Variation in Kimakunduchi and Standard Swahili: Insights from verbal morphosyntax

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Abstract

This paper explores variation between Kimakunduchi and Standard Swahili with a focus on verbal morphosyntax. With several varieties of Swahili identified and described over the years, here we focus on the Kimakunduchi variety spoken in the south-east of Zanzibar. While Kimakunduchi exhibits a number of features which are similar to those of Standard Swahili, it also has features which are distinct from those of the standard variety. In this paper we explore the variation in these two varieties through an examination of features relating to the TAM domain, negation, verbal finiteness, verb type, auxiliary constructions and relative clauses. These are areas which have not previously received in-depth examination or for which we present new data. The paper furthers the descriptive status of Kimakunduchi, contributes to a better understanding of the difference between the two varieties and deepens our understanding of microvariation in Bantu languages. The present paper also provides new insights which enable the development of updated hypotheses relating to diachronic change through re-examining Kimakunduchi and Standard Swahili morphosyntactic features.

Keywords

Bantu, Kimakunduchi, microvariation, Swahili, verbal morphosyntax

Résumé

Cet article étudie les variations entre le kimakunduchi et le swahili standard en se concentrant sur la morphosyntaxe verbale. Plusieurs variétés de swahili ayant été identifiées et décrites au fil des ans, nous nous concentrons ici sur la variété kimakunduchi parlée dans le sud-est de Zanzibar. Si le kimakunduchi présente un certain nombre de caractéristiques similaires à celles du swahili standard, il possède également des caractéristiques distinctes de celles de la variété standard. Dans cet article, nous étudions la variation dans ces deux variétés à travers un examen des caractéristiques relatives au domaine TAM, à la négation, à la finitude verbale, au type de verbe, aux constructions à auxiliaire et aux subordonnées relatives. Il s'agit de domaines qui n'ont pas encore fait l'objet d'un examen approfondi ou pour lesquels nous présentons de nouvelles données. L'article fait progresser la description du kimakunduchi, contribue à une meilleure compréhension de la différence entre les deux variétés et approfondit notre compréhension de la microvariation dans les langues bantoues. Le présent article fournit également de nouvelles perspectives qui permettent de développer des hypothèses actualisées relatives au changement diachronique en réexaminant les caractéristiques morphosyntaxiques du kimakunduchi et du swahili standard.

Mots clés

bantou, kimakunduchi, microvariation, morphosyntaxe verbale, swahili

1. Introduction

In the coastal areas of Eastern Africa, there are several language varieties which are assumed to be genetically closely related and are categorised as Swahili dialects (Sacleux 1909; Stigand 1915; Werner 1916; Whiteley 1969; Möhlig 1995; Maho 2009). Kimakunduchi (G43c),[1] also known as Kihadimu and Kikae, is a dialect of Swahili spoken in the south-eastern part of Unguja Island, Zanzibar.[2]

　　Assuming a broad division of the coastal Swahili dialects into Northern and Southern Dialects, Kimakunduchi has been classified as one of the Southern Dialects (Nurse 1982a; Nurse & Hinnebusch 1993). While Kimakunduchi exhibits a number of features which are similar to those

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1. Bantu languages are conventionally referred to using a numbering system developed by Guthrie (1948; 1967-1971) and further updated by Maho (2003; 2009). This is a geographic (rather than genetic) referential system.

2. As an anonymous reviewed pointed out, Kimakunduchi is under some pressure from the standard variety and there is a gap in terms of linguistic knowledge between older and younger generations. However, we also note that Kimakunduchi is still actively used across the generations.

of Standard Swahili, it also has features which are distinct from the standard variety of the language.[3] In (1),[4] for example, a number of Kimakunduchi words and their Standard Swahili counterparts are shown (data are from Chum 1962-1963; Chum 1994; BAKIZA 2012). As can be seen on comparison of these forms, there are a number of differences exhibited by the two varieties. While some lexical differences are the result of sound change (1a),[5] there are also Kimakunduchi words which can be traced back to Proto-Bantu and which lack cognates in Standard Swahili (Nurse & Hinnebusch 1993; Bastin *et al.* 2002) (1b).[6]

(1)		Standard Swahili	Kimakunduchi	Gloss
	a.	*-aṃka*	*-laṃka*	'wake up'
		-zaa	*-vyaa*	'give birth'
		-taka	*-chaka*	'want'
		-pika	*-vika*	'cook'
		mvua	*vua*	'rain' (cl. 9/10)
	b.	*-kimbia*	*-suṃka*	'run away'
		-anguka	*-gwa*	'fall'
		-pa	*-kʰa*	'give'
		haraka	*shongo*	'hurry' (cl. 5)
	c.	*jiwe*	*bwe*	'stone' (cl. 5)
		ṇzi	*zi*	'fly' (cl. 9/10)
		ṃpya	*pʰya*	'new' (cl. 9/10)
		kula	*lya*	'Eat!' (imperative)

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3. The term "Standard Swahili" generally refers to the standardised variety of Swahili which is based on Kiunguja, originally the local dialect of Zanzibar City and environs, spoken on the west coast of Unguja (Whiteley 1969: 79ff.; Nurse & Hinnebusch 1993: 12). Here we use this term to refer to data collected from a Kiunguja native speaker, as well as to those from previous published studies on (Standard) Swahili.

4. Examples are transcribed using the orthography of Standard Swahili with the following additions: aspiration and nasal syllabicity are marked with IPA symbols, the first characters of sentences and proper nouns are written in lower case, periods are not added at the end of sentences and Ø is used for the zero prefix. The transcriptions, glosses and translations of examples from previous studies have been modified to facilitate comparison.

5. The final vowel of verbal stems such as a of -*aṃka* 'wake up' in (1a) can inflect; vowels other than -*a* can also appear in this position. We show stems marked with the final vowel -*a* as the citation form and transcribe the final vowel separately only when the alternation needs to be shown explicitly.

6. Nouns in both varieties are categorised into several noun classes. We follow the classification of Standard Swahili, which differentiates noun classes numbered from 1 to 18 (except 12-14) (Meinhof 1932: 128). In the transcriptions of nouns and modifiers, we provide noun class information to show agreement but do not indicate this information unless it is relevant to the analysis. The noun class information is glossed using only the numbers. First and second persons are represented by numbers 1 and 2 shown with SG or PL.

Kimakunduchi differs in prosodic terms from Standard Swahili (see also Werner 1916; Whiteley 1959; Racine-Issa 2002). Furumoto & Takahashi (2021) have proposed that Kimakunduchi lacks stress on the penultimate syllable. This is reflected in the presence of monosyllabic words in (1c), which due to stress assignment rules in Standard Swahili must be polysyllabic (see also Nurse & Hinnebusch 1993: 165ff.).

In terms of verbal morphology, the order of the inflectional elements in the verb form is the same in the two varieties. This can be represented schematically following the standard Bantu verbal template, as in (2). Note that the stem is the only obligatory part of the verb form.

(2)   Template of the inflected verb forms

Negative-Subject-Negative-Tense/Aspect/Mood (TAM)-Relative-Object-Stem

Despite the similarity in overall structure, the two varieties employ different forms in their tense-aspect-mood (TAM) systems. For example, Kimakunduchi lacks the final vowel *-i* used in the present negative in Standard Swahili. Instead, Kimakunduchi employs the prefix *na-* in the present negative. This contrast is exemplified in (3) and (4).[7]

(3)   Standard Swahili (Ashton 1947: 74, 338)

    a.   *tu-na-som-a*

       SM1PL-IPFV-read-FV

       'We are reading./We read.'

    b.   *ha-tu-som-i*

       NEG-SM1PL-read-FV

       'We are not reading./We do not read.'

(4)   Kimakunduchi

    a.   *tu-na-som-a*

       SM1PL-IPFV-read-FV

       'We are reading./We read.'

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7. Examples are, unless otherwise noted, from native speakers who are listed in the acknowledgements. In order to collect data, we used both interviews and recordings of natural speech. Interviews were conducted to confirm observations or to corroborate hypotheses. They were primarily used to better understand observations that arose from natural speech and very few instances involved translation tasks from Standard Swahili into Kimakunduchi. This is important both to reduce the chance of obtaining unnatural examples and to reduce accommodation due to possible pressure from the standard variety and its associated perceived higher prestige.

b. *ha-tu-na-som-a*

NEG-SM1PL-IPFV-read-FV

'We are not reading./We do not read.'

Differences such as these in the TAM system suggest that, in addition to lexical and prosodic differences, there is microvariation in terms of broader morphosyntactic features. The term microvariation is used here to refer to fine-grained differences between closely related languages or varieties (such as between Bantu languages or within Swahili dialects, see also Bloom Ström & Petzell forthcoming).

There is a long history of work looking at dialectal variation in Swahili. This includes early studies on the Swahili dialects (e.g. Steere 1894; Sacleux 1909; Stigand 1915; Werner 1919), as well as more recent work (e.g. Lambert 1953; 1957; 1958a; 1958b; Whiteley 1955; 1956; Whiteley 1958; Eastman 1969; Hill 1973; Nurse 1982a; 1982b; 1984-1985; Bakari 1985; Möhlig 1995 amongst others). However, these works tend to describe formal, rather than functional, features. In contrast, the present study seeks to cover both domains and shows that there are systematic differences even between language varieties which are closely related and appear to be similar in structural terms.

The present study aims to re-examine Kimakunduchi verbal morphosyntax and to better understand areas in which variation is found between Kimakunduchi and Standard Swahili. In contrast to many coastal dialects, there is a detailed morphophonological description of Kimakunduchi (Racine-Issa 2002; cf. Devos 2005) in addition to more brief grammar sketches (Whiteley 1959; Hurskainen 1989). However, a number of features have not yet received sufficient attention nor been the subject of in-depth examination. Re-examining Kimakunduchi and Standard Swahili morphosyntactic features provides new insights which enable the development of updated hypotheses relating to diachronic change. Furthermore, this study sheds light on features which are widely shared in Bantu languages but which have to date been overlooked in studies of microvariation in Bantu.

The paper is structured as follows: Section 2 examines the tense-aspect-mood systems of the two varieties. Section 3 deals with verbal inflection with a focus on negation. Section 4 discusses morphological strategies used to encode finiteness. Section 5 examines verb types with a focus on inchoative and defective verbs. Section 6 explores auxiliary forms, derived from the copula and lexical verbs. Section 7 examines the formal characteristics of relative clauses. Section 8 constitutes a summary and conclusion.

2. The Tense-Aspect-Mood system

In both Kimakunduchi and Standard Swahili, the TAM prefix and/or the final vowel of the verb alternates according to tense-aspect-mood/modal information. Forms related to TAM inflection in each variety are listed in (5) and (6).[8]

(5)   Standard Swahili

    a.   TAM prefixes (with the final vowel -*a*)

        na-: PRESENT/IMPERFECTIVE, *a*-: PRESENT, *hu*-: HABITUAL

        me-: PERFECTIVE, *ja*-: PERFECT (negative), *li*-: PAST, *ku*-: PAST (negative)

        ta-: FUTURE, *to*-: FUTURE (negative)

        ki-: CONDITIONAL, *ka*-: CONSECUTIVE

        nge-/*ngali*-: COUNTERFACTUAL

    b.   The final vowel

        -*a*: DEFAULT

        -*i*: PRESENT (negative)

        -*e*: SUBJUNCTIVE

(6)   Kimakunduchi

    a.   TAM prefixes (with the final vowel -*a*)

        na-: IMPERFECTIVE, *hu*-: HABITUAL

        me-: PERFECT, *ja*-: PERFECT (negative)

        Ø-: PERFECTIVE, *li*-: PERFECTIVE (negative), *a*-: PERFECTIVE (relative clause)

        cha-: FUTURE

        ka-: CONDITIONAL/CONSECUTIVE,

        nge-: COUNTERFACTUAL

    b.   The final vowel

        -*a*: DEFAULT

        vowel copy: PERFECTIVE/FUTURE (negative)

        -*e*: SUBJUNCTIVE

Below we deal with forms used for present (*na-, hu-, a-*), anterior (past *li-*, perfective Ø-/vowel copy, perfect(ive) *me-*), future (*ta-, cha-*), conditional/consecutive (*ki-, ka-*) and counterfactual (*nge-, ngali-*). Amongst these forms, *na-, me-, ka-* and *nge-* are commonly used in both varieties. Kimakunduchi *cha-* is clearly cognate with Standard Swahili *ta-*. A nota-

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8. In both Standard Swahili and Kimakunduchi, there is no change in the final vowel of borrowed verbs in line with TAMP (tense-aspect-mood-polarity) information. Furthermore, in both varieties, itive is marked through a combination of the prefix *ka-* and the final vowel -*e*. These points are not included in (5) and (6).

ble instance of microvariation is that although these markers share formal features and origins, they do not cover the same functional range (see also Furumoto 2019; 2020a).

2.1 Present/Imperfective reference

2.1.1 The prefix *na-*

Both Standard Swahili and Kimakunduchi use the prefix *na-*. While in the descriptions of Standard Swahili, *na-* is described as a present tense marker (Ashton 1947; Yukawa 1989; Mohammed 2001; Mpiranya 2015; and others), we consider the term 'imperfective' to capture the function of *na-* more appropriately than 'present'. This is because the progressive and habitual can both be subsumed under the label 'imperfective' (Comrie 1976: 24ff.),[9] and *na-* is generally used for progressive and habitual situations, as can be seen in (7)[10] and (8).

