. e. g. *m-ji* 'town', *ji-ji* 'city', *ki-ji-ji* 'village') or abstract concepts (cf. *m-toto* 'child', *u-toto* 'childhood').

2.2. Adjective stems (which include numerals) have nominal prefixes by which they agree with the head noun; e. g. *m-toto m-dogo* 'small child', *ki-kombe ki-dogo* 'small cup', or *m-toto m-moja* 'one child', *wa-toto wa-tatu* 'three children'. So the basic difference between adjective stems and noun stems is that adjective stems combine freely with any noun class prefix, whereas noun stems do not. But only a subset of the adjectives and numerals actually agree with the head noun, namely those of Bantu origin; examples which lack agreement are *kikombe safi* 'clean cup', *wa-toto saba* 'seven children'.

2.3. There is a second class of prefixes which plays a role in the agreement of pronominal modifiers, like demonstratives, and therefore is called *pronominal prefix*. For example, the pronominal prefix of the *ji/ma* classes are *li* and *ya*, and for the *ki/vi* classes they happen to be identical to the nominal prefixes, *ki* and *vi*. There are three *demonstratives*, a far-deictic, cf. *ji-we li-le* 'that stone', and two near-deictics, cf. *ji-we hi-li* and *ji-we hi-lo*. Traditionally, the latter ones are described as near-deictic 'this stone' and text-deictic 'the aforementioned stone'; Barrett-Keach (1980) cites evidence that, in fact, the distinction is 'near

speaker' vs. 'near hearer' (cf. also Leonard 1985). Note that in these two forms, the pronominal "prefix" occurs as suffix and influences the preceding vowel, and with the last one, the vowel of the prefix is changed to *o* (cf. also 8.1.1.). The pronominal prefix is also used with *possessives*, cf. *ji-we l-angu* 'my stone', *ji-we l-ako* 'your stone'. But note that with some relational nouns, such as *baba* 'father', the possessive will be a suffix, cf. *bab-angu* 'my father'. The pronominal prefix occurs in a *genitival construction* based on the preposition *-a*, cf. *ji-we l-a Juma* 'Juma's stone', and in a possessive construction based on the preposition *-enye*, cf. *ji-we l-enye uzito* 'stone with weight', 'heavy stone'. Furthermore, the pronominal prefix is used for a number of *quantifier-like expressions*, namely with *-ote* 'all' (cf. *ma-we y-ote* 'all stones'), with *-o -ote* 'any' (cf. *ji-we l-o l-ote* 'any stone'), with the interrogative *-pi* 'which' (cf. *ji-we li-pi* 'which stone'), and with the intensifier *-enyewe* (cf. *ji-we l-enyewe* 'the stone itself'). Note the contrast between *-ote* 'all' and number words or words like *-ingi* 'many', which agree using the nominal prefix (cf. *ma-we m-engi* 'many stones').

2.4. As the examples given so far suggest, adnominal modifiers follow their head noun in Swahili. This also holds, of course, of relative clauses, which will be discussed in section (5.1.) below. One possible exception to that rule are demonstratives, which may precede the noun, especially in a more colloquial style; cf. *li-le ji-we* 'the stone'. As the gloss suggests, preposed demonstratives can be considered as definite *articles*. Another exception is the quantifier *kila* 'every', borrowed from Arabic, which has to precede the noun (cf. *kila mtoto* 'every child'). So it might be that a new category of pronominal determiners is developing in Swahili. There is no indefinite article; however, the postponed number word *-moja* 'one' is sometimes used in this function, most notably when introducing an entity into discourse about which more information is given later.

2.5. There are three *locative classes* that are special insofar as there are no nouns which belong to them per se (with the exception of *mahali* 'place'). However, many nouns can be transformed to place nouns by a suffix *-ni* (cf. *nyumba-ni* 'at, to, from the house', *kazi-ni* 'at, to, from work'). These locative nouns, together with place names which are inherently

locative, in turn, may agree with the help of one of the three locative prefixes (*pa-*, *ku-*, *m-*), which add further specification to the locative meaning of the noun (roughly 'at', 'to' or 'near', and 'in').

2.6. Standard Swahili differs from many other Bantu languages that feature two different nominal prefixes, generally of the structure CV- or VCV- (where the first V also is called 'preprefix'). Typically, using the CV prefix indicates that the noun is indefinite, nonspecific, or predicative, whereas the VCV prefix indicates that the noun is definite, specific, or referential. Greenberg (1978) assumes that the complex prefixes originate in the agglutination of demonstrative elements or articles with the noun.

### 3. Basic Sentence Types

3.1. Noun class agreement plays an important role in the syntax of Swahili sentences. In the following sentence, the verb agrees with both the subject *watoto wale* 'those children' and the object *machungwa haya* 'these oranges' by means of their pronominal prefixes *wa* (class 2) and *ya* (class 6):

- (1) Wa-toto wa-le  
 CL2-child CL2-that  
 wa-na-ya-ona  
 CL2-PRES-CL6-see  
 ma-chungwa ha-ya.  
 CL6-orange this-CL6

As it can be seen with this example, the so-called *subject prefix* is followed by a *tense prefix*, the *object prefix*, and the verb stem. The subject prefix occurs with most tenses; exceptions being the general present tense marked by *a*, where it occurs with some allomorphic variations, and the habitual tense prefix *hu*, where it does not occur at all. The object prefix occurs only with transitive verbs, and is not obligatory in this case: it occurs regularly with animate NPs, especially if they are definite, and sometimes with inanimate definite NPs. The conditions of object agreement will be further discussed in section (6.1.3.).

3.2. There is no case distinction with NPs. The word order, though basically SVO, is relatively free – the two NPs and the verb in (1) can be arranged in any order. Hence agreement, or cross-reference, bears a considerable functional load in determining sub-

ject and object. Thus, Swahili is a headmarking language in the typology of Nichols (1986), as the syntactic functions of the arguments are marked on the head, viz. the verb.

3.3. Example (1) has provided a first impression of the morphological structure of the Swahili verb. It should be noted here that the verb stem may be decomposed into a verb root and suffixes which indicate argument-changing processes, like passive (cf. section 4.). The last vowel, *-a*, can be considered as a marker of affirmativity and indicativity; there is a special subjunctive form with *-e* as a final vowel and lacks the "tense" prefix (cf. *wa-ya-on-e* CL2-CL6-see-SUBJ), and there are special negative forms, some of which have the final vowel *-i* (cf. *ha-wa-ya-on-i* NEG-CL2-CL6-see-NEG). With verb stems of Arabic origin, however, the final vowel does not change, cf. *wa-na-fahamu* CL2-PRES-understand, with *wa-fahamu* as subjunctive and *ha-wa-fahamu* as negation. (See Contini-Morava 1989 for a study of the semantics of tense, modus and negation).

3.4. The *copula* behaves differently from other verbs. There is a particle *ni* (negative *si*) which, combined with a following NP or adjective, changes this to a predicate; cf. *Juma ni mwalimu* 'Juma is a teacher', *nyumba si nzuri* 'the house isn't nice'. It is, however, not obligatory to use an overt copula; cf. *Juma mwalimu* 'Juma is a teacher'. There is a second copula which consists of a pronominal prefix; cf. *Juma yu mwalimu* 'Juma is a teacher', *Kuchimba ku kazi* 'Cultivation is (hard) work'; it is related to a Bantu copula stem *li*, which is reduced to zero in Swahili. There are slight semantic differences between these two copulas; the latter one has a kind of 'actual' meaning, cf. *Huyu yu mume wangu* 'This is my husband' (implies that the speaker is still married), *Huyu ni mume wangu* (could be uttered by a widow pointing at a picture). To express tense distinctions, an auxiliary verb *kuwa* 'to be' must be used; one example is *Watu hawa wa-li-kuwa ni mwalimu* 'These people were teachers'. With the verb *kuwa*, the copula *nilsi*, and especially the second type of copula which consists of a subject prefix only, typically are suppressed; so it looks as if the verb *kuwa* were the copula (see Closs 1967 for a treatment of copula constructions, and 8.6. for auxiliary *kuwa*).

3.5. *Possession* and *location* are expressed with the help of copula constructions. The

concept 'to have' is realized by a particle *na* 'with'; this occurs either with a subject prefix (cf. *watu hawa wa-na motokaa* 'these people have a car'), or with the verb *kuwa* (cf. *watu hawa wa-li-kuwa na motokaa* 'these people had a car', lit. 'were with a car'). The object prefix may be cliticized to the possession predicate, using the *o*-pronoun; cf. *watu hawa wa-na-yo motokaa* 'these people have the car'. Location is expressed by the agreeing copula and an enclitic locative *o*-pronoun; e. g. *watu hawa wa-po Nairobi* 'these people are in Nairobi'. In other tenses, the locative pronoun is attached to *kuwa*; cf. *watu hawa walikuwapo Nairobi* 'these people were in Nairobi'.

3.6. In addition to the pronominal prefixes of the noun classes, we also have a set of *personal prefixes*. Note the special form *a* for third person singular which replaces the pronominal prefix of class, 1, *yu*.

	1. SG	2. SG	3. SG	1. PL	2. PL	3. PL	Reflexive
Subject	<i>ni</i>	<i>u</i>	<i>a</i>	<i>tu</i>	<i>m</i>	<i>wa</i>	<i>-ji</i>
Object	<i>ni</i>	<i>ku</i>	<i>m</i>	<i>tu</i>	<i>wa</i>	<i>wa</i>	

We find some differences between subject and object forms – the only trace in Swahili of a case system. The prefix *ji* acts as a reflexive pronoun which does not show any person category. In addition to the pronominal prefixes, there are also free forms; they do not distinguish between subject and object forms, and there are no free pronouns for non-animate NPs. In general, free pronouns are used only in special cases, such as emphasis. The following example is a complete sentence:

- (2) *Ni-na-ku-penda.*  
1.SG-PRES-2.SG-love, 'I love you.'

3.7. The agreement system is confronted with a special problem with conjoined NPs. If the conjoined NPs belong to the same singular class, the complex NP typically will agree according to the corresponding plural class. Furthermore, if they denote human beings, the complex NP will agree according to class 2 (human plural). In other cases, there are two strategies: First, the plural prefix of class 8, *vi-*, might be used as a sort of neutral class (cf. *Sabuni na maji vi-ta-ku-saidia* 'Soap (Cl. 9) and water (Cl. 6) will help you'); second, the last NP might trigger the agreement (cf. *Vi-kombe na zawadi zi-li-tolewa kwa washindi*

'Cups (Cl. 8) and presents (Cl. 10) were given (Cl. 10) to the victors'). (Cf. Givón 1970 and Roberts/Wolontis 1972 for Bantu in general). Note that both strategies pose problems for a unification-based treatment of agreement, such as in GPSG, as the category of the conjoined NP cannot be derived from the categories of the parts by simple unification of features.

3.8. Intransitive and simple transitive sentences are not the only clause types in Swahili, of course. Here is an example of a bitransitive sentence:

- (3) *Mw-alimu a-li-wa-pa*  
CL1-teacher CL1-PAST-CL2-give  
*wa-nafunzi mpira.*  
CL2-pupil CL9.ball  
'the teacher gave the pupils the/a ball'

The Swahili verb can have only one cliticized object pronoun. If there are two objects, it is

the "dative"-like object (denoting the recipient or benefactive), and not the "patient"-like object, which shows agreement. This object typically follows the verb directly, but other orders are possible. Furthermore, it is the "dative" object which becomes the subject after passivization (see also 4.1.; 4.8.5. for dialectal differences).

- (4) *Wa-nafunzi wa-li-pewa*  
CL2-pupil CL2-PAST-give.Pass  
*mpira na mw-alimu.*  
CL9.ball by CL1-teacher  
'The children were given the/a ball by the teacher'  
\**Mpira i-li-pewa wa-nafunzi na mw-alimu.*

So the "dative" object is distinct from traditional indirect objects. Following Hoekstra/Dimmendaal (1983) and researchers on other Bantu languages, I will use the term *direct object* instead of "dative object", and call other objects *nominal complements*. Swahili, then, exhibits a major difference to the argument selection of better-known European languages: For verbs with both a "dative" object and a "patient" object, it is the "dative" object which enjoys the syntactic status of a direct object (cf. Faltz 1978).



4.1. The *passive* can be derived from verbs which have a direct object (but see 6.2.1.). The direct object is promoted to subject, the former subject may be expressed by a prepositional phrase with the preposition *na*, and the verb is marked with the suffix *w* or one of its allomorphic variants (*lew*, *liw*, which are conditioned by rules of vowel harmony). One example: For the sentence *Juma a-li-wa-ona watoto* 'Juma saw the children', we have the passive correspondent *Watoto wa-li-onew-a (na Juma)* 'The children were seen (by Juma)'. As we have seen (cf. 4.), passive applies only to the direct object, not to a nominal complement (but see 4.8.5.). Also, it does not apply to idiomatic complex verbs as discussed in (3.9.).

4.2. Similar to the passive, the *stative* verb form advances the direct object to subject position. In this case, however, the former subject cannot be expressed anymore. The verb is marked by the suffix *k* or its variants (*lik* or *lek*). One example: *Juma a-me-ki-vunja kikombe* 'Juma has broken the cup.', *kikombe ki-me-vunj-ik-a (\*na Juma)* 'the cup is broken (\*by Juma).'

4.3. There is another use of this suffix, namely to derive forms which express *potentiality*. One example: *Juma a-na-fanya kazi hii* 'Juma does this work.', *kazi hii ya-fany-ik-a (\*na Juma)*. 'This work can be done (\*by Juma).' Some verbs allow stative followed by potential marking at the same time, by *k* and by *lik/lek*, (e. g. *ukuta w-a-bomo-k-a* 'the wall is crumbling down', *ukuta w-a-bomo-lek-a* 'the wall can be pulled down'). It is possible to apply the potential derivation to lexical intransitives, e. g. *pona* 'heal', *ponek-a* 'be healable'.

4.4. *Causatives* are marked by the suffixes *ish/esh* or *iz/lez*. They add an agent, or causer, to the argument frame of the verb. If the original verb was intransitive, its subject becomes the direct object of the derived verb, as seen in *watoto wa-na-lala* 'the children are sleeping' vs. *Juma a-na-wa-lalisha watoto* 'Juma makes the children sleep', 'Juma puts the children to bed.' If the original verb was transitive, its subject becomes the direct object, and its object becomes a nominal complement of the derived verb: *farasi a-na-kunywa maji* 'the horse is drinking water', *Juma a-nam-nywesh-a farasi maji* 'Juma makes the horse drink water'. Although causatives are quite

frequent in running Swahili text, not every verb can be causativized. For example, there are no causative forms of *ishi* 'live' or *tua* 'land'. There is a syntactic alternative to causative verb derivation, the embedding of subjunctive clauses under the verb *fanya* 'do, make' (cf. 5.2.2.), e. g. *Juma a-li-wa-fanya watoto wa-lale* 'Juma made the children sleep'. This alternative is less restricted and can be used, for example, with the verb *ishi*: *Kenyatta a-me-m-fanya Oginga a-ishi Kisumu* 'Kenya has forced Oginga to live in Kisumu.' There is a second, minor use of the causative suffix which expresses intensification, without changing the argument frame at all; witness *chungu* 'search' vs. *chunguza* 'investigate'; *nyama* 'be silent' vs. *nyamaza* 'be completely silent'; or *fungu* 'close' vs. *fungisha* 'fasten tightly, imprison'.

4.5. The *applicative*, which is marked by the suffix (*le*)(*li*), typically creates a non-subject argument. The applicative can occur with basically intransitive verbs; cf. *a-me-kufa* 'he died' vs. *a-me-wa-f-i-a watoto* 'he died for the children'. The new argument assumes object status. It often occurs with basically transitive verbs; cf. *a-li-u-pika wali* 'he cooked rice' vs. *a-li-wa-pik-i-a watoto wali* 'he cooked rice for the children'. Here, the new argument becomes an object, and the old object is demoted to the status of a nominal complement. If we start with a ditransitive verb, we end up with a four-place verb that has two nominal complements; e. g. *a-li-m-pa mtoto wali* 'he gave the child rice' vs. *a-li-wa-p-e-a wazee mtoto wali* 'he gave the child rice for the parents'. Note that in the examples so far, the added argument has the role of a beneficiary. It also may have the role of an instrument; witness *a-me-li-i-andika barua* 'he has written the letter' vs. *a-li-ili-andik-i-a barua unyoya* 'he has written the/a letter with the/a quill'. In this case, the instrument may become object, or the former object may remain in object position (see the alternative agreement pattern). Furthermore, the additional argument may be a goal; e. g. *a-li-kim-bia* 'he ran (away)' vs. *a-li-wa-kimbi-li-a watoto* 'he ran after the children'. The applicative suffix may be used without any change in the argument structure with an intensifying meaning; some examples: *nuka* 'smell bad' vs. *nuk-i-a* 'smell pleasant', *kosa* 'commit an error' vs. *kos-e-a* 'commit a trivial error', *tuma* 'send' and *tum-i-a* 'use'.

4.6. The *reciprocal derivation* removes the direct object of a verb. The verb is marked by the suffix *na*, and the result is interpreted as a reciprocal form: *Juma a-li-m-piga Hassani* 'Juma beat Hassan', *Juma na Hassani wa-li-pig-an-a* 'Juma and Hassan beat each other'. However, unlike reciprocals in English, we can have "split subjects": *Juma a-li-pigana na Hassani*. – The *reflexive*, on the other hand, does not belong to the voice system, as it is indicated by a special object prefix, not by a suffix: *Juma a-li-u-kata m-kate* 'Juma cut the bread', *Juma a-li-ji-kata* 'Juma cut himself.'

4.7. Besides the voice distinctions discussed so far, there are a few which are not productive anymore in Swahili, but whose traces still are visible in the vocabulary of the language. One of these derivations is the so-called *contactive* form, which expresses intensive contact with an object (cf. *kama* 'squeeze', *kamata* 'take hold of, arrest'). Somewhat more transparent is the *reversive form*: examples are *kunja* 'fold' vs. *kunjua* 'unfold', *fungua* 'close' vs. *fungua* 'open'. Furthermore, there is a so-called *static form*, similar in its syntactic behaviour to the stative (cf. *ficha* 'hide' vs. *fichama* 'be hidden').

4.8. Verbal derivations may *interact* with each other in various ways, that is, one derivation may feed another one. Verbs with up to four derivation suffixes are by no means unusual. In general, the meaning of these complex derivations can be derived from the simple derivation and the order in which they apply. However, not every combination of derivations is possible. The following generalizations seem to hold, not only for Swahili, but for Bantu in general:

4.8.1. There is no derivation after passive (but see 6.2.1., and Alsina 1990 for a case of an applicative with locative meaning after passive in Chichewa).

4.8.2. There is no derivation after the suffix *eklik* marking the potential. However, there are some verbs, mainly used impersonally, where a reciprocal applies after the stative suffix *eklik*. One example is *weza* 'manage', 'be able to' vs. *wez-ek-an-a* 'managable, possible', as in *i-na-wez-ek-an-a* 'it is possible'.