(7) Standard Swahili (Ashton 1947: 37; Contini-Morava 1989: 77)

    a. [Progressive]

        ni-na-soma

        SM1SG-IPFV-read

        'I am reading (now).'

    b. [Habitual]

kila	*siku*	*majumba-ni*	*mote*
every	day	houses-LOC	all.18

humu	*watoto*	*wa-na-kanywa*
DEM.PROX.18	2.children	SM2-IPFV-rebuke.PASS

na	*wazee*	*wao*
COM	2.elders	their.2

        'Every day throughout this neighbourhood children are rebuked by their elders.'

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9. Standard Swahili *na-* additionally covers stable states (for more details see §5). This is not the case for Kimakunduchi.

10. In (7b), the locative noun *majumba-ni* 'in the house' agrees with *mote* 'all' and the demonstrative *humu*, though its noun class information is not shown overtly.

(8) Kimakunduchi (Furumoto 2019: 82)

  a. [Progressive]

   pandu   *vino*[11]   *sasa* *ka-na-lya* *ṃpunga*

   1.Pandu(PN) DEM.PROX.8 now SM1-IPFV-eat rice

   'Pandu is eating rice right now.'

  b. [Habitual]

   pandu   *kila* *siku* *ka-na-lya* *ṃpunga*

   1.Pandu(PN) every day SM1-IPFV-eat rice

   'Pandu eats rice every day.'

2.1.2 The habitual *hu-*

In addition to *na-*, the prefix *hu-* can also encode habitual in both Kimakunduchi and Standard Swahili (Ashton 1947: 38; Racine-Issa 2002: 109f.). Verbs hosting the habitual marker *hu-* do not exhibit subject agreement.

(9) Standard Swahili (Ashton 1947: 38)

  ng'ombe *hu-la* *chakula* *gani*

  cows HAB-eat food   what_kind_of

  'What sort of food do cows eat as their staple food?'

(10) Kimakunduchi

  watʰu *wengi* *hu-sema* *sufuria*

  2.people many.2 HAB-say cooking_pot

  'Many people say "sufuria" (when referring to cooking pots).'

2.1.3 The prefix *a-*

Standard Swahili has another present prefix *a-* as described by, amongst others, Ashton (1947: 37), Mohammed (2001: 124ff.) and Mpiranya (2015: 42) and shown in (11).

(11) Standard Swahili (Ashton 1947: 40, 334)

  tw-a-taka   *chakula*

  SM1PL-PRS-want food

  'We want some food.'

The prefix *a-* is not found in descriptions of Kimakunduchi (see e.g. Whiteley 1959; Hurskainen 1989; Racine-Issa 2002). While we also note that

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11. In Kimakunduchi, the class 8 proximal demonstrative *vino* can form a temporal expression meaning 'right now' in combination with *sasa* 'now'. Standard Swahili also uses a similar collocation (Ashton 1947: 39, 176; Mpiranya 2015: 42).

this prefix is not generally in use in Kimakunduchi, it does appear in a no longer used song relating to male circumcision (12). This song, which was taught to the first author by a Kimakunduchi speaker in his seventies, appears not to have been used for more than 50 years.

(12)   Kimakunduchi

mama	*njaa*	*y-a-uma*	*wee*	*njaa*	*i-na-uma*
mother	9.hunger	SM9-IPFV-hurt	PRO.2SG	9.hunger	SM9-IPFV-hurt

'Mama, we are suffering from hunger, we are suffering from hunger.'

In (12), *a-* and *na-* are used in the same context. This suggests that there is little or no semantic difference between the two so-called present markers, in contrast to most Standard Swahili descriptions, which distinguish between their functions. According to Contini-Morava (1989: 78), as a result of the functional convergence, "*a* appears to be losing ground to *na*" in Southern Swahili in Zanzibar. It therefore appears that *a-* and *na-* were previously used in the same way in Kimakunduchi, as illustrated in the song in (12), and over time, *a-* has been lost as the functions of the two prefixes converged.

2.2 Anterior reference

2.2.1 Form and functional range of TAM markers for anterior reference

For anterior reference, Standard Swahili employs the perfective marker *me-* (13a) and the past tense marker *li-* (13b) (Ashton 1947; Contini-Morava 1989).

(13)   Standard Swahili

  a. *tu-me-soma*

    SM1PL-PFV-read

    'We (have) read.'

  b. *tu-li-soma*

    SM1PL-PST-read

    'We read.'

Kimakunduchi also has two inflectional forms for anterior reference: one is *me-*, as in (14a), and another is the vowel copy strategy, in which the vowel of the penultimate syllable of the verb is copied and appears again as the final vowel, as can be seen in (14b). Crucially, in Kimakunduchi, *me-* is not a perfective marker as in Standard Swahili and vowel copying does not functionally correspond to the Standard Swahili past marker *li-* (Furumoto

2019).[12] This can be seen in the glosses of the following examples; in (14a), *me-* is glossed as 'perfect' in contrast to *me-* in (13a), which is glossed as 'perfective'. In (14b), Ø- is glossed as 'perfective' simply to aid the reader.[13]

(14)   Kimakunduchi

    a.   *tu-me-som-a*

       SM1PL-PRF-read-FV

       'We have read.'

    b.   *tu-Ø-som-o*

       SM1PL-PFV-read-FV

       'We (have) read.'

In Kimakunduchi, what functionally corresponds to Standard Swahili *me-* is not the cognate prefix but the vowel copy strategy. The functional correspondence can be exemplified with the inchoative verb *-lala* 'fall asleep' in (15) and (16) (for further details of inchoative verbs, see §5.1). The verb *-lala* can express a present state with the *me-*form in Standard Swahili, and thus can co-occur with persistive *-ngali*, as in (15). In Kimakunduchi, on the other hand, *-lala* can only occur with *-ngali* when the vowel-copied form is used (16a), not when prefixed with *me-* (16b).[14]

(15)   Standard Swahili (Ashton 1947: 270)

    a-ngali   *a-me-lala*

    SM1-PERS.COP   SM1-PFV-fall_asleep

    'He is still asleep.'

(16)   Kimakunduchi

    a.   *a-ngali*   *ka-Ø-lala*

       SM1-PERS.COP   SM1-PFV-fall_asleep

       'S/he is still asleep.'

    b.   (**a-ngali*)   *ke-me-lala*

       SM1-PERS.COP   SM1-PRF-fall_asleep

       'S/he has fallen asleep.'

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12. Note here also that the vowel copy strategy in Kimakunduchi has been described simply as a 'past' in some previous work (e.g. Racine-Issa 2002; Hurskainen 1989).

13. In Kimakunduchi, the way in which perfective is encoded depends on the clause type; the prefix *li-* appears with negation (see also §3.1), whereas *a-* or Ø- (without vowel copying) is applied to the relativised form (see §7.2).

14. In Kimakunduchi, when verbs are marked with perfect *me-*, the class 1 subject prefix is realised as *ke-* rather than *ka-*. A similar alternation holds for class 2 *wa-~we-*, class 6 *ya-~ye-* and class 16 *va-~ve-* (see also Racine-Issa 2002: 120).

The above contrast suggests a difference in the function of *me-* in the two varieties. Although the Standard Swahili *me-* has also been described as a perfect marker (Perrot 1957; Wilson 1985; Drolc 1992; Mohammed 2001),[15] Furumoto (2019) claims that Kimakunduchi *me-* is more of a prototypical perfect than *me-* in Standard Swahili. His claim stems from the observation that the Kimakunduchi *me-* is incompatible with past time adverbials, and that it is used primarily for: i) perfects of result, ii) experiential perfects and iii) perfects of a persistent situation (see also §2.2.2). This does not hold for *me-* in Standard Swahili nor for the Kimakunduchi vowel-copied form, to which Furumoto (2019) assigns the label 'perfective' (not 'perfect').

In sum, Kimakunduchi does not encode past tense through verbal inflection, and it utilises *me-* as a perfect (not perfective) marker (in contrast to Standard Swahili). The systematic difference between the two varieties is summarised in (17). It should be noted that in Kimakunduchi, past tense can be expressed through periphrastic markers (for further details see §6).

(17) Tense and aspect markers for anteriority (Furumoto 2019: 75)

	Standard Swahili	Kimakunduchi
perfect	n.a.	*me-*
perfective	*me-*	vowel copy
past	*li-*	n.a.

2.2.2 The combination of *me-* with *na-* in Kimakunduchi

Unlike Standard Swahili *me-*, Kimakunduchi *me-* can be combined with imperfective *na-*, as in (18), where it is used for the perfect of persistent situation (Racine-Issa 2002: 121f.; Furumoto 2019: 70ff.).

(18) Kimakunduchi (Furumoto 2019: 70)

    ke-me-na-katʰa   *kʰuni*

    SM1-PRF-IPFV-cut   firewood

    'S/he has been cutting firewood.'

Conceivably, this combination is the result of the semantic properties of the prefixes. A key observation comes from English, in which the Present Perfect (*have* + past participle) works for the perfect of persistent situations together with a progressive marker (*be* + present participle), as the translation of (18) suggests. Notably, the English Present Perfect is almost

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15. There are also some studies in which Standard Swahili *me-* is labelled as 'perfective' (e.g. Polomé 1967; Schadeberg 1992; McGrath & Marten 2003).

functionally congruent with the prototype perfect (McCawley 1971: 104; 1981: 81; see also Comrie 1976: 56ff.; Dahl 1985: 133ff.; Bybee, Perkins & Pagliuca 1994: 54, 61ff.; Lindstedt 2000: 259), whereas Kimakunduchi *na-* can express progressive situations (see §2.1.1). Assuming that Kimakunduchi *me-* has prototypical perfect semantics, there seems to be affinity between Kimakunduchi and English, since in both languages, a perfect marker combines with a progressive marker for perfect of persistent situations. Based on this cross-linguistic similarity, we propose that Kimakunduchi *me-* and the English Present Perfect have the potential to co-occur with progressive markers, although the precise analysis of the functional corelation of perfect and progressive is beyond the scope of this paper (see also Furumoto 2019: 70ff.).

If this proposal is correct, the absence of a similar combination of *na-* and *me-* in the standard variety could therefore be attributed to the semantic properties of *me-* in Standard Swahili, which deviates from a prototypical perfect (Furumoto 2019). Furthermore, this proposal is compatible with the observation that in Kitumbatu, another dialect of Swahili,[16] the prefix *ma-* (cognate with *me-*), can co-occur with imperfective *na-* (Miyazaki & Takemura 2019: 54; Furumoto 2020b: 109). According to Furumoto (2019: 79, 82), Kitumbatu *ma-* is functionally much closer to Kimakunduchi *me-* than to Standard Swahili *me-* and Kitumbatu *na-* refers to progressive situations.

The combination of two TAM prefixes in a single verb form is relatively unusual in Bantu languages, where the verbal template typically only has a single pre-stem TAM slot. However, such a structure is not unique to Kimakunduchi. Rather, a number of Bantu languages, including Chaga, for example, also allows the presence of multiple TAM prefixes within the verb form (Shinagawa 2019a: 130, 133; Shinagawa 2019b: 176; see also Nurse 2003: 34f.).

2.3 Future: The functional gap between Standard Swahili *ta-* and Kimakunduchi *cha-*

Kimakunduchi has the prefix *cha-* (Hurskainen 1989: 9, 12; Racine-Issa 2002: 119). This prefix can be traced back to Proto-Bantu *-càk-* 'desire, want' (Nurse & Hinnebusch 1993: 375f., 412, 581; Bastin *et al.* 2002) and is cognate with the Standard Swahili future marker *ta-* (Ashton 1947: 37). However, *cha-* differs from *ta-* in terms of co-occurrence with future time adverbials. As can be seen in the following examples, *kesho* 'tomorrow' can co-occur with Standard Swahili *ta-* (19), while the use of Kimakun-

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16. Kitumbatu is spoken by people on Tumbatu Island, off the northwest tip of Unguja, as well as the ancestors of Tumbatu migrants in some parts of northern Unguja.

duchi *cha-* with *kesho* (20a) is dispreffered. When such adverbials appear, *-ja*, derived from the verb 'come', is used in addition to *cha-*, as in (20b) (for the grammaticalisation of *-ja*, see also §6.2.2).

(19) Standard Swahili (Ashton 1947: 37)

      ni-ta-soma   *kesho*

      SM1SG-FUT-read   tomorrow

      'I shall read tomorrow.'

(20) Kimakunduchi

    a. *?ka-cha-soma*   *kesho*

        SM1-FUT-read   tomorrow

        'S/he will read tomorrow.'

    b. *ka-cha-ja-soma*   *kesho*

        SM1-FUT-come-read   tomorrow

        'S/he will read tomorrow.'

According to Furumoto (2020a: 113f.), Kimakunduchi *cha-* functions as an epistemic modality marker which covers uncertain future situations, and *-ja* is added for certain futures. The (un)acceptability of (20a) can therefore be explained as follows: *cha-* in isolation indicates that the proposition may possibly be true, while the adverbial *kesho* 'tomorrow' encourages speech participants to view the event as concrete. Due to the incompatibility between *cha-* (possible) and *kesho* 'tomorrow' (certainty), (20a) is ill-formed.

    As the analysis of *cha-* as a modality marker predicts, when temporal adverbials do not conflict with the uncertain reading of *cha-*, they can occur with *cha-* without recourse to *-ja*. This is exemplified in (21) with *mwakani* 'next year'.[17] In contrast to *kesho*, which is more immediate and therefore more likely to occur, *mwakani* seems to allow for a looser interpretation.

(21) Kimakunduchi

      tu-cha-safiri   *mwakani*

      SM1PL-FUT-travel   next_year

      'We will travel in the next year.'

According to Bybee *et al.* (1991: 26-29), verbs or constructions with agent-oriented meanings (e.g. 'desire') most commonly develop into future markers, and then acquire epistemic uses. Assuming a cross-linguistically

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17. The temporal expression *mwakani*, which can be decomposed into *mwaka* 'year' and the locative suffix *-ni*, has the non-compositional meaning '(in) the next year'.

common and unidirectional functional change, the functional gap between Standard Swahili *ta-* and Kimakunduchi *cha-* allows us to hypothesise that Proto-Bantu *-càk-* 'desire, want' developed into the various TAM prefixes through the same process of change, with different Swahili varieties representing different points along the pathway of change: Kimakunduchi *cha-*, an epistemic modality marker, is at a later stage of the same process than *ta-* in the standard variety, which covers future situations broadly (see Furumoto 2020a: 114 fn.).

While the presence of multiple degrees of future and multiple degrees of past are well-known features of Bantu languages (Nurse 2008: 88-94), the morphological encoding of certain versus uncertain futures has received significantly less attention (cf. Leonard 1980). However, this feature is also of importance when we describe and compare markers indicating future reference. The future is inevitably more speculative than the past and present in that we cannot experience and perceive the future. As such, we inherently speculate when talking about future situations (Comrie 1985: 43ff.; Dahl 1985: 103; Bybee *et al.* 1991: 19). Considering that factors other than temporal remoteness, such as intentionality, evidentiality and the degree of confidence, can also be related to our prediction, the degree of certainty also likely varies between markers labelled 'future', as, for instance, the contrast between Standard Swahili *ta-* and Kimakunduchi *cha-* suggests.

Crane & Mabena (2019) have pointed out that even though COME- and GO-derived forms in isiNdebele have previously been described as near and remote future markers, respectively, they do not always strictly mark a temporal distinction. In some contexts, COME-derived *-zo-* is used in order to convey a greater degree of epistemic certainty than GO-derived *-yo-*, rather than encoding temporal proximity. This observation also suggests that there is microvariation in certainty of future markers (see also Bybee *et al.* 1994: 244-251; Botne 2006).

2.4 Conditional, consecutive and counterfactual marking

Standard Swahili has the consecutive prefix *ka-* and the conditional prefix *ki-*. In contrast, Kimakunduchi uses *ka-* for both consecutive and conditional markings (Whiteley 1959: 54; Chum 1962-1963: 56). Therefore, *ka-* in Kimakunduchi appears not only with so-called then-clauses expressing subsequent events, as in (22a), but also with if-clauses, as in (22b). In the same context as in (22b), Standard Swahili uses *ki-* (23).

(22)   Kimakunduchi

    a.   [Consecutive]

       ya   *kwaza*   *ka-Ø-fu*[18]   *ya*   *pili*   *a-ka-fwa*

       CONN.1   first   SM1-PFV-die   CONN.1   second   SM1-CONSC-die

       'The firstborn child had died, and (subsequently) the second born had died.'

    b.   [Conditional] (Issa 2018: 94)

       u-ka-tahunwa   *nyi=ndudu*   *yoyoti*

       SM2SG-COND-bite.PASS   by=1.insect   any.1

       mwazo   *u-vake*   *mate*

       first   SM2SG-apply.SBJV   saliva

       'If you get bitten by any insect, you should first apply saliva.'

(23)   Standard Swahili [Conditional] (Issa 2018: 94)

    u-ki-tafunwa   *na*   *m̩dudu*   *yoyote*

    SM2SG-COND-bite.PASS   by   1.insect   any.1

    awali   *u-pake*   *mate*

    first   SM2SG-apply.SBJV   saliva

    'If you get bitten by any insect, you should first apply saliva.'

For counterfactual marking, Standard Swahili has developed the prefixes *nge-* and *ngali-*, though their functional difference is not entirely clear (Schadeberg 1992: 25). In contrast, Kimakunduchi only has *nge-* (Whiteley 1959: 54; Chum 1962-1963: 60). A comparison of (24) and (25) shows that Kimakunduchi *nge-* and Standard Swahili *-ngali* can be used in the same contexts.

(24)   Kimakunduchi (Chum 1994: 77)

    ama   *k-evu*   *na*   *uchokoo*

    if   SM1-PST.COP   have   spear

    [a-]nge-vata   *nyambo*   *wengi*

    SM1-CFL-get   2.octopus   many.2

    'If s/he had a fishing spear, s/he would have got good catch of octopus.'

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18. The formation of the stem *-fu*, not discussed here due to space, is an exceptional case of vowel copying. For more details, see Furumoto (2022: 35-36).

(25)   Standard Swahili (Chum 1994: 77)

alau   a-li-kuwa   na   ṃchokoo
if   SM1-PST-COP   have   spear

a-ngali-wa-pata   pweza   wengi
SM1-CFL-OM2-get   2.octopus   many.2

'If s/he had a fishing spear, s/he would have got good catch of octopus.'

It should be noted that Kimakunduchi *ka-* and *nge-* can also appear in the pre-stem position with the imperfective *na-*, as shown in (26) (similar to the co-occurrence of *me-* with *na-* in §2.2.2). These concatenations have not explicitly been pointed out in previous descriptions but can be seen in the Kimakunduchi glossary provided by Chum (1994).

(26)   Kimakunduchi

  a.   *bwana   yulya   a-ka-na-ji-tia   maji*
       1.sir   DEM.DIST.1   SM1-CONSC-IPFV-REFL-put   6.water
       'That man was bathing.'

  b.   *a-nge-na-soma   kitabu   kama   ka-Ø-wa-vo*
       SM1-CFL-IPFV-read   book   if   SM1-PFV-COP-PRO16
       'If s/he were here, s/he would be reading a book.'

3. Negative markers

In both Standard Swahili and Kimakunduchi, negation is encoded through verbal prefixes which vary depending on clause type. While the two varieties appear to be similar because they have formally identical negative prefixes, Kimakunduchi exhibits a formal and/or functional symmetry between the affirmative and negative TAM paradigms.

3.1 Negation marking in independent tenses

In independent tense forms (i.e. main clause contexts), negation in Kimakunduchi is encoded by the prefix *ha-* in the pre-initial position (i.e. before the subject prefix), as in (27a). Alternatively, the negative portmanteaux forms *si-*, *hu-* and *ha-*, which encode the first person singular, second person singular, and class 1 subjects, respectively, can be used (27b).

(27)   Kimakunduchi

  a.   (*ha-*)*tu-na-soma*
       NEG-SM1PL-IPFV-read
       'We are (not) reading./We (do not) read.'

  b. *si-na-soma*
      NEG.SM1SG-IPFV-read
      'I am not reading./I do not read.'

The Kimakunduchi negative prefixes are of the same shape as those found in Standard Swahili. However, in Kimakunduchi the negative prefix and the imperfective prefix *na-* can co-occur. In contrast, Standard Swahili employs *na-* only in the affirmative, and in the negative present tense form there is no segmental TAM prefix, as in (28).

(28) Standard Swahili (Ashton 1947: 74, 338)

  a. *tu-na-som-a*
      SM1PL-IPFV-read-FV
      'We are reading./We read.'

  b. *ha-tu-som-i*
      NEG-SM1PL-read-FV
      'We are not reading./We do not read.'

More generally, while in both varieties the TAM prefix and/or the final vowel vary according to polarity, the relationship between the affirmative and its negative counterpart differs as can be seen upon examination of Table 1 and Table 2.

Table 1 — Affirmative-negative correspondences in Standard Swahili (based on Ashton 1947; Contini-Morava 1989; Yukawa 1989; Mpiranya 2015)

	Affirmative	Negative
Perfective	*me-*	*ja-*
Past	*li-*	*ku-*
Present/Imperfective	*na-, a-, hu-*	*-i* (final vowel)
Future	*ta-*	*ta- ~ to-*

Table 2 — Affirmative-negative correspondences in Kimakunduchi (based on data from Hurskainen 1989; Racine-Issa 2002; Furumoto 2019 and 2020a)

	Affirmative	Negative
Perfect	*me-*	*ja-*
Perfective	vowel copy	*li-*
Present/Imperfective	*na-, hu-*	*na-*
Future	*cha-*	*cha-*, vowel copy

There are several points to be noted. First, Standard Swahili future *ta-* can alternate with *to-* in negative contexts (29). This is a point which is often overlooked with a few exceptions such as Yukawa (1989: 383) and Mpiranya (2015: 43). A generalisation can therefore be developed: in Standard Swahili, regardless of the TAM distinction, the negative form is differentiated from the affirmative form through the negative prefix and accompanying TAM prefix or final vowel.

(29)   Standard Swahili (Mpiranya 2015: 43)
    si-to-fanya
    SM1SG-FUT-do
    'I will not do.'

Second, in Kimakunduchi, perfective marking with negation is realised with the prefix *li-*, rather than vowel copying. This can be seen in (30), where A uses the verb *-soma* 'study' in the vowel-copied form in order to ask whether B went to school during B's childhood, while B replies using *li-*.

(30)   Kimakunduchi
    A: *ku-Ø-som-o*
        SM2SG-PFV-study-FV
        'Did you study (in school)?'
    B: *si-li-som-a*
        NEG.SM1SG-PFV-study-FV
        'I did not study'.

While vowel copying is also compatible with the negative prefix, this combination indicates negation of the future, rather than negation of the perfective (see also Racine-Issa 2002: 111). Thus, it can occur in the same context as verbs with the future *cha-*, as in (31).

(31)   Kimakunduchi
    A: *ku-cha-kwend-a*   *pʰwa-ni*
        SM2SG-FUT-go-FV   shore-LOC
        'Will you go to the beach?'
    B: *s-end-e*
        NEG.SM1SG-go-FV
        'I will not go (there).'

Note that the vowel-copying strategy is used for anterior (i.e. perfect, perfective, past etc.) marking not only in Kimakunduchi but also in other Swahili dialects and genetically closely related languages (Whiteley 1956; Lambert 1957; Rombi 1983: 198; Furumoto field notes on Kitumbatu). With negation, other dialects and languages tend to use vowel-copying for habitual marking. This difference between Kimakunduchi and other language varieties seems to suggest that the Kimakunduchi negative vowel-copied form has undergone a functional change from habitual to future, a cross-linguistically widely observed tendency (Poppe 1996; Tröbs 2003; Tatevosov 2005; cf. Dahl 1985).

The third point is related to the a/symmetry of the affirmative and negative TAM systems. It has been proposed that "the affirmative and negative TAM-markers [in Standard Swahili] categorise the temporal and aspectual properties of an event in different ways" (Contini-Morava 1989; after Miestamo 2005: 126). Thus, there is not necessarily a one-to-one functional correspondence between the affirmative and negative forms. For example, perfective *me-* corresponds to *ja-* in (32), which we assign the label 'perfective' for ease, and to the past marker *ku-* in (33). Assuming that the functions of *ja-* and *ku-* differ, these examples suggest that *me-* covers a wider functional range than *ja-* and *ku-*. The relevant TAM prefixes are shown in bold.

(32)   Standard Swahili (Contini-Morava 1989: 23)

    *ni-**me**-fanya*   *kazi*   *nyingi*   *njema...* *lakini* *hata*
    SM1SG-PFV-do 10.works many.10 good.10 but   even

    hivi   *na-ona*   *si-**ja**-fanya*   *kazi* *bora...*
    DEM.PROX.8   SM1SG-IPFV-see NEG.SM1SG-PFV-do work good

    'I have done many good works... but even so I feel [that] I have not done a good job...'

(33)   Standard Swahili (Contini-Morava 1989: 23)

    A: *u-**me**-sema*   *u-na-juta*
        SM2SG-PFV-say SM2SG-IPFV-regret
        'You said you regret (it).'

    B: *si-**ku**-sema*   *hivyo*
        NEG.SM1SG-PST-say DEM.MED.8
        'I didn't say that.'

In contrast, Kimakunduchi verbs in the negative form seem to encode TAM information in parallel ways to the affirmative form. For perfective and perfect markings, Kimakunduchi uses different markers in the affirmative

and negative forms. Because of the correspondence of *me-* to *ja-* and *ku-* in Standard Swahili, it may be expected that Kimakunduchi *me-* corresponds to both *ja-* and *li-*. However, our informant accepted *me-* in the same context as *ja-* but not as *li-*(34). Similarly, vowel-copying only corresponds to *li-*. This correspondence is strict, regardless of the lexical aspect of the verbs (for details of lexical aspect, see §5.1).