4.8.3. Reciprocals can feed other derivations, e. g. applicative, causative, potential. Examples are *Sam na Juma wa-me-gomb-an-i-a*

*mtoto* 'Sam and Juma quarreled over the child'; *Hassani a-li-fung-an-ish-a Sam na Juma* 'Hassan made Sam and Juma tie each other'; *Mpango huu u-na-pat-an-ik-a* 'this plan is negotiable'. Occasionally, we also find passives of reciprocal verbs. In these cases, it can be assumed that the reciprocal verb form has been reanalyzed to a transitive verb. An example is *vita i-li-pig-an-w-a* 'the war was fought', where *piga* is 'beat' and *pigana* is 'beat each other', 'fight'.

4.8.4. Causatives may feed other derivations, for example reciprocal, potential, and passive (but not statives). Some examples: *Sam na Juma wa-li-furah-ish-an-a* 'Sam and Juma pleased each other (lit. made each other happy)', *Juma a-na-nyw-esh-ek-a pombe* 'Juma can be made drink beer'. Furthermore, causative may feed applicative, as the following example shows: *Zawadi i-li-rudi kwa mtoto* 'the gift went back to the child', *Yusuf a-li-i-rud-ish-a zawadi kwa mtoto* 'Yusuf gave back the gift to the child', and *Yusuf a-li-m-rud-ish-i-a mtoto zawadi* 'Yusuf gave back the child the gift'. There are a few cases where a causative feeds another causative, for example *Sam a-me-mw-o-a Jenny* 'Sam has married Jenny', *Jaji a-me-mw-o-z-a Sam Jenny* 'the judge married Jenny to Sam', and *Rais a-me-mw-o-z-esh-a jaji Sam Jenny* 'the president made the judge marry Jenny to Sam'.

4.8.5. Applicatives may feed some other derivations, for example, reciprocals, potentials, and passives. Examples are *Sam na Rehema wa-li-andik-i-an-a* 'Sam and Rehema wrote to each other', *barua i-na-andik-i-k-a* 'the letter is writeable', and *watoto wa-li-andik-i-w-a barua (na Sam)* 'the children were written a letter by Sam'. There is some variation in the latter case, as some dialects (e. g. Mvita, cf. Barrett-Keach 1980) allow also for the patient NP to become subject, e. g. *barua i-li-andik-i-w-a watoto (na Sam)*. There seem to be a few cases of a causative derivation from an applicative; one example: *Juma a-li-mw-o-a Mariamu* 'Juma married Mariamu', *Juma a-li-wa-o-le-a watu wale* 'Juma married from those people', *waziri a-li-mw-o-l-esh-a Juma watu wale* 'the Minister forced Juma to marry from those people'. Applicative derivations from applicatives are equally rare and probably have to be analyzed as a special case, as they do not lead to additional arguments, and their meaning cannot be predicted in a

regular way; for example, we have *sema* 'speak', *semea* 'speak for', and *semelea* 'sermonize'; or *oga* 'take a shower', *ogea* 'wash with', and *ogelea* 'swim'. However, we find regular cases with two applicatives in other Bantu languages, for example in Haya (cf. Byarushengo e. a. 1977).

4.8.6. Statives may feed other derivations, if they are compatible with intransitives, namely causatives and applicatives. For example, we have *ondo-k-esh-a* 'cause to leave', *ondo-k-e-a* 'leave for'.

4.8.7. Although the reflexive is not part of the suffixal verb derivation system, it may interact with it. For example, it can be argued that it may apply before or after applicative derivation. So the reflexive verb form *-ji-kat-i-a* can mean (i) 'cut oneself with', which is an applicative derivation of *ji-kat-a* 'cut oneself', or (ii) 'cut for oneself', which is a reflexive form of *kat-i-a* 'cut for'.

## 5. Clause Subordination and Coordination

5.1. There are three types of *relative clauses*, an analytic type, and two synthetic types with special relative forms of the verb. All of these types are based on a special pronominal affix, which typically contains the vowel "o".

5.1.1. The analytic type contains a relative pronoun, which is based on the root *amba*, originally 'say', and a suffix containing *o*. One example, an object relative clause, is the following: *watoto amba-o mwalimu a-li-wa-ona* 'the children whom the teacher saw'. The relative pronoun heads the relative clause and agrees with the head noun (in the case at hand, with *o*); in the relative clause, we often find agreement with the relative pronoun (here, *wa*). This agreement is not obligatory in every case, however; cf. the relativization on a nominal complement in *kitabu ambacho mwalimu a-li-wa-onyesha watoto* 'the book which the teacher showed to the children'.

5.1.2. The second type of relative clauses is based on a special relative verb form, which contains an *o*-affix after the tense affix, and may be followed by an object prefix. This type is restricted to verbs in a small number of tenses; namely the ones marked by *na* (present), *li* (past) and *ta* (future; in this case, the

future prefix has the allomorphic variant *taka*). Also, it occurs with the negation infix *si*. An example *watoto a-li-o-wa-ona mwalimu* 'the children whom the teacher saw'; note that both *o* and *wa* refer to the children. Our second example turns out as *kitabu mwalimu a-li-cho-wa-onyesha watoto* 'the book which the teacher showed to the children'; note that in this case, the relative prefix *cho* differs from both subject and object prefix. This last example also shows that the word containing the relative morpheme need not be adjacent to the head noun, although there is a tendency to that order.

5.1.3. Finally, there is a second type of a synthetic relative form in which the verb lacks a tense affix and the *o*-pronoun is enclitic: an example is *watoto a-wa-ona-o mwalimu* 'the children the teacher sees'. The syntactic possibilities are more restricted here; for example, we cannot formulate a sentence corresponding to our second example.

Otherwise, the three relative clause forms have a similar distribution. For example, every one of them can function as an attributive or a restrictive relative clause. Also, every type can occur as a free relative clause; witness *wamba-o wanaimba wa-na-furahi, wa-na-o-imba wanafurahi* and *wa-imba-o wanafurahi* '(they) who sing are happy. (See 8.3. for further discussion of relative clauses).

5.1.4. Relative forms occur quite frequently because a common way to mark focus are cleft sentences that involve relative clauses. Cleft sentences consist of the copula *ndi-* (negative *si-*), which agrees with the focused constituent by means of an *o*-pronoun, followed by the constituent in focus, and a low-pitched relative clause. Some examples:

- (8a) *Ndi-lo dirisha a-li-lo-vunja mtoto yule.*  
'It is the window that the child broke'  
(8b) *Ndi-ye mtoto yule a-li-ye-vunja dirisha.*  
'It is the child who broke the window'  
(8c) *Ndi-po jana a-li-po-vunja mtoto yule dirisha.*  
'It was yesterday that the child broke the window'

Swahili makes abundant use of this cleft construction. It may be simplified by using a non-relative verb form and the copula *ndi-* or simply *ni*; for example, (8a) in this variant would become *NdilolNi dirisha a-li-(li)-vunja mtoto yule*.

5.2. Let us now turn to embedded clauses which are governed by verbs. There are three types of *sentential complements*: tensed indicative clauses, subjunctive clauses, and infinitives.

5.2.1. Indicative clauses are typically introduced by a complementizer *kwamba* (historically an infinitive of the verb *-amba* 'say') or *kuwa* (the infinitive of 'be'). Similar to English, the complementizer may be dropped if the embedded sentence immediately follows the governing verb.

- (9a) Mariamu a-li-ona kwamba/kuwa/∅ watoto wa-li-kwenda shuleni.  
'Mariamu saw that the children went to school'
- (9b) Mariamu a-li-mw-ambia Juma kwamba/kuwa watoto wa-ta-kwenda shuleni.  
'Mariamu told Juma that the children will go to school'

5.2.2. The following sentence is an example of an embedded subjunctive:

- (10) Juma a-li-taka Mariamu a-ki-som-e kitabu.  
'Juma wanted that Mariam should read the book'

Subjunctives behave similar as in many other languages: They may occur under predicates denoting wishes (like *taka* 'want', *omba* 'beg', *ambia* 'tell (to do something)'), under negation, and under modals like *ilibidi* 'it is necessary'. They may occur as root clauses in an optative or adhortative meaning, cf. *Tusome!* 'Let's read!'. (There is, in addition, an imperative, consisting of the verb root only in the singular and the root with suffix *-ni* in the plural). Subjunctive clauses typically have no overt subject, and the subject prefix agrees with some NP in the embedding clause, as in *Juma a-li-wa-ambia watoto wa-some kitabu* 'John told the children that they should read the book', but this is not a syntactic requirement, as example (10) shows. It should be noted that there are some noun-like modals borrowed from Arabic which govern the subjunctive and which are not verbal; examples are *afadhali* (suggestion), *tafadhali* (request), *lazima*, *sharti* (necessity).

5.2.3. The last type of embedded clauses, infinitives, has neither overt subjects nor subject agreement (the infinitive marker, *ku*, is

sometimes treated as a noun class prefix and is probably related to the locative *ku*-class; other Bantu languages may form the infinitive with different class markers, cf. Meeusen 1967). We find subject-controlled and object-controlled infinitive constructions:

- (11a) Juma a-li-jaribu ku-wa-angalia watoto.  
'Juma tried to take care of the children'
- (11b) Juma a-li-mw-ambia Mariamu ku-wa-angalia watoto.  
'Juma told Mariamu to take care of the children'

As we have seen, some verbs, like *ambia* 'tell', may govern the subjunctive or the infinitive. Others, like *jaribu* 'try', are restricted to the infinitive.