(34) Kimakunduchi

    A: *ke-**me**-fua*   *nguo*   *zake*
        SM1-PRF-wash   10.clothes   his/her.10
        'Has s/he washed his/her clothes?'

    B: *ha-**ja**-fua*
        SM1-PRF-wash
        'S/he has not yet washed his/her clothes.'

    B': *#ha-**li**-fua*
        SM1-PFV-wash
        'S/he did not wash his/her clothes.'

Based on the functional correspondence of perfect and perfective markers and the formal co-incidence of imperfective and future markers, we consider Kimakunduchi to have developed almost symmetrical affirmative and negative TAM systems.

3.2 Negation marking in dependent tenses and relative clause forms

Kimakunduchi dependent tense forms and relative clause forms take the negative prefix *si-* in the post-initial position (i.e. after the subject prefix) (35). While the shape of the negative prefix *si-* is the same as in the standard variety, there are two points to be noted.

(35) Kimakunduchi [Dependent form] (Racine-Issa 2002: 126)

    kama   *k-evu*   *ṃfupi*   *a-si-nge-u-kutʰa*   *ṃpira*
    if   SM1-PST.COP   short.1   SM1-NEG-CFL-OM3-meet   3.ball
    'If s/he had been small, s/he would not have caught the ball.'

Firstly, *si-* is used in the negative infinitive in Kimakunduchi (36), in contrast to Standard Swahili, where the negative infinitive employs *to*(*a*)- (derived from *-toa* 'take out'; see Ashton 1947: 279f.; Mpiranya 2015: 58 and others), as in (37).

(36)   Kimakunduchi (Racine-Issa 2002: 117)

   ku-si-tembea

   INF-NEG-walk

   'not to walk'

(37)   Standard Swahili (Mpiranya 2015: 58)

   ku-to-ona

   INF-NEG-see

   'not to see'

Secondly, when expressing prohibition, subjunctive verbs can combine with either the negative marker *si-* (38a) or the independent negative marker *hebu* (38b) (Racine-Issa 2002: 115f.).[19] Standard Swahili uses *si-* in the same way but lacks an independent marker.

(38)   Kimakunduchi

   a.   *u-si-je*

      SM2SG-NEG-come.SBJV

      'Don't come.'

   b.   *hebu   u-je*

      PROH   SM2SG-come.SBJV

      'Don't come.'

4. The coding of finiteness

In Kimakunduchi, the second person singular and class 1 subject prefixes have the allomorphs, *ku-/u-* and *ka-/a-*, respectively (see also Racine-Issa 2002; Kipacha 2006). In (39), for example, *-chaka* 'want' takes the subject prefix *ka-*, while *-je* (the subjunctive form of *-ja* 'come') co-occurs with *a-*. Both *ka-* and *a-* refer to class 1 subjects. This situation also differs from that found in Standard Swahili.

(39)   Kimakunduchi

   ka-na-chaka   a-je   kuno

   SM1-IPFV-want   SM1-come.SBJV   DEM.PROX.17

   'S/he wants to come here, s/he is about to come here.'

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19. Kimakunduchi *hebu* can be analysed as a member of a class of modal words such as *lazima* 'obligation', *sheti* 'obligation', *bora* 'better', *-chaka* 'want', which all encode modality and are followed by subjective verb forms. Racine-Issa (2002: 115) assumes that *hebu* is derived from the defective verb *-ebu* 'need, want' (see also §5.2.2).

What previous studies overlooked is that the distribution of these allomorphs aligns with that of the negative prefixes (§3). The allomorphs of the subject prefixes and the negative prefixes therefore indicate that Kimakunduchi inflected verb forms can be divided into two classes.

Verb forms which can host the negative prefix *ha-* and the subject prefixes *ku-* and *ka-* can be the head of an independent declarative clause. When accompanied by negative *si-* and/or the subject prefixes *u-* and *a-*, verbs typically occur in dependent and/or non-declarative contexts.

In recent studies, finiteness, which has traditionally been viewed as a property of verbs, has been re-articulated as a clausal phenomenon which can secondarily be reflected on the verb (see Nikolaeva 2010: 4). Furthermore, it has been proposed that finiteness is not a binary distinction, but a scalar phenomenon (Givón 2001). Against this background, we propose that a similar degree of finiteness is coded by the negative and subject prefixes in Kimakunduchi. We thus use the term (non-)finite for the distinction signalled by the form of the two markers. The finite and non-finite forms in Kimakunduchi are summarised in Table 3.

Table 3 — Distribution of subject prefixes and negative prefixes in Kimakunduchi

		Subject Prefix	Negative Prefix
Finite	*na-*, *cha-* vc-stem	*ku-*, *ka-*	*ha-*
	me-	*ku-*, *ka-*	n.a.
	ja-, *li-*	n.a.	*ha-*
Non-Finite	*ka-*	*u-*, *a-*	n.a.
	nge-	*u-*, *a-*	*si-*
	Relative	*u-*, *a-*	*si-*
	Subjunctive	*u-*, *a-*	*si-*
	Infinitive	n.a.	*si-*

Note that the consecutive *ka*-form, categorised as non-finite, primarily occurs in dependent subordinate (i.e. conditional and consecutive) contexts (see also §2.4). However, it can appear in independent declarative clauses when occurring with the copula-derived persistive auxiliary *-ngali* (see also §5.2.4 and §6.1), which hosts the subject prefix *u-/a-*, the indicator of the non-finite form (40). These two non-finite forms may have acquired this conventionalised independent use as a result of their use in insubordination (cf. Evans 2007).

(40) Kimakunduchi

  a-ngali   *a-ka-tenda*   *kazi*

  SM1-PERS.COP   SM1-CONSC-do   work

  'S/he is still working.'

Although the use of different negative markers cannot necessarily be explained through reference to the notion of finite(ness), it is well-known that a number of Bantu languages employ different negative markers depending on the clause type (Güldemann 1999: 545). In contrast, to the best of our knowledge, the alternation of the subject prefixes in relation to finiteness has received little attention. However, in a number of Bantu languages, subject prefixes alternate depending on clause type (Kisseberth & Odden 2003: 68; Dom & Bostoen 2015: 179ff.; Doke & Mofokeng 1985: 186; M. A. Mokoaleli p.c.). Considering that the use of distinct agreement markers is a cross-linguistically possible way of coding finiteness (Cristofaro 2003: 281; 2007: 97; Nikolaeva 2010: 7), further research is needed to understand whether other Bantu languages also reflect finiteness through the form of the subject prefix, and whether the distribution of negative prefixes correlates with the allomorphs of the subject prefix.

5. Verb types

5.1 Inchoative and stative verbs

Some Bantu languages have a class of verbs which are typically used with a perfective verb form to express a present state (Botne 1983; 2010: 43ff.; Botne & Kershner 2000: 165f.; Fleisch 2000: chap. 3; Dom & Bostoen 2015: 172; Jerro 2017; Crane & Persohn 2019: 325-331; Kanijo 2019: 99-103 and others). In Kimakunduchi, such verbs can be divided into inchoative and stative verbs based on their aspectual features, while Standard Swahili lacks a class of stative verbs.

5.1.1 Inchoative verbs in Kimakunduchi

In both Standard Swahili and Kimakunduchi, a class of verbs encode reversible resultative states which presuppose a preceding transition into the state in question when inflected in the perfective form (cf. Dahl 1985: 133; Nedjalkov & Jaxontof 1988: 6). We call these inchoative verbs. Kimakunduchi inchoative verbs such as *-lala* 'fall asleep' in (41a) and *-shiba* 'get full' in (41b) can encode present states when inflected in the perfective vowel-copied form. This is exemplified by persistive *-ngali* (for a test using persistive expressions, see Nedjalkov & Jaxontof 1988: 36). Non-inchoative verbs like *-soma* 'read' in (41c) cannot co-occur with *-ngali* when inflected in the vowel-copied form.

(41)   Kimakunduchi

    a.   *a-ngali*   *ka-Ø-lal-a*
       SM1-PERS.COP SM1-PFV-fall_asleep-FV
       'S/he is still asleep.'

    b.   *a-ngali*   *ka-Ø-shib-i*
       SM1-PERS.COP SM1-PFV-get_full-FV
       'S/he is still full.'

    c.   (**a-ngali*)   *ka-Ø-som-o*
       SM1-PERS.COP SM1-PFV-read-FV
       'S/he read.' (Furumoto 2020a: 116)

While Kimakunduchi inchoative verbs can uniformly be prefixed with imperfective *na-*, they can be divided into two classes based on the aspectual characteristics of the *na*-inflection. When accompanied by *na-*, verbs expressing a perceptible change-of-state like *-lala* 'fall asleep' in (42a) can denote a transition in progress (progressive), an expected transition in the future and its repetitive occurrence on different occasions (habitual). In contrast, verbs like *-shiba* 'get full' in (42b), which express an imperceptible change-of-state, have a habitual reading only. In order to encode an ongoing change-of-state with such verbs, perfect *me-* is used in addition to *na-*, as in (42c) (see also §2.2.2).

(42)   Kimakunduchi

    a.   *ka-na-lala*
       SM1-IPFV-fall_asleep
       'S/he falls asleep (at the same time every day)./'S/he is lying down.'

    b.   *ka-na-shiba*
       SM1-IPFV-get_full
       '(Every time when s/he eats,) s/he gets full.'

    c.   *ka-me-na-shiba*
       SM1-PRF-IPFV-get_full
       'S/he has been getting full.'

5.1.2 A class of stative verbs in Kimakunduchi

The Kimakunduchi verbs, *-ijua* 'know', *-kaza* 'please' and *-chukia* 'displease' also express present states using perfective forms (illustrated by the vowel copy strategy in (43a)).[20] However, they are differentiated from in-

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20. In Kimakunduchi, the experiencer argument of the stative verbs *-kaza* 'please (like)' and *-chukia* 'displease (hate)' is realised as the object, and the theme argument is realised as the subject. In contrast,

choative verbs because of the incompatibility with imperfective *na-* (43b) (Furumoto 2019: 74).

(43)   Kimakunduchi

    a.   *ndizi*   *i-Ø-ṇ-chuki-i*

           9.banana   SM9-PFV-OM1SG-displease-FV

           'I hate bananas.' (Lit. 'Bananas are displeasing to me.')

    b.   **ndizi*   *i-na-ṇ-chuki-a*

           9.banana   SM9-IPFV-OM1SG-displease-FV

           Intended: 'I am coming to hate bananas.'

Here we call these stative verbs. Kimakunduchi stative verbs, unlike inchoative verbs, express stable states. Standard Swahili differs from Kimakunduchi in that it lacks a class of such stative verbs. Standard Swahili utilises imperfective *na-*, rather than perfective *me-* (44) in the context where the Kimakunduchi stative verbs appear in the perfective form and express stable states.

(44)   Standard Swahili (Furumoto 2019: 75)

    na-chukia   *ndizi*

    SM1SG.IPFV-hate   9.banana

    'I hate bananas.'

Persohn (2017: 135f.) noted that in Sukwa, Ndali and Nyakyusa, verbs covering stable states have similar morphosyntactic characteristics as other inchoative verbs, and few cues suggest a division between stative and inchoative verbs (cf. Kershner 2002; Botne 2008). His observation combined with our own in relation to the two Swahili varieties suggest that the aspectual features of verbs covering stable states and their aspectual classification varies between Bantu languages and is also a promising area for future microvariation research. Note that the aspectual characteristics of inchoative verbs in the imperfective form provide a clue about the incompatibility of imperfective *na-* with stative verbs. Inchoative verbs, when combined with *na-*, encode an ongoing change of state or repetitive occurrence of transition into states on different occasions (see also §5.1.1). If stative verbs can be inflected in the imperfective form, they would be expected to encode the same aspects as inchoative verbs. However, we know that transition into stable states is typically imperceptible and infrequent (see also Nedjalkov & Jaxontof 1988: 4). Assuming that Kimakunduchi

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the Standard Swahili counterparts (*-penda* 'like' and *-chukia* 'hate') take the experiencer as the subject and the theme as the object.

stative verbs had the same lexical aspect as inchoative verbs as in other Bantu languages, the imperceptibility and infrequency appear to have induced aspectual change of stative verbs; this change has been realised as the incompatibility with *na-*.

5.1.3 A list of Kimakunduchi inchoative and stative verbs

An extensive list of Kimakunduchi inchoative and stative verbs (including an idiomatic phrase *-uka wima* 'stand') is provided in (45) (see also Furumoto 2022: 44). Perfective forms of these verbs express present states and thus are compatible with the persistive auxiliary *-ngali* and the temporal adverbial *bado* 'still'.[21] Most individual Bantu languages still lack such detailed lists of different verb types which are needed for comparative studies (Nurse 2008: 97).

(45)   Kimakunduchi inchoative and stative verbs

    a.   Inchoative verbs (imperceptible)

        -chaga 'get angry', *-choka* 'get tired', *-dumba* 'agree', *-fwana* 'please', *-fanana* 'resemble', *-furahi* 'rejoice', *-lewa* 'get drunk', *-kacha* 'stiffen', *-koswa* 'get annoyed, angry', *-sahau* 'forget', *-shiba* 'get full', *-shugulika* 'get busy', *-tulia* 'get calm', *-umia* 'feel pain' *-wa* 'be (copula)'

    b.   Inchoative verbs (perceptible)

        -aga 'get lost', *-baki* 'remain', *-chanua* 'bloom', *-chuchʰama* 'squat down', *-chuchʰamia* 'stand on tiptoe', *-egemea* 'lean against', *-enda* 'go to', *-funga* 'tie, close', *-jaa* 'fill', *-ima* 'stop', *-kaa* 'take a seat', *-lala* 'fall asleep', *-tua* 'put', *-uka* 'leave', *-uka wima* 'stand', *-vwaa* 'put on (clothes)'

    c.   Stative verbs

        -ijua 'know', *-kaza* 'please (like)', *-chukia* 'displease (hate)'

5.2 Defective verbs

In Standard Swahili, only borrowed verbs, *-na* 'have' (derived from the comitative marker) and the so-called locative copula (cf. Marten 2013) do not follow the standard TAM paradigms for the language. For example, in present tense negation the final vowel of the verb typically changes from *-a* to *-i* (see §3.1). However, this does not happen with borrowed verbs which end in a vowel other than *-a* such as *-fahamu* 'understand', which instead retains the final *-u* (46).

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21. Kimakunduchi inchoative verbs express present states when inflected in the affirmative (but not the negative) perfective form. When inflected with perfective *li-* under negation, they denote temporally past events while at the same time indicating that the events in question have not actually occurred, and cannot co-occur with persistive expressions (see also Furumoto 2020a: 14 fn.).

(46)   Standard Swahili (Krifka 1995: 1399)

    a.   *wa-na-fahamu*

       SM2-IPFV-understand

       'They understand.'

    b.   *ha-wa-fahamu*

       NEG-SM2-understand

       'They do not understand.'

In Kimakunduchi, a wider range of verb types deviate from the regular inflectional pattern. These are examined in turn below. In general, defective verbs have a gap in the inflectional paradigm. We also introduce verbs which fill a particular column of the paradigm with a suppletive form as well as verbs which have additional inflectional forms and thus bigger inflectional paradigms than other verbs. The morphosyntactic idiosyncrasies of these Kimakunduchi verbs have not been extensively analysed in previous accounts.

5.2.1 The verb -*na* 'have' derived from the comitative marker

In order to express possession ('have'), Standard Swahili utilises -*na* 'have', derived from the comitative marker. While Standard Swahili -*na* can take the subject prefix in the same way as other verbs, as in (47a), it differs in that it does not host TAM markers directly. In order to encode TAM information, Standard Swahili employs the copula verb -(*ku*)*wa* (47b).[22] When -*na* occurs after -(*ku*)*wa*, the subject prefix does not necessarily appear, as in (47c).

(47)   Standard Swahili (Ashton 1947: 98, 144, 192)

    a.   *a-na*   *chakula*

       SM1-have   7.food

       'He has food.'

    b.   *nyoka*   *a-li-kuwa*   *a-na*   *miguu*

       1.snake   SM1-PST-COP SM1-have 4.legs

       '[T]he snake had legs.'

    c.   *a-li-kuwa*   *na*   *watoto*   *wengi*

       SM1-PST-COP have   2.children   many.2

       'He had many children.'

While Kimakunduchi -*na* 'have' has the same use as its cognate in Standard Swahili (48a)-(48b), it exhibits a difference in that it is optionally sub-

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22. In Standard Swahili, monosyllabic verbs such as the copula -*wa* are accompanied by the empty morph *ku*- when preceded by certain prefixes, though this is not always the case in Kimakunduchi.

ject to TAM inflection. For example, *-na* in Kimakunduchi can take certain TAM prefixes such as (probable) future marker *cha-* (48c). The final vowel can also appear in the subjunctive form *-e*, as in (48d). Considering that Kimakunduchi *-na* is more similar to other verbs than its Standard Swahili cognate, it seems to be at a later stage in the process of reanalysis as a verb.

(48)   Kimakunduchi

    a.   *ka-na   simu*
        SM1-have   phone
        'S/he has a phone.'

    b.   *ka-cha-wa   (ka-)na   simu*
        SM1-FUT-COP   SM1-have   phone
        'S/he will have a phone.'

    c.   *ka-cha-na   simu*
        SM1-FUT-have   phone
        'S/he will have a phone.'

    d.   *hamdu   h-ogo   heti*
        1.Hamdu(PN)   NEG.SM1-bathe   until
        a-ne   vyunyu   maungo-ni
        SM1-have.SBJV   marks_of_sweat   body-LOC
        'Hamdu does not bathe until he has marks of sweat on his body.'
        (Chum 1994: 25)

The verb-like features would allow us to categorise *-na* as a verb. However, Kimakunduchi *-na* can be considered as a defective verb because it cannot be inflected for either perfective (49b) or imperfective (50b).

(49)   Kimakunduchi

    a.   *ṃ-na   kisu*
        REL.SM1-have   7.knife
        'the one (person) who has a knife'

    b.   **mw-a-na   kisu*
        REL.SM1-PFV-have   7.knife
        Intended: 'The one (person) who had a knife'

(50)   Kimakunduchi

    a.   *ka-na   kisu*
        SM1-have   7.knife
        'S/he has a knife.'

    b.   *ka-na-na   kisu
         SM1-IPFV-have   7.knife
         Intended: 'S/he has a knife.'

Additionally, *-na* is incompatible with the object prefix, as can be seen in (51a). Instead, *-na* is followed by a bound pronoun that refers to the possessed item, as (51b) illustrates. This feature also indicates that *-na* is a defective verb.

(51)   Kimakunduchi

    a.   *kisu   ka-ki-na
         7.knife   SM1-OM7-have
         Intended: 'For the knife, s/he has it.'

    b.   *kisu*   *ka-na-cho*
         7.knife   SM1-have-PRO7
         'For the knife, s/he has it.'

5.2.2 *-ebu* 'need, want'

According to Johnson (1939: 131), Standard Swahili has the verb *hebu* 'like, be pleased', which is historically borrowed from Arabic. Though this verb may no longer actively be used in the standard variety, its cognate appears to have been retained in Kimakunduchi as the defective verb *-ebu* 'need, want' (Racine-Issa 2002: 222; cf. Sacleux 1909: 212). In Kimakunduchi, like in Standard Swahili, most borrowed verbs are accompanied by TAM prefixes, but these do not exhibit the associated change to the final vowel. The verb *-ebu* is not accompanied by any dedicated morphological TAM marker. It obligatorily co-occurs with the negative and subject prefixes, which are realised as the portmanteau *s(i)-* in (52a)-(52b). While Chum (1962-1963) provides an example of *-ebu* occurring without an object prefix (52a), our informant only accepted examples which include an object prefix, as in (52b) and rejected example (52a).[23] Note also that although this verb lacks most inflectional forms, it exhibits a passive form, as seen in (52c).

(52)   Kimakunduchi

    a.   *s-ebu*
         NEG.SM1SG-want
         'I don't like it.' (Chum 1962-1963: 54)

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23. The elaboration provided by one speaker is that *-ebu* 'need, want' might be used without an object prefix in neighbouring areas such as Paje.

b. *si-kw-ebu*

   NEG.SM1SG-OM2SG-want

   'I don't want you.'

c. *u-ka-wa   ṃkongwe   hw-ebugwa*

   SM2SG-COND-COP   old.1   NEG.SM2SG-want.PASS

   'Once you get old, you are no longer needed.'

5.2.3 *-ijua* 'know'

Kimakunduchi stative verbs are distinguished from other verb types in that they are incompatible with imperfective *na-* (see §5.1.2). As such, they are themselves a type of defective verb. However, the stative verb *-ijua* 'know' also lacks the finite perfective-marking forms. Specifically, *-ijua* does not employ the vowel-copying strategy, which expresses present states with other stative verbs, nor the perfective prefix *li-*, which occurs in the negative form (see also §2.2.1, §3.1 and §5.1.1). When denoting present states, the stem *-ijua* occurs without vowel copying and without a TAM prefix, as in (53a), while in its negative correspondent, the suppletive stem *-iji* is used instead of the prefix *li-*, as (53b) and (53c) show. Note that the stem *-iji* does not appear to have a segmentable final vowel (Racine-Issa 2002: 112).[24]

(53)   Kimakunduchi

   a. *ka-v-iju-a*

      SM1-OM8-know-FV

      'S/he knows that.' (Racine-Issa 2002: 110)

   b. *si-v-iji*

      NEG.SM1SG-OM8-know

      'I do not know that.'

   c. **si-li-v-iju-a*

      NEG.SM1SG-PFV-OM8-know-FV

      Intended: 'I do not know that.'

The morphological idiosyncrasy of *-ijua* with perfective marking is limited to the finite form. When it hosts the relativiser *mw-* and the perfective *a-*, *-ijua* denotes present states (54a). This inflectional pattern is the same as that of the other stative verbs such as *-chukia* 'hate' in (54b).

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24. As an anonymous reviewer pointed out, *-ijua* 'know' tends to occur with the object prefix, though our informants accepted its use without the object prefix. Furthermore, there is no restriction in terms of noun class of the co-occurring object prefix in contrast to, for example, the Mwani cognate verb which only hosts the object prefix of classes 1 and 2.

(54)   Kimakunduchi

    a.   *mw-a-v-ijua*

        REL.SM1-PFV-OM8-know

        'the one (person) who knows that'

    b.   *mw-a-ṇ-chukia*

        REL.SM1-PFV-OM1SG-hate

        'the one (person) whom I hate'

5.2.4 The copula *-wa*

When accompanied only by the subject prefix, the Kimakunduchi copula *-wa* can be used to introduce the property of the subject referent, as in (55a), or the location of the referent, as in (55b) (for more details of its use, see also Furumoto 2015; Furumoto 2022). Since the inflectional form of *-wa* shown in (55) lacks both the TAM prefix and final vowel alternation, it may be considered an irregular form (Racine-Issa 2002: 110). However, it can also be analysed as a perfective form. This analysis is compatible not only with the description that inchoative verbs encode present states in the perfective form (see §5.1.1) but also with the observation that *-Ca* form verbs like *-ja* 'come' encode perfectivity without stem modification (55c) (Furumoto 2015: 22f.).[25]

(55)   Kimakunduchi

    a.   *ka-Ø-wa*   *mwana* *ya*   *vivyo*   *kwa*   *vivyo*

        SM1-PFV-COP 1.child CONN.1 DEM.MED.8 CONN.17 DEM.MED.8

        'S/he is an extramarital child.' (Lit. 'S/he is a child of here and there.') (Issa 2018: 77)

    b.   *ka-Ø-wa*   *nyumba-ni*

        SM1-PFV-COP house-LOC

        'S/he is at home.'

    c.   *ka-Ø-ja*   *nyumba-ni*

        SM1-PFV-come house-LOC

        'S/he came home.'

A notable idiosyncrasy of the copula is its incompatibility with perfective *li-*, which occurs in the negative form (56a). Rather than appearing alongside *li-*, the copula uses the suppletive stem *-li* when expressing negative present states, as shown in (56b). Furthermore, *-li* can co-occur with the

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25. It is possible to explain the stem formation of monosyllabic verbs by revising the vowel copy rule. For more details, see Furumoto (2022: 33-37).

relativisers from class 8 -*vyo*, class 16 -*vo*, class 17 -*ko* and class 18 -*mo* (see also Racine-Issa 2002: 173). In (56c), -*li* combines with -*ko* as well as the subject prefix *a*- and is used to refer to the location of the subject of the relative clause (a person called Gwegwe). Note however, that the stem -*li* can transparently be seen to share its origin with the perfective *li*- (Nurse & Hinnebusch 1993: 412).

(56) Kimakunduchi

    a. **ha-li-wa*   *nyumba-ni*
        NEG.SM1-PFV-COP house-LOC
        Intended: 'S/he is not at home./S/he is not in the house.'

    b. *ha-li*   *nyumba-ni*
        NEG.SM1-COP house-LOC
        'S/he is not at home./S/he is not in the house.'

    c. *ŋ-ku-veleke*   *a-li-ko*   *gwegwe*
        SM1SG-OM2SG-bring.SBJV SM1-COP-REL17 1.Gwegwe(PN)
        'Can I take you to the place where Gwegwe is?'

In addition to the form with the stem -*li*, the Kimakunduchi copula has past and persistive suppletive forms, in which TAM marking and copula functions are packaged together: -*evu* and -*ngali*, respectively. These forms can be directly followed by locative phrases such *nyumba-ni* 'in the house' (57) in the same way as the -*wa* forms in (55b). Considering that locative phrases obligatorily require a copula in order to form a predicate, -*evu* and -*ngali* appear to have a copula function.

(57) Kimakunduchi

    a. *k-evu*   *nyumba-ni*
        SM1-PST.COP house-LOC
        'S/he was at home.'

    b. *a-ngali*   *nyumba-ni*
        SM1-PERS.COP house-LOC
        'S/he is still at home.'