5.2.4. Sentential complements neither show object agreement nor undergo passivization. Furthermore, they cannot be topicalized; cf. *\*kwamba watoto walikwenda shuleni, Juma aliona* 'That the children went to school, John saw'. Infinitives, however, may be the subject of a copula sentence, as in [*kupata chakula msituni*] *ni kigumu sana* 'to get food in the wood is very difficult'

5.3. In addition to embedded clauses which are governed by a verb there is a wide variety of *adverbial clauses*, that is, embedded clauses in the function of an adjunct.

5.3.1. One type of adverbial clauses is introduced by a subjunction, followed by an indicative, subjunctive, or infinitive clause. Some examples with the subjunction *ili* 'in order to', which might govern a subjunctive or an infinitive, and *kwa vile* 'because', which governs the indicative:

- (12a) Tu-li-kutana ili tu-anzishe chama.  
(12b) Tu-li-kutana ili ku-anzisha chama.  
'We met in order to found a party'
- (12c) Tu-li-kutana kwa vile tu-li-taka ku-anzisha chama.  
'We met because we wanted to found a party'

5.3.2. A second type consists of clauses which are formally relative clauses, headed by a subjunction. There are two subcases: Temporal clauses, which are headed by *wakati* 'time' and contain the relative prefix *po*, and manner clauses, which are headed by *jinsi* 'man-

ner', 'kind' or *kama* 'as', and contain the relative prefix *vyo*. Note that the relative prefixes do not agree formally with their heads, analyzed as nouns; *po* is a locative prefix (and is applied to temporal location here), and *vyo* is the prefix of class 8, which is used to form adverbials from adjective stems (cf. *vi-zuri* 'well'). Two examples:

- (13a) Wakati watoto wa-li-po-kwenda shuleni, Juma a-li-lala.  
'When the children went to school, Juma slept.'
- (13b) Kama Juma a-li-vyo-eleza, watoto walikwenda shuleni.  
'As Juma explained, the children went to school.'

5.3.3. A third type of adverbial clauses is marked by a special affix at the position of the "tense" marker (possibly in addition with a subjunction, like *kama*). One example is the affix *ki*, which is used for clauses specifying the situational background of the main clause (see Hopper 1979 for that interpretation); it may specify an event which is going on simultaneously, or it may specify the conditions in a "when"-clause:

- (14a) Juma a-li-pika chakula a-ki-wa-sikia watoto.  
'Juma cooked food when he heard the children.'
- (14b) Watoto wa-ki-rudi nyumbani Juma a-li-wa-pikeni chakula.  
'When the children return home, Juma cooks food for them.'

5.3.4. Other examples are the affixes *nga* and *japo*, which mark factive and hypothetical concessive clauses, roughly to be translated using 'although', or 'even if'. Furthermore, the two conditional affixes *nge* and *ngali* (hypothetical) belong to that type. Both protasis and apodosis have to be marked with these affixes:

- (15) Juma a-ngali-pika chakula, watoto wa-ngali-rudi nyumbani.  
'If Juma had cooked food, the children would have returned home.'

5.3.5. Some of the subjunctions are based on the verb *-wa* 'be' with a dummy subject prefix *i-*, such as *i-ki-wa* 'when', *i-nga-wa* 'although', *i-si-po-kuwa* 'except'. Others are of Arabic origin, such as *ili* 'in order that', (*kwa*) *sababu* 'because', *ila* 'except if'. In general, it

seems that the use of subjunctions is of relatively recent origin in Bantu.

5.4. Let us finally look at sentence *conjunctions*. There are conjunctions which are rather independent from the categories they conjoin, for example *na* 'and', *au* 'or' and *wala* 'and not' (after a negated first conjunct), and they can be used as NP conjunctions, verb conjunctions, and sentence conjunctions. However, the use of *na* as sentence conjunction is definitely not idiomatic. Also, note that *au* and *wala* are of Arabic origin.

One very characteristic way of conjoining sentences in narratives, with the additional meaning of temporal succession, is the use of verbs with the "tense" affix *ka*. A typical paragraph in a narrative starts with a sentence whose verb has some definite time affix, such as *li* (past), followed by clauses marked by *ka*, which can be rendered by 'and then'; cf. *ni-li-kuja, ni-ka-ona, ni-ka-shinda* 'veni, vidi, vici'. The *ka*-marker is special, however, as it may occur with the subjunctive in purposive clauses (cf. *Nitakwenda sokoni ni-ka-nunue ndizi* 'I will go to the market and (I) buy some bananas'). Furthermore, it can occur without a subject prefix, to give emphasis; cf. *Ka-sema nani* 'Who spoke?'. Hopper (1979) and Contini-Morava (1989) analyze *ka* as a foreground marker, in opposition to the background marker *ki* mentioned in (5.3.3.).

Another conjunction, *tena*, is used to conjoin adjectives (e. g. *maembe haya mazuri tena mabivu* 'those mangos are fine and ripe'). When *na* is used, the second noun typically is an abstract noun; in our case, *mazuri na ubivu* 'fine and (with) ripeness'. *Tena* is also a sentence-initial conjunction 'then', and an adverb 'again'. I will discuss a means to conjoin VPs in (8.1.6.).

## 6. A Closer Look at Agreement

6.1. Subject-agreement and object-agreement are not quite as simple as presented in section 3. I start by pointing out some differences between Bantu languages in their object agreement (and possibly also differences in dialects of Swahili):

6.1.1. Some languages closely related to Swahili can have more than one object prefix (e. g. Chimwini, cf. Abasheik 1980, Kinyarwanda, cf. Kimeny 1980, and Haya, cf. Byarushengo e. a. 1977; see also Wald 1979). For

example, in Haya we find verbs with up to three object clitics, as in *Kat' á-ka-ki-ga-mú-siigisa* 'Kato smeared it (*mu*) on him (*ga*) with it (*ki*)'. Interestingly, the order of the object clitics is the mirror-image of the preferred order of the corresponding full NPs; this might reflect an older stage with a basic Object-Verb word order (cf. Krifka 1983).

6.1.2. Not all object agreement in Bantu languages is the same. Bresnan/Mchombo (1987) show that object agreement in Chichewa is not syntactical agreement of the verb with its object, but anaphoric agreement between an incorporated object pronoun and a topical noun phrase. Subject agreement, on the other hand, can be either syntactic agreement or anaphoric agreement. For example, they show, using evidence from tone sandhi phenomena, that a string consisting of a non-agreeing verb and an object NP forms a constituent, whereas a string consisting of an agreeing verb and an (purported) object NP does not. Also, they show that the word order is Verb-Object with non-agreeing verbs, but can be any order with agreeing verbs (as the purported O is in fact a free NP).

Swahili is different in that respect. First, there is no indication for the type of difference found in Chichewa. Second, as agreement with object NPs denoting human beings is virtually obligatory, and there is no reason for claiming that these object NPs aren't true objects, we should assume syntactic verb-object agreement.

6.1.3. A typology of object agreement in Bantu may look as follows: In general, object markers may express anaphoric agreement. Languages like Chichewa restrict their use of object markers to anaphoric agreement. Languages of this type vary in one respect, insofar as some of them, like Chichewa, allow object pronouns in object relative clauses like 'the man that I (him-)saw', whereas others, like Chibemba, ban it (cf. Bresnan/Mchombo 1987, Wald 1979). Other languages show syntactic agreement in addition to anaphoric agreement. The use of syntactic agreement may differ between languages; in Zulu, for example, object agreement seems to be a sign of definiteness of the object.

For Swahili, a good generalization is that objects denoting human beings show agreement far more frequently than others, and definite NPs show agreement more frequently than indefinite NPs, and indefinite

referential NPs in turn more frequently than nonreferential NPs. According to a text survey by Wald (1979), object NPs denoting human beings agreed to 90% if they were definite, 42% if indefinite, and 10% if nonreferential; if they denoted non-human entities, the figures were 11%, 3% and 0%, respectively. According to Alemán (1987), specificity may also play a role; she contrasts sentences like *Na-m-tafuta mtu ku-ni-saidia* 'I'm looking for someone (specific) to help me' vs. *Na-tafuta mtu ku-ni-saidia* 'I'm looking for anyone that can help me', or *Si-ku-mw-ona mtu yo yote* 'I didn't see anyone of them' vs. *Si-ku-ona mtu yo yote* 'I didn't see anyone at all'.

It seems plausible that object agreement originated in anaphoric agreement (cf. Givón 1976). A pattern like *a-li-wa-ona, watoto* 'he saw them, the children', with the topical NP *watoto* and anaphoric agreement, evolved towards *a-li-wa-ona watoto* 'he saw the children', where anaphoric agreement is grammaticalized to syntactic agreement. As topical NPs typically are definite and denote human beings, this bias became grammaticalized as well.

6.1.4. Wald (1979), following Ashton (1944), suggests that an additional function of syntactic object agreement, at least with non-human objects, might be to "draw attention" to the object. Hence object agreement would be a means to *focus* the object. Wald tries to explain that by saying that syntactic object agreement with non-human objects is so rare that its very occurrence **MUST** draw attention to the object. By that, object agreement would have developed from a reference to *topical* entities to a *focus* marker(!).

Maw (1976) also showed that object agreement is used in more circumstances than earlier descriptions had envisaged. She found that the verb may agree with locative adjuncts, temporal adjuncts and manner adjuncts:

- (16a) *A-li-mu-ulia busta-ni wageni.*  
'He killed the stranger *in the garden*.'
- (16b) *A-li-mu-isha mwaka jana kazi yake.*  
'He finished his work *last year*.'
- (16c) *A-li-vi-onelea kwa uchungu sana kifo cha dada yake.*  
'She felt her sister's death *very bitterly*.'