Co-occurrence with the locative bound pronoun also characterises the copula (58a).[26] Note also the presence of the stem -*wa*. As can be seen in (58b),

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26. These bound pronouns are of the same shape as the medial contracted demonstrative (for more on the contracted demonstrative, see also Racine-Issa 2002: 59, 62, 69). However, the bound pronoun can be differentiated from the contracted demonstrative since they i) can be followed by a contracted form of the demonstrative and ii) can occur after the copula verb (including past -*evu* and persistive -*ngali*) but not after other verbs.

the corresponding negative form lacks the stem *-wa*, making it more similar to the locative copula in Standard Swahili (59).

(58) Kimakunduchi
    a. *tu-Ø-wa-vo*
       SM1PL-PFV-COP-PRO16
       'We are here.'
    b. *ha-tu-vo*
       NEG-SM1PL-PRO16
       'We are not here.'

(59) Standard Swahili
    (*ha-*)*tu-po*
    NEG-SM1PL-PRO16
    'We are (not) here.'

5.2.5 *-enda* 'go'

In Kimakunduchi, the initial vowel of some vowel-initial verbs exhibits vowel coalescence; the initial vowel is, at least on the surface, absorbed in the final syllable of the preceding morpheme (Racine-Issa 2002: 24-27, 47f., 79-91). The past copula *-evu* and *-enda* 'go' in (60a) are such forms, and thus in (60b), the class 1 subject prefix marking them does not realise as *ka-* but forms a single syllable *ke* with the initial vowel of the stem (i.e. *ka-* + *-e* > *ke*). Though this feature is also notable, what we highlight here is that *-enda* can appear without the first person singular subject prefix and the stem initial vowel. When co-occurring with consonant initial stems such as *-somo* in (60c) (the vowel-copied form of *-soma* 'read'), the shape of the first person singular subject prefix is *nyi-*. In contrast, when occurring before *-enda* in the vowel-copied form (60d) and in the subjunctive form (60e), this prefix merges with the stem-initial *e* (i.e. *nyi-* + *-e* > *nye*) and can optionally be omitted entirely as the parentheses in (60d) and (60e) suggest.

(60) Kimakunduchi
    a. *k-evu*   *k-Ø-ende*   *m̦ji-ni*
       SM1-PST.COP SM1-PFV-go town-LOC
       'S/he has gone to town.'
    b. *ka-Ø-tende* *kazi*
       SM1-PFV-do   work
       'S/he worked.'

    c. *nyi-Ø-somo*
       SM1SG-PFV-read
       'I read.'

    d. *ny-evu*   *(ny-Ø-e)nde*   *m̦ji-ni*
       SM1SG-PST.COP SM1SG-PFV-go town-LOC
       'I went to the town.'

    e. *na-chaka*   *(ny-e)nde*   *m̦ji-ni*
       SM1SG.IPFV-want SM1SG-go.SBJV town-LOC
       'I want to go to the town.'

Furthermore, *-enda*, unlike most other verbs, has an inflectional form which consists of the subject prefix and the stem ending with *-a* (61a). This form, although apparently similar to the perfective form of the copula *-wa* (see §5.2.4 and Racine-Issa 2002: 110), encodes progressive and habitual aspects in the same way as the imperfective form characterised with *na-* (61b). When referring to the first-person singular subject, the subject prefix and the initial vowel *e* are generally missing, as in (61c), although they optionally appear, as was noted by Racine-Issa (2002: 110).

(61) Kimakunduchi

    a. *k-enda*   *skuli*
       SM1-IPFV.go   school
       'S/he goes to school./S/he is going to school.'

    b. *ka-na-kw-enda*   *skuli*
       SM1-IPFV-KU-go   school
       'S/he goes to school./S/he is going to school.'

    c. *nda*   *uwanda-ni*
       SM1SG.IPFV.go field-LOC
       'I'm going to the field.' (Issa 2018: 26)

Notably, when the TAM prefix *na-* is not present, another constituent in the same clause is obligatorily required after the verb. This point is over-looked in most previous descriptions. In a range of Bantu languages, verbs exhibit the so-called conjoint/disjoint alternation. The conjoint form has to be followed by another constituent, whereas the disjoint form can occur in the final position of a clause (van der Wal & Hyman 2017). Against this background, it seems that *-enda* in Kimakunduchi shows the conjoint/dis-joint distinction.

5.2.6 Accounting for the irregularity from a diachronic perspective

Thus far, we have described defective verbs in Kimakunduchi. While some irregularities such as the incompatibility of imperfective *na-* and stative verbs may be attributed to the semantic properties (as discussed in §5.1.1), others seem to be remnants of diachronic change. For example, *-wa* 'be (copula)' and *-ijua* 'know' are incompatible with perfective *li-*. Conceivably, this is not because there is a semantic inconsistency between the prefix and the verb but because old forms (e.g. *-li* 'be (copula)', *-iji* 'know') are retained as suppletive forms and have not been replaced with more regular forms.

Based on the observation of Western Bantu languages, Good (2020) proposes that epenthetic vowels as well as postverbal TAMP-coding elements in Bantu have gradually emerged and become integrated into the end of verbs as the segmental final vowel. This means that the application of the final vowel was restricted to a class of verbs in an earlier stage of the development and this restriction has been lost as a result of levelling. The lack of the inflectional final vowel in the above-mentioned Kimakunduchi old forms (e.g. *-li* 'be (copula)', *-iji* 'know') can therefore be viewed as a reflection of the selectivity of the final vowel in an earlier stage.

The development of the final vowel in Kimakunduchi *-na* 'have' also provides valuable insights. The final vowel *-a* can alternate with subjunctive *-e*, even though *-na*, which has its origins in the comitative marker, did not originally have a segmentable final vowel. This alternation suggests that reanalysis is a possible way of the inflectional final vowel developing.

6. Auxiliaries and uncategorised TAM markers

In Kimakunduchi and Standard Swahili, TAM information is primarily encoded through a combination of verbal inflection markers (i.e. prefixation and final vowel alternation, see §2). In both varieties, however, periphrastic markers are also involved in TAM coding. One class of markers is derived from the copula verb (see also §5.2.4), whereas others are lexical verbs in the process of grammaticalisation. Even though they do not necessarily share morphosyntactic features and seem not to constitute a single word class, we refer to them here as "auxiliaries" (cf. Gibson forthcoming). The copula-derived auxiliaries typically co-occur with the finite form of verbs. This does not hold for the non-copula forms.

6.1 Copula-derived forms

Standard Swahili and Kimakunduchi both have auxiliaries derived from the copula verb. In (62), the copula *-wa* occurs with *-lala* 'fall asleep' and hosts the future prefix *ta-*.

(62)   Standard Swahili (Ashton 1947: 251)

   u-si-po-kuja   *mapema*

   SM2SG-NEG-REL16-come   early

   ni-ta-kuwa   *ni-me-lala*

   SM1SG-FUT-COP   SM1SG-PFV-fall_asleep

   'Unless you come early, I shall be asleep.'

In (63a), the copula *-wa* is combined with the future (probable) marker *cha-* and functions as an auxiliary, while in (63b) and (63c), the suppletive forms of the copula (see §5.2.4), past *-evu* and persistive *-ngali*, appear as auxiliaries, co-occurring with verbs inflected with imperfective *na-*.

(63)   Kimakunduchi (Racine-Issa 2002: 138, 139, 172)

   a.   *ku-cha-wa*   *ku-na-uṃwa*

        SM2SG-FUT-COP   SM2SG-IPFV-hurt.PASS

        'Probably you are suffering.'

   b.   *k-evu*   *ka-na-lima*

        SM1-PST.COP   SM1-IPFV-cultivate

        'He was cultivating.'

   c.   *wa-ngali*   *wa-na-vuna*

        SM2-PERS.COP   SM2-IPFV-harvest

        'They are still harvesting.'

In Kimakunduchi, at least two of these copula-derived auxiliary forms can co-occur (64).

(64)   Kimakunduchi

   a.   *k-evu*   *a-ngali*   *ka-na-soma*

        SM1-PST.COP   SM1-PERS.COP   SM1-IPFV-read

        'S/he was still reading.'

   b.   *ka-cha-wa*   *k-evu*   *ka-na-soma*

        SM1-FUT-COP   SM1-PST.COP   SM1-IPFV-study

        'S/he was probably reading.'

   c.   *ka-cha-wa*   *a-ngali*   *ka-na-soma*

        SM1-FUT-COP   SM1-PERS.COP   SM1-IPFV-study

        'S/he is probably still reading.'

Note that the order of these auxiliaries cannot be changed; the aspect marker (*-ngali*) occurs closest to the finite verb, preceded by the tense mark-

er (*-evu*), and by the modality marker (*-cha-wa*). This is reminiscent of Bybee's (1985: 34f., 196) observation of the cross-linguistic tendency in relation to the order of inflectional morphemes. According to Bybee (1985), mood tends to be expressed at the periphery of words, whereas aspect information tends to be coded closer to the stem; tense markers occur between mood and aspect markers. Kimakunduchi auxiliaries appear to conform to this cross-linguistic tendency.

The co-occurrence of auxiliaries has received more attention in the descriptions of Southern African Bantu languages, than those of East African Bantu languages (cf. Gibson forthcoming). However, similar combinations of auxiliaries are reported in the Standard Swahili grammar by Ashton (1947; see also Schadeberg 1992: 34f.). In Standard Swahili, the lexical verb following multiple auxiliaries appears in the infinitival form, as can be seen in (65).

(65)   Standard Swahili (Ashton 1947: 270)

    a.   *a-li-kuwa*   *a-ngali*   *ku-soma*
        SM1-PST-COP   SM1-PERS.COP   INF-read
        'He was still reading.'

    b.   *a-ta-kuwa*   *a-ngali*   *ku-soma*
        SM1-FUT-COP   SM1-PERS.COP   INF-read
        'He will be still reading.'

6.2 The non-copula forms

In Kimakunduchi, a class of verbs can be followed by an unprefixed stem of other verbs (see also Racine-Issa 2002: 126ff.). Specifically, verbs following *-isa* 'finish' and *-aza* 'start' can optionally be accompanied by the infinitive prefix *ku-*, whereas verbs following *-ja* 'come' and *-enda* 'go' cannot be prefixed with *ku-*. In (66), examples of *-aza* and *-ja* are shown.

(66)   Kimakunduchi

    a.   *k-Ø-aza-(ku-)zunguṃza*
        SM1-PFV-start-INF-chat
        'S/he started to chat.'

    b.   *ke-me-ja(*ku-)vika*
        SM1-PRF-come-INF-cook
        'S/he has come to cook.'

Kimakunduchi *-isa* 'finish' and *-ja* 'come', which appear as the first component of a multiple verb construction, have grammaticalised to mark

TAM information. While their cognates in Standard Swahili can also serve to encode TAM information, there are formal and functional differences between the two varieties. In addition to these two verbs, Kimakunduchi *-chaka* and Standard Swahili *-taka* 'desire, want' can also function as a TAM marker. These volitional verbs are followed by lexical verbs in the infinitive or subjunctive form.

6.2.1 The completive marker derived from the verb 'finish'

For Kimakunduchi *-isa*, the vowel-copied perfective stem *-isi* seems to be in the process of being reanalysed as the completive prefix *si-* (see also Furumoto 2019: 80f.; cf. Miyazaki & Takemura 2019: 55). This is indicated by the alternation of *nyi* and *ṇ*, which appear in the initial position of the inflected form referring to the first-person singular subject. This alternation is possible when *-(i)si* occurs before the stem of another verb, as in (67), but not when *-(i)si* is followed by a noun, as in (68).

(67)   Kimakunduchi

   a.   *nyi-si-lya*   *vyakulya*
        SM1SG-COMPL-eat   foods
        'I have finished eating foods.'

   b.   *ṇ-si-lya*   *vyakulya*
        SM1SG-COMPL-eat   foods
        'I have finished eating foods.'

(68)   Kimakunduchi

   a.   *ny-Ø-isi*   *vyakulya*
        SM1SG-PFV-finish   foods
        'I have finished (to eat) foods.'

   b.   **ṇ-Ø-si*   *vyakulya*
        SM1SG-PFV-finish   foods
        Intended: 'I have finished (to eat) foods.'

In Kimakunduchi, a class of vowel-initial verbs blur the morpheme boundary since their initial vowel is fused with the final syllable of the preceding morpheme (see also §5.2.5). Assuming that the alternation of *nyi* with *ṇ* is possible only when *nyi* is analysed as a single morpheme, as in (69), there appears to be a morpheme boundary between *ny* and *i* in (68a). In contrast, in (67), the morpheme boundary changes in accordance with the syllable boundary and *nyi-* and *si-* are interpreted as separate morphemes.

(69) Kimakunduchi

  a. *nyi-Ø-somo*

    SM1SG-PFV-read

    'I read.'

  b. *n̩-Ø-somo*

    SM1SG-PFV-read

    'I read.'

Standard Swahili *-isha* 'finish' is clearly cognate with Kimakunduchi *-isa*. The form *-isha* has also developed into the completive marker *sha-*. For the change from *-isha* to *sha-*, Marten (1998) proposes that *-isha* and the conditional prefix *ki-* are jointly reanalysed to yield the aspectual marker *ki+i-sha* (70a), following which *sha-* alone started to be used with the perfective marker *me-* (70b). The form was subsequently reduced to *sha-* (70c).