The locative adjunct (16a) and the temporal adjunct (16b) agree using one of the locative prefixes (here *mu* 'inside'), and the manner adjunct agrees by the class prefix 8 (we have

already seen with free relative clauses that the locative prefixes can have a temporal meaning and class 8 can have a manner-related meaning; cf. (13a/b)). In all cases, the agreement focuses the agreeing adjuncts; for example, (16a) would be appropriate as an response to 'Where was it that he killed them?', (b) to 'When was it that he finished his work?', and (c) to 'how did she take her sister's death?'

6.1.5. To sum up, "object" agreement in Swahili is a rather complex matter: We have to distinguish between anaphoric agreement and syntactic agreement, and with syntactic agreement we must in turn distinguish between two cases: object NPs denoting human beings nearly always agree, and other constituents (objects or adjuncts) may agree if the constituent is in focus.

6.2. Now let's look at *subject agreement*. It turns out to be governed by rules at least as complicated, which becomes particularly clear when we look at so-called *inversions*.

6.2.1. Ashton (1944) pointed out that locative adverbials may trigger subject agreement, which she called *locative inversion*:

- (17a) Mwituni m-me-lala wa-nyama.  
'In the wood animals are asleep'  
(17b) Bonde-ni ku-na-lima wanawake.  
'There in the valley women cultivate'  
(17c) Hapa pa-me-kufa simba.  
'On this spot there has died a lion.'

According to Khamisi (1985), the verb may be marked by the passive suffix *w* in these cases; cf. *dukani pa-me-simam-(w)-a watu* 'in the shop there are people standing'. In contrast to real passives, these passives of intransitives do not have a normal agent phrase marked by *na*. Also, locative inversion may apply after passive, contrary to all derivations; cf. *mtoto a-li-vu-li-w-a nguo na Sam nyumba-ni* 'the child was undressed by Sam' and *nyumba-ni m-li-vu-li-w-a mtoto nguo na Sam* 'in the house a child was undressed by Sam'.

6.2.2. Maw (1976) showed that we can also have *temporal* subjects. Note that the subjects cannot occur with the locative ending *-ni*, although the subject prefixes are locative:

- (18a) Asubuhi m-li-nyesha mvua nyingi.

'In the morning it rained a lot', 'It rained all morning'

- (18b) Mwaka jana m-li-fika wageni.  
'Last year foreigners arrived'

6.2.3. Perhaps most striking are the facts discussed by Whiteley/Mganga (1969). They show that many verbs are quite unstable in their subject selection. In the following example, the verb *pika* 'cook' occurs with the NP denoting the cooked object as a subject:

- (19) Chakula ki-me-pika mgeni wetu.  
lit. 'The food has cooked our guest',  
gloss: 'the food (which we have been praising ...) has, as a matter of fact, been cooked by our guest'

For examples of this type, the semantic relationship of the NPs to the verb is clear by the animateness of one NP; if both NPs are animate, only the normal interpretation is possible (for example, the meaning of *yule kijana a-me-wa-piga wa-toto wangu* 'that youngster has hit my kids' cannot be rendered by *watoto wangu wa-me-piga yule kijana*). Although animateness of one NP is an important condition (cf. Barrett-Keach 1980), in some cases we have inversion although both NPs are inanimate. In this case, other semantic properties of the arguments clarify the semantic role assignment: cf. *nchi i-me-enea maji* 'the country is covered with water' and *maji ya-me-enea nchi* 'the water covers the country', or *bahari hii i-me-zama meli* 'this sea has sunk ships'. Another restriction is that the demoted object, though not an object, must be expressed explicitly: cf. \**chakula ki-me-pika*.

6.2.4. It should be noted that there is a tendency, at least with adverbial subjects, that the "logical" subject may not be a proper name or a pronoun (cf. Whiteley 1972): for example, *nyumba-ni ku-li-fika mtoto/\*Juma* 'to-the-house came some child/\*Juma'. In most examples of inversions, the "logical" subject is, indeed, indefinite.

6.2.5. These facts can be captured by assuming that what we have called subject agreement is in fact *topic agreement*, that is, agreement with a constituent in topic position that need not be the logical subject. Often, the logical subject will be the topic: but if this is not the case, it may be demoted from subject position without any marking at the verb. This, however, is possible only if the semantic

roles are recoverable by world-knowledge inference.

6.2.6. There is one peculiar construction which shows that the verb can agree either with the subject or with the topic (cf. Maw 1970):

- (20) Mtoto yule mambo yake a/ya-me-ni-choka.  
 CL1.Child this CL6.affairs his CL1/  
 CL6-TNS-1SG-make-tired.

Maw suggests quite similar glosses for each case. A plausible analysis is that *mtoto yule* in fact is the topic of the sentence, and that the best gloss is 'As for the child, his affairs make me tired'. The verb may either agree with the main topic *mtoto yule* or with the logical subject, *mambo yake*. Note that, when we make the reasonable assumption that the two NPs occupy different syntactic positions, syntactic agreement is not obviously triggered by syntactic position.

6.2.7. Cases of variable agreement can be treated in at least two different ways: They might be considered as a case of syntactic movement, similar to passive, with the difference that the verb is not marked and the former subject does not end up in a PP, but as a nominal complement. Alternatively, we might assume that the mapping from semantic arguments to the syntactic arguments is not as rigid as in languages like English. Swahili might be closer to a topic-prominent language in the sense of Li/Thompson (1975). I do not intend to go into this problem here, but I will contribute some more observations on argument selection.

## 7. A Closer Look at Grammatical Function Assignment

In the last section, we saw that "subject" and "object" agreement is related to topic and focus marking. But it is also related to the meaning of the verb, or, to be more precise, to the thematic roles of the verb, which give us the "default" subject and object, as it were.

7.1. First, let us have a look at the *selection of the subject*. In general, if a verb has an agent argument, this will become the subject, cf. *Juma a-li-funga mlango* 'Juma closed the door'. If no agent is present, an *instrument*

may take the subject position, cf. *Upepo u-li-funga mlango* 'the wind closed the door'. In this case, the instrument probably has typical agent features so that it qualifies, in absence of a real agent, as the most agent-like participant.

7.1.1. For some verbs there is a *middle construction* where the agent is suppressed and the patient surfaces as subject; cf. *Mlango u-me-funga* 'The door closed'. Whiteley (1972) remarks that the middle is apparently restricted to perfective and future, and that the potentiality of the door for closing properly is stressed. So the middle conveys the meaning that it is some property of the non-agent subject which accounts for the fact expressed by the sentence.

7.1.2. The same seems to be true for semantically triggered *inversions*, which are similar to middles, but for which the "original" subject is still present (cf. 6.2.3.). For example, Whiteley/Mganga (1969) note that in addition to the regular *mtoto huyu a-me-li-ruka jiwe* 'the child jumped onto a stone', we have *jiwe li-me-ruka mtoto huyu*, 'the stone is small enough for the child to have jumped on it', where *mtoto huyu* 'the child' is an agent. Of course, inversions abide by additional restrictions, such as recoverability of theta-roles. Inversion, in general, may apply after passive; cf. *watoto wa-li-som-e-w-a kitabu* 'the children were read a book' vs. *kitabu ki-li-som-e-w-a watoto* 'the book was read to children'.

Whiteley (1972) sees as the common property of inversions that "one can infer from the sentence some quality of NP<sup>1</sup> [the NP agreeing as subject] which is responsible for such an attribute". In fact, this *responsibility* feature is present in the instrument and middle construction as well, were it suggested that the instrument, or the theme, are responsible for the verbal predicate to be applicable. Also, it covers the simple agent case; in *Juma a-li-m-piga mtoto* 'Juma beat the child', Juma is responsible for the beating. Consequently, we can assume that the NP whose semantic role involves responsibility becomes the subject. There are restrictions, however: First, as we have seen in the last section, there is a competing subject principle, related to topicality. Second, the "responsibility" property does not apply to the stimulus in experiencer-stimulus-verbs, such as in *Juma a-li-wa-ona watoto* 'Juma saw the children', as it is the

experiencer (who is not responsible) that becomes subject.

7.2. As for *object selection*, we have to account for the fact that in a transitive verb with agent and theme, the theme will become the (direct) object, whereas in a ditransitive verb with agent, theme and “dative”, the “dative” will be the object (cf. 3.8.). Note that this cannot simply be traced back to applicative voice, as it holds even with simple, non-applicative verbs, such as *pa* ‘give’. With ditransitives, recipient and benefactives are not the only semantic role for objects; for example, in *Juma a-na-m-la Ali pesa* ‘Juma is scrounging (lit. eating) money from Ali’, the object *Ali* is neither recipient nor beneficiary. It is difficult to characterize the common core of the semantic role of these objects; maybe something like ‘indirectly participating in the event’ is general enough. A few verbs vary in their object selection; for example, we have both *a-li-u-paka ukuta rangi* ‘he smeared the wall (with) paint’ and *a-li-i-paka rangi ukuta* ‘he smeared the paint (on) the wall’.

7.3. With many transitive verbs, the object may be dropped, yielding an indefinite interpretation; cf. *Juma a-na-kula* ‘Juma is eating’. With other verbs, we get a definite interpretation; cf. *Juma a-me-peleka* ‘Juma has sent (it)’. Verbs with indefinite interpretation can be said to have an “immanent” object (cf. Whiteley 1972). According to Barrett-Keach (1980), only inanimate objects can be dropped, which shows the important role animacy has in the syntax of Swahili.

7.4. Let us now turn to *nominal complement selection*. We have seen that NPs may end up as complements because they are demoted from subject or object status. However, there are some cases which can be considered as free complement creation.