(70) Standard Swahili (Marten 1998: 141, 143)

  a. *u-ki-sha-fika*   *mombasa*

    SM2SG-COND-COMPL-arrive Mombasa(PN)

    'If/When/Once you have arrived in Mombasa, ...'

  b. *a-me-sha-imba*

    SM1-PFV-COMPL-sing

    'S/he has already sung.'

  c. *ni-sha-fahamu*

    SM1SG-COMPL-understand

    'I have already understood.'

Both Kimakunduchi *-isa* and Standard Swahili *-isha* 'finish' have developed into completive markers, albeit along different pathways of change. Standard Swahili *sha-* seems to have emerged as result of the reduction of compound forms such as *ki-sha-* and *me-sha-*, whereas Kimakunduchi *si-* can be traced back to the vowel-copied stem *-isi*. If Marten's (1998) proposal and our current proposal are correct, there are several possible paths of development for the two forms into completive markers.

  The prefix *sha-* has also grammaticalised in Kipemba and Kitumbatu, other Swahili dialects in Zanzibar (Whiteley 1958; Miyazaki & Takemura 2019). Since these dialects lack *me-* and *ki-*, it is likely that *sha-* in these varieties also developed through a different path of change. Note that according to a speaker in Zanzibar City, the use of *sha-* is associated with "dialectal" or "street" Swahili. Therefore, it seems less likely that *sha-* in Kitumbatu and Kipemba has been borrowed from the standard variety.

6.2.2 The tense-marking function of *-ja* 'come'

According to Ashton (1947: 272f.), *-ja* 'come' in Standard Swahili, "used as an auxiliary verb, refers to an action to take place at an implied time in the near or distant future". The perfect prefix *ja-*, which appears under negation, as in (71a), is also probably derived from the cognate verb (Nurse & Hinnebusch 1993: 375, 410f.). The perfect prefix is followed by an unprefixed stem. In contrast, when denoting future, *-ja* is morphologically independent of the following lexical verb, as in (71b).

(71)   Standard Swahili (Ashton 1947: 273, 274)

    a.   *ha-ja-fika*
        NEG.SM1-PRF-arrive
        'He has not yet arrived.'

    b.   *na-jua*   *tu-ta-pata*   *fedha*
        SM1SG.IPFV-know   SM1PL-FUT-get   money
        halafu   *tu-ta-kuja*   *tu-ta-tumia*
        then   SM1PL-FUT-come   SM1PL-FUT-use
        'I know we shall get some money, then later on we will use it.'

In Kimakunduchi, *-ja* 'come' followed by an unprefixed verb stem refers to both future and past situations (Furumoto 2020a). Specifically, when *-ja* occurs with the perfective markers it indicates past perfective, whereas when it occurs with other TAM markers it encodes future certainty (see also §2.3). This is with the exception of the perfect prefixes such as *me-*. Immobile subjects such as *nyumba ino* 'this house' can occur with *-ja* in both the perfective (72a) and imperfective (72b) forms. In contrast, when prefixed with perfect *me-*, *-ja* refers to spatial movement and thus cannot co-occur with an immobile subject, such as *nyumba ino* (72c).

(72)   Kimakunduchi (Furumoto 2020a: 104, 105, 127)

    a.   *nyumba*   *ino*   *ha-i-li-ja-bomoka*
        9.house   DEM.PROX.9   NEG-SM9-PFV-come-break.NEU
        'This house did not collapse.' (Lit. 'This house did not "come to" collapse.')

    b.   *nyumba*   *ino*   *i-na-ja-bomoka*
        9.house   DEM.PROX.9   SM9-IPFV-come-break.NEU
        'This house will collapse.' (Lit. 'This house will "come to" collapse.')

    c.   **nyumba*   *ino*   *i-me-ja-bomoka*
        9.house   DEM.PROX.9   SM9-PRF-come-break.NEU
        Intended: 'This house has "come to" collapse.'

6.2.3 The prospective marker derived from the verb 'desire, want'

The verbs *-taka* and *-chaka*, derived from the Proto-Bantu *-càk- 'desire, want', are found in both Standard Swahili and Kimakunduchi alongside the prefixes *ta-* and *cha-* (see §2.3). These verbs are used to convey their original volitional meaning and to encode prospective aspect (for Standard Swahili, see Ashton 1947: 36, 277). They can therefore occur with non-volitional inanimate subjects, as in (73) and (74a), where they are followed by the lexical verbs in the infinitive form. Note that Kimakunduchi *-chaka* can encode prospective aspect even when followed by verbs in the subjunctive form, as in (74b).

(73)   Standard Swahili (Ashton 1947: 36)

       ngoma   i-na-taka   ku-pasuka

       9.drum   SM9-IPFV-want   INF-split

       'The drum is about to split.'

(74)   Kimakunduchi

    a.   *gari   i-na-chaka   ku-uka*

       9.car   SM9-IPFV-want   INF-leave

       'The car is about to leave.'

    b.   *gari   i-na-chaka   i-uke*

       9.car   SM9-IPFV-want   SM9-leave.SBJV

       'The car is about to leave.'

6.3 Co-occurrence with the consecutive form

Thus far, we have shown that in Kimakunduchi, the copula-derived auxiliaries are typically followed by finite verbs which encode TAM information independently of the co-occurring auxiliary. In contrast, other auxiliaries tend to occur with lexical verbs without TAM markers.

In Kimakunduchi, the consecutive *ka-* form is categorised as non-finite (see §4). However, it can occur with past *-evu* and persistive *-ngali*, derived from the suppletive forms of the copula verb (75a)-(75b). This does not hold for the copula-derived auxiliaries including the stem *-wa* (75c).

(75)   Kimakunduchi

    a.   *k-evu   a-ka-tenda   kazi*

       SM1-PST.COP   SM1-CONSC-do   work

       'S/he was working.'

    b.   *a-ngali   a-ka-tenda   kazi*

       SM1-PERS.COP   SM1-CONSC-do   work

       'S/he is still working.'

   c. *ka-cha-wa   a-ka-tenda   kazi
       SM1-FUT-COP   SM1-CONSC-do   work
       Intended: 'S/he will be working.'

The co-occurrence with the consecutive form is not restricted to -*evu* and
-*ngali*. Perfective prefixes such as *li-* in (76) can also be followed by the
ka-form when combined with -*ja* 'come', which has grammaticalised into
a tense marker (see also §6.2.2).

 (76) Kimakunduchi (Furumoto 2020a: 127)

       ha-li-ja   *a-ka-vika*
       NEG.SM1-PFV-come   SM1-CONSC-cook
       'S/he was not cooking./S/he used not to cook.'

Furthermore, when co-occurring with imperfective *na-*, perfect *me-* can be
followed by either an unprefixed stem (see §2.2.2) or by a verb prefixed
with *ka-*, as in (77).

 (77) Kimakunduchi
       ke-me-na   *a-ka-vika*
       SM1-PRF-IPFV   SM1-CONSC-cook
       'S/he has been cooking.'

Notably, these combinations are primarily used to express imperfective
situations (see also Furumoto 2020a: 129f.). Assuming that consecutive
ka-, which can also express perfective situations (see (22)), is aspectually
underspecified, then imperfectivity is associated with the construction in-
cluding an auxiliary and a verb in the consecutive form, rather than with
a particular morpheme such as *ka-*. In other words, the auxiliary and the
following lexical verb, which both host inflectional prefixes, appear to be
separate but cannot be analysed separately in terms of TAM marking; they
are formally independent but functionally dependent.

    The reason why Kimakunduchi has such a complex construction is still
unclear. A possible hypothesis is that auxiliaries occurring in this construc-
tion are at an intermediate stage of the development from an independent
into a bound TAM marker. However, further investigation of the develop-
ment of auxiliaries in Bantu would be needed.

7. Relative clause morphology
For relative clause formation, Standard Swahili and Kimakunduchi again
appear to be similar and both have relative clauses which are primarily

realised through prefixation on the verb. However, there are also notable differences in terms of the form of the relative clause prefix, accompanying TAM prefixes and the independent relative clause marker, which is formed by a combination of a verb with the relative clause prefix. Kimakunduchi has also developed the attributive linker using this prefix.

7.1 Relative clause formation through a verbal prefix

In order to form a relative clause, both Standard Swahili and Kimakunduchi employ a verbal prefix, which occurs just after the TAM prefix slot. This can be seen in (78) and (79), where the relative clause is formed through the presence of the relative marker *o-*.[27]

(78)   Standard Swahili (Ashton 1947: 111)
   watu   wa-na-o-soma
   2.people   SM2-IPFV-REL2-read
   'people who are reading'

(79)   Kimakunduchi (Whiteley 1959: 64)
   wanak^hele   wa-na-o-tenda   usheza
   2.children   SM2-IPFV-REL2-do   play
   'the children who are playing'

This relative clause marker can occur either before or after the stem. When it follows the stem, the verb appears without a TAM prefix, as in (80) and (81). Standard Swahili seems to apply this strategy to any verb. In Kimakunduchi, only *-na* 'have' and the suppletive stem *-li* of the copula verb can host the relative clause marker after the stem (see also §5.2.1 and §5.2.4).

(80)   Standard Swahili (Ashton 1947: 111)
   m̩t^hu   a-soma-ye
   1.person   SM1-read-REL1
   'a man who reads'

(81)   Kimakunduchi
   a.   *n̩-ku-veleke   a-li-ko   gwegwe*
       SM1SG-OM2SG-bring.SBJV   SM1-COP-REL17   1.Gwegwe(PN)
       'Can I take you to the place where Gwegwe is?'

_____

27. The relative clause prefix is formally identical to the bound pronoun occurring after *-na* 'have' in the finite form (see §5.2.1). Diachronically these can be traced back to the same origin, but synchronically they need to be distinguished since they occur in different morphosyntactic environments.

b. *kisu   a-na-cho*
7.knife   SM1-have-REL7
'the knife s/he has'

In Kimakunduchi, like in Standard Swahili, the relative clause prefix can occur after the TAM slot for the formation of first/second person singular and class 1 subject relative clauses (82a). In this context, however, there is a preference for the prefix *m̩-*, which occurs in the same slot as the subject prefix to be used (82b). The presence of this prefix *m̩-* also distinguishes Kimakunduchi from Standard Swahili.

(82) Kimakunduchi

a. *mie   n̩-na-e-tenda   kazi   ino*
PRO.1SG   SM1SG-IPFV-REL1-do   9.work   DEM.PROX.9
'I who am doing this work'

b. *mie   m̩-na-tenda   kazi   ino*
PRO.1SG   REL.SM1-IPFV-do   9.work   DEM.PROX.9
'I who am doing this work' (Whiteley 1959: 64)

7.2. Co-occurrence of TAM prefixes

In Standard Swahili, past *li-*, imperfective *na-* and future *taka-* can occur before the relative clause prefix (Ashton 1947: 110; Schadeberg 1992: 33). Kimakunduchi, on the other hand, can use imperfective *na-*, future (probable) *cha-* and perfect *me-* in the relativised form of verbs (83a)-(83b) (Racine-Issa 2002: 153-161).[28] Furthermore, Kimakunduchi encodes perfective using Ø- and *a-* (Furumoto 2020a). The zero morph Ø- can be assumed to occur between the subject prefix and the relative clause prefix, as in (83c), whereas *a-* joins with *m̩* in the fused form *mw-a-*, as in (83d). To sum up, in Kimakunduchi unlike in Standard Swahili, the relativised form of verbs can distinguish TAM information in a parallel way with the finite affirmative form.

(83) Kimakunduchi

a. *wanafuzi   a-me-o-wa-somesha*
2.student   SM1-PRF-REL2-OM2-teach
'the students whom he has taught' (Racine-Issa 2002: 161)

———

28. According to our informant, *me-* optionally alternates with *ne-* when verbs are relativised with the prefix *m̩-*.

    b. *ṃ-me-tenda   kazi*

        REL.SM1-PRF-do   work

        'the one who has done work'

    c. *jishetani   li-Ø-lyo-kwea   ujiti*

        5.devil   SM5-PFV-REL5-climb   tree

        'the devil who climbed the tree'

    d. *mw-a-kuja   nani*

        REL.SM1-PFV-come   who

        'Who is the one that came?' (Whiteley 1959: 51)

The co-occurrence of *me-* with the relative clause prefix, as in (83a), may also provide insights into the origin of Kimakunduchi *me-*. Notably, *me-* can co-occur with the relative clause prefix even in some Northern Swahili varieties (Nurse 1982b: 119; Nurse & Hinnebusch 1993: 408, 517). For the origin of Kimakunduchi *me-*, Güldemann (2003: 187) proposes that *me-* came to Kimakunduchi from the Northern Dialects by way of Kiunguja, which forms the basis of Standard Swahili. However, considering the resemblance between the morphological features of *me-* and relative clause formation, the possibility that Kimakunduchi borrowed *me-* directly from Northern Swahili may also need to be considered (see also Miehe 1979: 225-230; Nurse & Hinnebusch 1993: 418; Furumoto 2019: 83f.).