7.4.1. According to Khamisi (1985), many verbs with an agent role may be extended to include an instrument role as well, without the prepositional marking *kwa*. One example is *Juma a-li-m-choma nguruwe mkuki* ‘Juma stabbed the pig (with a) spear’; another example, which requires a wider notion of instrument, *a-li-kufa ndui* ‘s/he died (of) smallpox’. This fits nicely to the assumption of Marantz (1984) and Baker (1988a, b) that instruments get their semantic role by the verb directly, and not by a preposition.

7.4.2. Locative arguments typically are marked by a locative noun (a place name or a noun with suffix *ni*). The specific type of locativity is determined by the verb; cf. *a-li-kwenda shule-ni* ‘he went TO school’, *a-li-kaa mji-ni* ‘he lived IN the town’, and *a-li-hama kijiji-ni* ‘he moved FROM the village’. Some verbs are ambiguous; for example, *ruka* ‘jump’, may have a goal or a source interpretation for its locative complement. Sometimes a non-locative noun may be used, as in *a-li-hama kijiji*. According to Driever (1976), this is possible with source-locatives (in the Mvita dialect); according to Whiteley (1972), this might be done if the NP refers to a previously mentioned entity.

7.5. There is an interesting construction which affects both subject and object selection:

- (21a) Mtoto a-me-fura mkono.  
CL1-child CL1-PERF-swell arm  
‘the child has the arm swollen’
- (21b) Wa-dudu wa-li-mw-uma mtoto  
mkono.  
CL2-insect CL2-PAST-CL1-bite child  
arm  
‘the insects bit the child in the arm’

In some analyses (cf. Harries 1970/71, Hawkins 1979, Hyman 1977 for Haya, see also Hinnebusch/Kirsner 1980), this construction was treated as a case of *possessor raising* applicable in the case of inalienable possession. (21a) is derived from *mkono wa mtoto u-me-fura* ‘the arm of the child is swollen’ by movement of *mtoto* into subject position, and (21b) from *wa-dudu wa-li-uma mkono wa mtoto* by movement of *mtoto* into object position. In both cases, the possessed *mkono* is demoted to complement status. According to Baker (1988a), *possessor raising* consists of the incorporation of the possessor into the verb; however, this does not explain why the possessor clearly has syntactic object status (with agreement), and why it might be syntactically complex (note that incorporation, as  $X^0$ -movement, should affect only lexical heads).

Scotton (1981) proposed that “*possessor raising*” has nothing to do with either possession or raising. First, there are many cases where the semantic trigger of the construction is not inalienable possession. For example, in *Juma a-li-m-shika Ali shati* ‘Juma grasped Ali at the shirt’, *Ali* and *shati* do not stand in the relation of inalienable posses-

sion. Second, the complement can be analyzed similarly to an adverbial, namely an adverbial that specifies the *extent* to which the described event or state holds; a similar treatment was indicated by Whiteley (1972) who called this complement the "NP of limitation". So a sentence like *Juma a-li-m-shika Ali shati* says that Juma grasped Ali, and limits this action to the shirt (a good paraphrase might be: "Juma grasped Ali shirtwise"); similarly, (21a) says that the child is swollen, and limits that state to the arm. Analyzed in this fashion, sentences like the following ones fall under that pattern as well: *Wa-li-jenga nyumba vyumba vivili* 'they built the house two rooms (implying that no more are to be built)', or *Juma a-li-m-piga mtoto bakora tatu* 'Juma beat the child three canes (to the extent of three strokes of a cane)', or the more familiar-looking *Juma a-li-tembea maili tatu* 'Juma walked three miles'. Note that the limitation complement will express the limitation either by referring to parts of the theme object, or, as in the last examples, by restricting the verbal predicate directly by some measure phrase.

7.6. In this section, I have suggested general principles of grammatical function assignments for simple verbs. An obvious question is how these principles relate to verbal derivations, as discussed in section 4.

At the time of this writing, the nature of these verbal derivations is perhaps the most debated problem in Bantu syntax. There are two quite different types of theories: Verbal derivations have been described as morphological consequences of basically syntactic rules in the GB framework or its predecessors (cf. Vitale 1981 for Swahili, Baker 1988a), or as lexical derivations with subsequent syntactic effects in frameworks like Case Grammar or Relational Grammar (cf. Driever 1976, Khamisi 1985; see also Kimenyi 1980 for Kinyarwanda, Bresnan/Kanerva 1989 and Alsina 1990 for Chichewa). Let us have a short look at current versions of these theory types.

According to Baker (1988a), the voice system is based on syntactic movement of lexical heads ( $X^0$ ) to other heads, leading to incorporation. For example, in causatives the verb of a clause embedded by a predicate CAUSE is raised to that predicate, leaving a trace (example: *CAUSE* [<sub>s</sub> *horse drink water*] → *drink*-CAUSE [<sub>s</sub> *horse t<sub>i</sub> water*]). This explains the origin of causative verb forms, the fact that the original subject (*horse*) becomes the ob-

ject (in Swahili, the causative verb allows for case-marking the adjacent NP *horse* as an object), and certain locality phenomena. Applicatives, on the other hand, consist in the movement and incorporation of a preposition (example: *cook* [*food*] [*FOR children*] → *cook-FOR<sub>i</sub>* [*t<sub>i</sub> children*] [*food*]). As *children* gets its case from the preposition, which is now part of the complex verb, it is consequently promoted to object status. – In a framework like this one, general syntactic principles can be applied to explain phenomena of verbal derivations and their interactions. Also, the fact that syntactical changes associated with morphological operations occur in the same sequence as these morphological operations (Baker's "mirror principle") gets a natural explanation.

According to the work of Bresnan, Mchombo and Alsina, verbal derivations can be described by morpholexical operations concerning the semantic arguments of a verb, and some general principles of grammatical function assignment. In the case of causatives, two new arguments are added to the arguments of the basic verb, an agent and a patient, and the patient is referentially identified with that argument of the basic verb that is highest on a scale of arguments (where agent > benefactive > goal > instrument > patient > locative). An example: *fall*(ag, pt) → *fall-CAUS*(ag, pt (ag, pt)), where underlying expresses referential identification (the patient of CAUSE is the agent of the embedded proposition). Independent rules of GF assignment apply to that structure. Basically, GF's are traced back to features [ $\pm$ o] for "objective", and [ $\pm$ r], for "thematically restricted", where subject is [ $-r$ ,  $-o$ ], direct object is [ $-r$ ,  $+o$ ], and oblique (complement) is [ $+r$ ,  $-o$ ]. These features are assigned to thematic roles by specific rules and restrictions like "assign [ $+o$ ] or [ $-r$ ] to patients", "assign [ $-o$ ] to all non-patients", "do not assign [ $+o$ ] to arguments higher than instrumental", or "do not assign [ $-r$ ] more than once". In the example at hand, the arguments of *fall-CAUSE*(ag, pt, (ag, pt)) would get the following features: ag gets [ $-o$ ], as it is a non-patient; pt-ag gets [ $-r$ ], as it contains a patient but cannot get [ $+o$ ] because it also contains an agent; finally pt gets [ $+o$ ], as it is a patient and [ $-r$ ] has been assigned already. In a second step, the feature assignment is completed by rules such as: "assign [ $-r$ ] to the highest argument if it has feature [ $-o$ ], otherwise assign [ $-o$ ] to the argument with

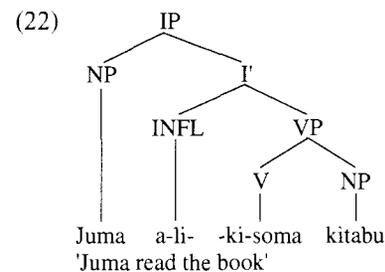
feature  $[-r]$ ", and "assign  $[+o]$  and  $[+r]$  where possible". In the case at hand, we end up with the three arguments having the features  $[-r, -o]$ ,  $[-r, +o]$  and  $[+r, +o]$  respectively, which is spelled out as subject, direct object, and complement. Similar rules allow for the derivation of applicatives, passives, statives, and reciprocals. And the feature assignment rules also determine GF-selection with simple verbs – for example, the two arguments of *hit*(ag, pat) will end up with the features  $[-r, -o]$  and  $[-r, +o]$ .

Although I have my reservations about the specific lexical theory sketched above (it might simply show how much one can "explain", given enough features, feature rules, and ingenuity), I think that there are good arguments for an analysis of this type. One is that the result of verbal derivations often is so idiosyncratic that a syntactic derivation is quite unlikely (e. g. the intensive meaning of causatives, as in *nya* 'rain' – *ny-esh-a* 'rain hard'). Another argument (cf. Alsina 1990) is that truly morphological operations, like nominalizations, may occur after verbal derivations (cf. *pend-w-a* 'love-PASS', *m-pend-w-a* 'friend'; *fa* 'die', *f-ish-a* 'kill', *m-f-ish-a* 'murderer'; *kema* 'shout', *kem-e-a* 'to rebuke', *m-kem-e-o* 'a rebuke'). Furthermore, the syntactic approach does not explain the similarity between the GF-assignment of simple verbs and derived verbs. For example, applicatives that introduce benefactives create verbs in which the benefactive is the direct object; but the same is true with basic verbs that come with a benefactive object, such as *pa* 'give'. According to the syntactic approach, this is a pure coincidence. Baker (1988a) tries to motivate it by assuming that verbs like *pa* actually are applicative as well; however, there is no independent motivation for that, and the fact that *pa* can have a regular applicative (cf. 4.5.) which is not possible with other applicative verbs in Swahili, argues against this hypothesis. Also, some of the generalizations for which Baker gave a theoretical explanation proved to be wrong, for example that there are no causatives after applicatives (cf. 4.8.5.), or that there are no applicatives after passives (cf. Alsina 1990 on Chichewa). As for the mirror principle, it has been shown (Alsina 1990) that a lexical approach can explain the correspondence between morphological structure and syntactic structure equally well, as soon as the scope of morphological affixes can be expressed.

## 8. Evidence for Clausal Phrase Structure

In this section, I will discuss some phenomena that argue for the assumption of specific syntactic structures, especially with respect to the IP and the CP (cf. Chomsky 1986).

8.1. There is interesting morphological evidence for an I (INFL) node as a part of the complex verb that consists of the subject and the tense prefix, but excludes the object prefix and the finite verb. This structure can be exemplified as follows (alternatively, one might assume that V is moved to I):



8.1.1. Drawing mainly on the distribution of referential affixes based on "o", Barrett-Keach (1986) arrived at an interesting argument for assuming an INFL node. First, she observes that the *o*-affix typically occurs word-finally, for example in the relative pronoun (*amba-o*), in the simple synthetic relative form (*wa-imba-o* 'who sing'), as an object prefix in possessive predicates (cf. *mwalimu ana-o watoto* 'the teacher has children'), or in morphological contractions like *na-o* 'and they'. Consequently, she argues that the *o*-affix is a constituent-final allomorph of the pronominal affix. But as we have seen in section (5.1.2.), the *o*-affix also seems to occur word-internally with synthetic relatives like *wa-li-o-mw-andikia* '(they) who wrote him', which seems to be an exception. However, under the assumption that the subject prefix and the "tense" prefix form a constituent, INFL, the *o*-affix simply could be analyzed as a clitic to that constituent:  $[_{INFL}wa-li-o]$   $[_{VP}mw-andika]$ . (Note: This analysis of *o*-affixes as constituent-final allomorphs faces a problem, as we have both forms with deictics, as in *hi-li* and *hi-lo*; cf. section 2.3. However, both deictic forms arguably cannot be analyzed as morphological complex anymore, due to morphological idiosyncrasies like the

choice of the vowel after *h* and the form *huyo* instead of the regular *h-ye*).

8.1.2. Barrett-Keach has a second argument for INFL, which relates facts about word accent to syntax and morphology. Swahili has stress on the penultimate syllable. In compositions, the stress of the first word becomes secondary, cf. *wafànya kàzi* 'workers'. Now, with finite verbs containing a tense prefix, we also find this secondary penultimate stress if we assume that the subject prefix, the "tense" prefix, and, if present, the relative prefix form a constituent. Some examples: [*ni-na*] [*ku-pènda*] 'I love you', [*ni-me-kwishà*] [*andika*] 'I have already written', [*wa-nà-o*] [*m-pènda*] '(they) who love him'.

8.1.3. An independent argument for an internal word boundary in finite verbs is due to Brandon (1975). He observes that words have typically two or more syllables, arguably due to the penultimate stress rule, and that morphological rules ensure that. For example, whereas adjectives (and nouns) in class 5 do not normally show agreement, monosyllabic adjectives (and nouns) have retained the prefix *ji* (cf. *duka kubwa* 'big shop', *duka jipya* 'new shop'). Now, this "bisyllabic word constraint" can explain an interesting fact about Swahili morphology (cf. Ashton 1944, 142f), namely that monosyllabic verb roots such as *la* 'eat', *nywa* 'drink', *ja* 'come', *fa* 'die' occur with the infinitive prefix in many tenses. For example, instead of \**ni-na-la* 'I'm eating', we have *ni-na-ku-la*. We can assume that there is a word boundary between *ni-na* and *la*, that *la* does not satisfy the bisyllabic word constraint, and hence has to be expanded, which is done by the infinitive prefix as in [*ni-na*] [*ku-la*]. Now, the interesting thing is that in case we have an object prefix, the infinitive prefix is not used; viz. *ni-na-ya-la mayai* 'I'm eating the eggs'. This can be explained by the fact that the object prefix and the verb stem form a word that already meets the bisyllabic word constraint, as in [*ni-na*] [*ya-la*]. Again, we have to assume that the major boundary is after the tense prefix.

There are, however, two residual problems with this analysis: First, there are also bisyllabic verb roots which need a dummy prefix *ku*, namely *enda* 'go', *isha* 'finish' and others in some dialects; note that all these verbs have an initial vowel. Second, the dummy *ku* is used only with certain tenses. For example,

it is not used with the *ki* tense; cf. *ni-ki-la* 'when I eat'.

8.1.4. Myers (1987) showed that Shona has the same internal verb structure as proposed for Swahili, using evidence from tone sandhi phenomena (Meeussen's Rule, which says that a H(igh) lowers an immediately following H, does apply between words and between word-internal INFL and VP, but not within INFL or VP). He also showed that Meeussen's rule does not apply within verbs with a subjunctive or participial INFL. This distinction between two kinds of INFL is reminiscent of the two kinds of temporal prefixes in Swahili that do or do not require *ku* with monosyllabic verb stems. Myers argues for the [INFL VP] analysis for both cases; however, he distinguishes between two different levels of morphological combinations, where Meeussen's Rule affects only the higher-level combination. Similarly, we can assume that Swahili *ni-na-ku-la* and *ni-ki-la* differ in the morphological level at which the INFL's *ni-na* and *ni-ki* combine with the VP.

8.1.5. Myers cites evidence that the [INFL VP] structure is indeed very common in Bantu and may be inherited from the proto-language. It might be a reflex of the syntactical origin of the morphological structure of the verb, which arguable goes back to an auxiliary + VP – construction (cf. Krifka 1983). For example, many temporal prefixes are related to verb stems with an original meaning that is apt for a grammaticalization as an auxiliary; cf. future *ta(ka)* 'want', past *li* 'be', perfect *me*, reconstructed as \**mala*, possibly related to *maliza* 'finish'. Especially interesting is the verb *kwisha* 'end'; it can govern infinitives or verb stems, as in *watoto wa-mekwishà (ku)ondoka* 'the children have already left'.

8.1.6. Another argument for an INFL node comes from VP conjunction. If two verbal predicates have the same subject and tense, they can be conjoined by *na*, but only the first bears a subject and a tense prefix, whereas the second has only the infinitive prefix *ku*. One example:

- (23) *Watoto wa-li-mw-andikia mwalimu na ku-ki-soma kitabu.*  
'The children wrote to the teacher and read the book'

This can be explained if we assume that subject and tense prefix form an INFL node which governs a VP node. In example (23), the INFL *wa-li* governs the conjoined VP [<sub>VP</sub>[<sub>VP</sub>*mw-andikia mwalimu*] *na* [<sub>VP</sub>*ku-ki-soma kitabu*]]. The infinitive marker *ku* of the verb in the second VP can be traced back to a rule which makes the incomplete *ki-soma* a surface word. This “dummy” analysis of *ku-* is motivated independently, as we find infinitive verb forms instead of agreeing verb forms in special registers, for example in the headlines of newspapers; an example of that is *Algeria ku-tu-saidia ku-tafuta mafuta* ‘Algeria to help us to search oil’.

This analysis predicts that the subject and tense prefix of the first verb is the head of the whole sentence. Given the plausible assumption that in synthetic relatives the relative affix occurs at the head of a clause, we can test this hypothesis: In a synthetic relative clause with a conjoined VP, we should expect that the relative pronoun is suffixed to the subject and tense prefix of the first verb. This is indeed true; viz. *watoto wa-li-o-mw-andika mwalimu na ku-ki-soma kitabu* ‘the children who wrote to the teacher and read the book’.

8.1.7. We have found four arguments for an INFL node: the *o*-Allomorph and synthetic relative clauses of type I, penultimate word stress, the bisyllabic word constraint and monosyllabic verb roots, and VP conjunction. Now there are certain restrictions with these constructions, as they may occur only with some tenses. The analysis given so far would be convincing if all four phenomena would pattern similarly, that is, would be acceptable with the same tenses. But this is not the case: Synthetic relative clauses are possible with the three tense markers *li* (past), *na* (present) and *taka* (future) only. Infinitive prefixes with monosyllabic verbs show up with these tenses, but in addition with tense markers like *me* (perfect) and *ngelngali* (conditional). And VP conjunction as discussed is possible with every tense marker.

8.2. It may be tempting to analyze INFL further, along the lines of Pollock (1989). More specifically, we might introduce phrases AgrS-P (subject agreement) and TP (tense), and arrive at structures like the following one:

(24) [<sub>AgrS-P</sub>Juma [<sub>AgrS'</sub> [<sub>a</sub>-[<sub>TP</sub>li-[<sub>VP</sub>ki-soma kitabu]]]]]

Note that this deviates from Pollock’s assumptions as AgrS-P dominates TP, and not vice versa. There is no simple way to include negation into this setup (which is, in Pollock’s theory, a phrasal node NegP occurring between TP and AgrS-P). This phrase should dominate AgrS’, as it is typically marked by an outermost prefix *ha* (cf. 3.3.); but we might also have changes of the tense prefix and the final vowel (cf. *h-a-ku-ki-som-i* ‘he didn’t read’).

There is one point in favour of a complex analysis of INFL, however. Assuming analysis (24), the relative affix should be suffixed to the tense affix (the specifier of TP). If there were no tense affix, we simply could not form this construction. This is borne out by the facts; in tenseless relative clauses (cf. 5.1.3.), the relative affix is suffixed to the whole verb, instead of the subject prefix (cf. *a-ki-soma-cho*, not *\*a-cho-soma*).

8.3. Let us now have a closer look at *relative clauses*. We will see that their structure provides us with clues about the structure of complementizer phrases (CPs).

8.3.1. Of the three types of relative clauses (cf. 5.1.), the one based on *amba* clearly is the most recent one. This relative marker originated with an now obsolete verb *amba* ‘say’ that occurred in the second synthetic relative form and subcategorized for a sentence. That origin may be still reflected by the fact that *amba*-relatives may have a complementizer *kwamba*; cf. *watoto amba-o kwamba mwalimu a-li-wa-ona*. Barrett-Keach (1980) takes this as an argument to analyze *amba* as a specialized verb in current Swahili and proposes the structure (25a). However, another possibility is that although this type of relative clause must be traced back to a verbal construction, *amba-* now is an agreeing relative pronoun in Spec-CP position, and *kwamba* is an optional complementizer in C-position (cf. (25b)); similar structures occur in southern varieties of German, as *die Kinder die wo der Lehrer gesehen hat*.

(25a) *watoto* [<sub>VP</sub>*amba-o* [<sub>S'</sub> *kwamba* [<sub>SM</sub>*walimu a-li-wa-ona*]]]

(25b) *watoto* [<sub>CP</sub>*amba-o* [<sub>C'</sub> *kwamba* [<sub>IP</sub>*walimu a-li-wa-ona*]]]

Synthetic relative clauses cannot occur with that complementizer; cf. *\*watoto (kwamba) a-li-o-wa-ona (kwamba) mwalimu*. Hence they should either be analyzed as being of the category IP, or alternatively the movement of

the verb containing the relative affix, *a-li-o-wa-ona*, to the Spec-CP position is barred because of the intervening complementizer.

8.3.2. One difference between the relative clause types is that with synthetic relatives, there is a clear tendency for postposing the subject (cf. Givón 1972 for a similar rule in Chibemba). This could be taken as an argument that the relative verb is moved to the initial Spec-C position, leaving the subject and other constituents behind. However, as we have seen in (5.1.2.), or with *jinsi wazee wa-li-vyo-ishi* 'the way the forefathers lived', this rule is a tendency at best. According to Barrett-Keach (1980), the subject may occur in front of the verb if it is stressed; this might suggest that a stressed subject may move into Spec-CP position, thus preventing the relative verb to do so.

8.3.3. Another difference between *amba*-clauses and synthetic relative clauses is that the relative pronoun in *amba*-clauses may be moved from an embedded clause. Barrett-Keach gives examples like *kitabu amba-cho ni-li-mw-ona watoto [u-li-o-wa-pa]* 'the book which I saw the children to whom you gave it' vs. *\*kitabu ni-li-cho-mw-ona watoto [u-li-o-wa-pa]*. This can be explained under the assumption that INFL as the site for marking relative clauses is only accessible for constituents within the local IP, whereas Spec-C is accessible for relative markers that are moved cyclically from embedded constituents.

8.3.4. A related difference is that *amba*-relatives allow for resumptive pronouns, whereas synthetic relatives don't. Barrett-Keach gives examples like *watoto amba-o (wao) wa-li-kwenda* 'the children who left' vs. *\*watoto (wao) wa-li-o-kwenda (wao)*. Note, however, that possessive resumptive pronouns are possible in both cases when they occur embedded in an NP; cf. *watoto ni-li-o-ki-soma [NPki-tabu ch-ake]* 'the children of whom I read their book'. Following Barrett-Keach, we can explain these facts in terms of a binding-theoretic restriction, saying that a pronoun cannot be bound by an *o*-antecedent in its minimal governing category (where IP or S', and NP are governing categories). But note that this applies only to free pronouns and not to affixes (cf. *kitabu ni-li-CHO-KI-soma* 'the book which I read'); hence we could conclude that affixes are not part of the syntax proper.

8.4. The data on relative clauses suggest that Swahili clauses might be either IP's or CP's, where the full-fledged CP structure is visible in the more recent construction. Incidentally, we find similar variations in other cases of sentential complementation (5.2.) and adverbial clauses (5.3.): Overt complementizers typically represent later developments; they are either derived from verbs or are borrowed from Arabic. The morphological marking of subordination, on the other hand, clearly represents the more traditional pattern. This suggests that the language is in a stage of syntactic transition.

8.5. It is interesting in this respect to look at *WH-movement*, as this is typically analyzed as a movement to the Spec-C position. In Standard Swahili, WH-words do not move at all. However, Alemán (1987) reports that there is a southern dialect in which syntactic movement of Wh-words into complementizer position is possible as a variant. (A similar case is reported for Kinande by Authier 1988). For example, for the question 'Who did you say you saw' we have two alternatives (Standard Swahili has only the first one).

- (26a) U-li-sema kwamba nani a-li-kuja?  
 (26b) Nani<sub>i</sub> a-li-sema kwamba t<sub>i</sub> a-li-kuja?

Alemán observes that more than one Wh-word may be moved, as in (27a), and that they may move to the same position (27b):

- (27a) Nani<sub>i</sub> u-me-amini kwamba wapi<sub>j</sub> t<sub>i</sub> a-me-kwenda t<sub>j</sub>?  
 'Who do you believe went where?'  
 (27b) Nani<sub>i</sub> wapi<sub>j</sub> u-li-mw-ona t<sub>i</sub> t<sub>j</sub>?  
 'Whom did you see where?'

Alemán notes certain restrictions with two moved Wh-words, such as the following: At least one of the Wh-words must agree with the verb. If two Comp-nodes are present, the agreeing Wh-words always moves to the higher node. If two Wh-words fill the same node, then one of them must be agreeing, and the other one must be non-agreeing.

Although data are lacking, it seems probable that WH-movement is an innovation; at least it is not mentioned at all in traditional grammars. This development of WH-movement might be seen in connection with the establishment of full-fledged CPs in dependent clauses.

8.6. Let us now have a look at a construction which I have suppressed until now, namely so-called "compound tenses" (Ashton 1944):

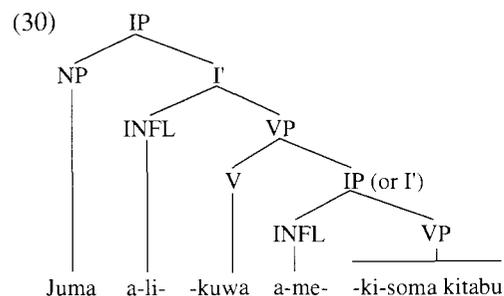
- (28) watoto wa-li-kuwa wa-me-ki-soma kitabu.  
'the children had read the book'

According to morphological criteria, this sentence has two finite verbs, *wa-li-kuwa* 'were' and *wa-me-ki-soma* 'have read it', which is contrary to basic assumptions of X-bar theory. In general, compound tenses consist of the auxiliary *kuwa* 'to be' with a tense prefix (*li, na, ta, me, ka, nge*) or in the subjunctive, and a main verb with another tense prefix, typically with some aspectual meaning, like perfect (*me*), imperfective (*ki*), or progressive (*na*). Both agree with the subject, and the main verb may also show object agreement. The two verbs follow each other in that order; typically, they are adjacent, but sometimes we find an adverb between them, as in *watoto walikuwa daima wakigombana* 'the children were all the time quarreling'.

At first sight, it looks as if these clauses contain two finite verbs. However, there is a reason for assuming that the two verbs are not equally ranked syntactically, but that the auxiliary forms the head of the construction. This follows from the explanation of relative clause structures given above. If we assume that the *o*-affix is realized as a clitic to the head of the relative clause, then we have a means to determine the head of a sentence with a compound tense: We simply put it into the first synthetic relative form and look where the *o*-affix ends up:

- (29) watoto wa-li-o-kuwa a-me-ki-soma kitabu  
'the children who had read the book'

It is the auxiliary; so we should assume that the auxiliary is the head of the construction. With this result, a plausible syntactic analysis of a sentence with a double verb construction would be as follows:



I assume that the auxiliary stem *kuwa* embeds an IP without an overt subject (alternatively, an I'). Thus, we have only one finite verb per IP.

In concluding the discussion of the double finite verb construction, I want to mention that either of the two verbs can be negated, with characteristic meaning differences (cf. Brauner/ Herms 1979, 242). For example, we have *ha-kuwa a-na-fanya kazi* (negated auxiliary; 'he was without work') vs. *a-li-kuwa ha-fanyi kazi* negated main verb, 'he did not work (although there was the possibility to do so)'.

## 9. Conclusion

This concludes this short treatise of syntactic phenomena in Swahili. With the vivid interest of different linguistic frameworks in Bantu syntax, we certainly can expect that the next years will bring with them many bold theoretical generalizations, fascinating discoveries, and embarrassing falsifications. In a certain respect the Bantu languages may prove to be an excellent laboratory for research into syntactic principles and parameters, as there are so many of them (around 500) that differ from each other in slight and, hopefully, principled ways.

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## 79. Tagalog

1. Introduction
2. Basic Clause Structure
3. Word Order
4. Nominals and Other Arguments
5. Non-Declarative Sentences and Negation
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### 1. Introduction

Tagalog, a member of the West Indonesian branch of the Austronesian language family, is native to the southern part of the Philippine island of Luzon. Since its adoption in 1937 as the Philippine national language (under the name Pilipino), it has spread rapidly over the entire Philippine archipelago, and it is estimated that by the year 2000 over 98% of all Filipinos will speak Tagalog as a first or second language. More than 300 years of

contact with Spanish and a briefer period of contact with English have heavily influenced the Tagalog lexicon, and have had some influence on the phonology as well (leading, for example, to a phonemicization of an originally allophonic distinction between high and mid vowels). But contact with Spanish and English appears to have had negligible influence on Tagalog syntax.

The following selective sketch presents an overview of the major syntactic structures of Tagalog, with emphasis on certain aspects of Tagalog syntax that are of particular theoretical interest. For a more complete account of the grammar as a whole, see Schachter and Otanes (1972).

### 2. Basic Clause Structure

Tagalog is basically a predicate-initial language (but see section 3 for certain non-pred-