    In the relativised form of verbs, negation is realised through the prefix *si-*, as can be seen in the examples below (see also §3.2). The negative *si-* can co-occur with *cha-*, as in (84c) and (84d), but not with other TAM prefixes. When combining negation with TAM information other than probability, a periphrastic strategy, described in the following section, is employed.

(84) Kimakunduchi

    a. *ki-si-cho-vatika   leo*

        SM7-NEG-REL7-get.NEU   today

        'something which is not available today' (Chum 1994: 85)

    b. *ṃ-si-soma   ha-cha-vata   cheo*

        REL.SM1-NEG-study   NEG.SM1-FUT-get   post

        'Whoever does not study will not take up a post.' (Racine-Issa 2002: 153)

    c. *a-(si-)cha-e-tenda   kazi*

        SM1-NEG-FUT-REL1-do   work

        'the one (person) who will (not) work'

d. *ṃ-(si-)cha-tenda   kazi*
    REL.SM1-NEG-FUT-do   work
    'the one (person) who will (not) work'

7.3 The independent relative clause marker

Standard Swahili has the independent relative clause marker, *amba-*, de-
rived from the verb 'say' (Ashton 1947: 113f.; Schadeberg 1989; Mpiranya
2015: 71ff.). In a similar way to verb stems, *amba-* is followed by the rel-
ative clause marker. In (85), for example, *amba-* is combined with class 7
cho- agreeing with *kitabu* 'book'.

(85) Standard Swahili (Schadeberg 1989: 36)
      kitabu   amba-cho   ha-ki-ja-fika
      7.book   REL-REL7   NEG-SM7-PFV-arrive
      'the book which has not yet arrived'

As described in §7.2, the occurrence of the relative clause-forming prefixes
is restricted to particular TAM prefixes. TAM prefixes such as perfective
ja- in (85) can only be embedded in a relative clause by using the inde-
pendent relative clause marker.

 Unlike Standard Swahili, Kimakunduchi lacks the *amba-*marker. In-
stead, it has developed an independent relative clause marker from the
copula verb *-wa*. The following examples show that when marked with
a relative clause prefix, the Kimakunduchi copula verb *-wa* can function
either as the verb of relativised copular clauses (86a) or as an independent
relative clause marker (86b). Note that according to Yoneda (2021: 443f.),
the Standard Swahili *amba-*marker obligatorily requires an antecedent. In
contrast, the Kimakunduchi copula-derived marker can appear without an
antecedent.

(86) Kimakunduchi
      a. *ṃ-cha-wa   nyumba-ni*
          REL.SM1-FUT-COP   house-LOC
          'the one who will be at home'
      b. *ṃ-cha-wa   ka-Ø-seme   uongo*
          REL.SM1-FUT-COP   SM1-PFV-tell   lie
          'the one who will have told a lie' (Racine-Issa 2002: 156)

The copula-derived relative clause marker, which exhibits TAM inflection,
can encode additional TAM information. For example, when *-wa* hosts

cha- it encodes the future (86b). When inflected in the perfective form as in (87), however, the copula does not convey additional TAM information and thus can be used in a parallel way to Standard Swahili *amba-*; it only serves to form a relative clause.

(87) Kimakunduchi

    mw-a-wa   *ha-ja-dungwa*

    REL.SM1-PFV-COP NEG.SM1-PRF-kick_out

    ha-tambuu   *mbio*

    NEG.SM1-understand   act_of_running

    'The one who has not yet encountered trouble does not recognise trouble as trouble.' (Lit. 'The one who has not (yet) been kicked out does not know how to run away.')

Kimakunduchi has a relative clause prefix which appears after the TAM prefix (see §7.2). Even when accompanied by this, the copula functions as a relative clause marker (88).

(88) Kimakunduchi

    duka   *li-Ø-lyo-wa*   *ha-li-ja-fungwa*

    5.shop   SM5-PFV-REL5-COP NEG-SM5-PRF-close.PASS

    'the shop which has not (yet) been closed'

Note that the subject prefix slot of the copula-derived relativiser can be filled not only with the prefix agreeing with the subject but also with that agreeing with the antecedent. In (89a), *-wa* hosts the class 1 subject prefix corresponding to the subject in the relative clause, but in (89b), its subject prefix slot is filled with class 3 marker *u-*, which refers to the relativised object. This alternation appears to occur as free variation; there seems to be no semantic difference between the two forms and no other factors seem to control the formal difference.

(89) Kimakunduchi

   a. *ṃchuzi* *a-Ø-o-wa*   *ka-Ø-viki*   *mama*

       3.soup   SM1-PFV-REL3-COP SM1-PFV-cook 1.mother

       'the soup which mother cooked'

   b. *ṃchuzi* *u-Ø-o-wa*   *ka-Ø-viki*   *mama*

       3.soup   SM3-PFV-REL3-COP SM1-PFV-cook 1.mother

       'the soup which mother cooked'

The use of copula verbs for relative clause formation has received little attention in the related typological studies of Bantu languages (Henderson

2006; Downing & Marten 2019; Guérois & Creissels 2020). However, this strategy appears not to be restricted to Kimakunduchi. Nurse & Hinnebusch (1993: 407) note that in Pokomo, *-i*, derived from Proto-Bantu *-dì 'be', forms a relative clause together with a verb in the infinitive form, whereas Petzell & Aunio (2019: 588) describe that in Kami, relative clauses can be formed with the verb *ku-kal-a* 'to be, remain, sit'. These observations suggest that copula verbs in Bantu languages tend to develop to relative clause markers.

7.4 The attributive linker

In Kimakunduchi, adverbial adjectives[29] (90a) and locative phrases (90b) mandatorily require the relativised copula when modifying nouns. In this environment, the stem *-wa* of the copula is optional, as the parentheses in the examples below indicate.

(90)   Kimakunduchi

   a.   *duka*   *li-Ø-lyo(-wa)*   *wazi*
        5.shop   SM5-PFV-REL5-COP   open
        'the shop which is open'

   b.   *duka*   *li-Ø-lyo(-wa)*   *barabara-ni*
        5.shop   SM5-PFV-REL5-COP   street-LOC
        'the shop which is in the street'

The copula verb can be employed to embed the finite form of verbs in the relative clause (as discussed in §7.3). When the finite verb follows the copula, the stem *-wa* is obligatorily required (91a) and cannot be omitted (91b).

(91)   Kimakunduchi

   a.   *duka*   *li-Ø-lyo-wa*   *ha-li-ja-fungwa*
        5.shop   SM5-PFV-REL5-COP   NEG-SM5-PRF-close.PASS
        'The shop which has not (yet) been closed'

   b.   **duka*   *li-Ø-lyo*   *ha-li-ja-fungwa*
        5.shop   SM5-PFV-REL5   NEG-SM5-PRF-close.PASS
        Intended: 'The shop which has not (yet) been closed'

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29. The term "adverbial adjective" is borrowed from Mpiranya (2015). Though Mpiranya distinguishes adverbial adjectives from adverbial nouns, here they are commonly referred to by the same label. In Kimakunduchi, adverbial adjectives differ from other adjectives in that they 1) obligatorily require the copula verb for predication, 2) obligatorily require the relativised copula verb or the linker when modifying nouns, 3) do not change their form in accordance with noun class membership, and 4) can modify verbal predicates (see also Furumoto 2015; 2022).

More generally, the copula has two grammatical functions when accompanied by the relative clause and perfective prefixes: one is to form relative clauses together with finite verbs and another is to link modifiers with the head noun. The above examples indicate that the omission of the stem is possible only when the copula has the latter function. Based on this observation, we propose that the copula is in the process of grammaticalisation into an attributive linker; more precisely, the form lacking the stem -*wa* is analysed as the linker because it can co-occur with attributive expressions such as nouns and adjectives but not with finite verbs. The optional presence of the stem is interpreted as indicative of a diachronic change in progress.

Whiteley (1959) presents examples illustrating the use of the linker. In (92a), the linker is composed of the class 10 subject and relative clause prefixes, while example (92b) shows that the relative clause prefix *mw-*, which occurs in the subject prefix slot (see §7.1), can also function as the linker together with the perfective prefix *a-*.

(92)   Kimakunduchi (Whiteley 1959: 68, 69)

    a.   *nazi*   *zivi*   *zi-Ø-zo*   *nzuri*

        10.coconuts   which.10   SM10-PFV-REL10   good.10

        'Which coconuts are good?'

    b.   *ṃtʰu*   *yuno*   *mw-a*   *mwalimu*

        1.person   DEM.PROX.1   REL.SM1-PFV   1.teacher

        sheti   *a-tende*   *kazi*   *nyingi*

        obligation   SM1-do.SBJV   9.work   many.9

        'The man who is a teacher must work hard.'

Previously, these forms have been analysed as relativisers rather than linkers (cf. Nurse & Hinnebusch 1993: 395). This is probably due to the observation that these forms include the relative clause prefix and that they have not previously been analysed in light of their emergence as a result of the formal reduction of the copula, nor that there is a restriction on the following constituent.

With the exception of adverbial adjectives, Kimakunduchi adjectives do not require the linker when modifying nouns, as in (93a) and (93b). This feature is notable, considering that the linker in Setswana obligatorily occurs between a noun and an adjective (Creissels 2014: 85).

(93)   Kimakunduchi

    a.   *duka*   (*li-Ø-lyo*)   *dogo*
        5.shop   SM5-PFV-REL5   small.5
        'the shop which is small/the small shop'

    b.   *mwanakʰele*   (*mw-a*)   *m̩dogo*
        1.child   REL.SM1-PFV   small.1
        'the child who is small/the small child'

While in most cases, the meaning of noun phrases including an adjective does not change depending on the presence of the linker, the meaning of idiomatic phrases such as *m̩ke m̩dogo* 'mistress' in (94a) is in opposition to phrases with the linker, which are semantically compositional, as in (94b).

(94)   Kimakunduchi

    a.   *m̩ke*   *m̩dogo*
        1.wife   small.1
        'mistress/second wife' (Lit. 'small wife')

    b.   *m̩ke*   *mw-a*   *m̩dogo*
        1.wife   REL.SM1-PFV-COP   small.1
        'the small/young wife'

8. Summary and conclusions

The paper has examined two closely related varieties of Swahili – Standard Swahili and Kimakunduchi. The goal of the paper was to explore features of Kimakunduchi morphosyntax and to provide a comparative perspective on this variety, against the wider backdrop of Swahili morphosyntax. Overall, we have shown that there are broad areas of similarity between the two varieties but also a degree of microvariation.

We first focused on verbal inflection. Most TAM markers in the two varieties share formal features and origins, but they do not necessarily cover the same functional range. In general terms, Standard Swahili and Kimakunduchi have developed distinct TAM systems. To encode negation, the two varieties use the same prefixes. However, they differ in terms of TAM markers accompanying the negative prefixes, the presence of the independent negative marker and the formal and/or functional symmetry between the affirmative and negative TAM paradigms. For the coding of finiteness, the two varieties both alternate the negative prefixes, but the use of the allomorphs of the subject prefix is restricted to Kimakunduchi.

Second, we showed that Kimakunduchi has a distinct class of inchoative and stative verbs, as well as a distinct class of defective verbs. Stand-

ard Swahili does not have such a class of stative verbs. For defective verbs, we described Kimakunduchi verbs for which there is either a gap in the paradigm, those fill a column in the paradigm with a suppletive form, and those have a larger paradigm than other verbs. Most of their Standard Swahili cognates do not exhibit such irregular inflectional patterns.

Third, we described periphrastic and uncategorised TAM markers as auxiliaries. Kimakunduchi is similar to Standard Swahili because auxiliaries can be divided into two classes depending on whether they are derived from the copula verb or not. In addition to basic information, we described the co-occurrence of multiple auxiliaries, which is possible in Kimakunduchi as well as in Standard Swahili and noted that Kimakunduchi non-copula auxiliaries, derived from lexical verbs, exhibit different grammaticalisation patterns from their Standard Swahili cognates.

Finally, we re-examined relative clause formation. While Kimakunduchi uses the same relative clause prefix as the standard variety, it differs from Standard Swahili in terms of the accompanying TAM prefixes and the presence of the prefix used for the formation of first/second person singular and class 1 subject relative clauses. Furthermore, Kimakunduchi has developed the copula-derived independent relative clause marker, which is used in almost the same context as the Standard Swahili independent marker, derived from *amba- 'say'. The presence of the attributive linker, derived from the relativised copula, also differentiates Kimakunduchi from Standard Swahili.

The last decade has seen a significant growth in studies examining microvariation in Bantu languages – that is small-scale, fine-grained differences between closely related languages or varieties (see e.g. Guérois, Gibson & Marten 2017; Bloom Ström & Petzell forthcoming; Mtenje-Mkochi forthcoming). In addition to furthering our understanding of the morphosyntax of Kimakunduchi as an erstwhile under-described variety, we have also contributed to the body of work which adopts this comparative microvariation approach when examining Bantu languages. This study has shed light on the following features through the description and comparison of the Swahili varieties: the certainty associated with future markers, allomorphs of the subject prefix and the relation between these and clause type, the presence of a class of stative verbs and the presence of copula-derived relative clause markers as well as linkers. These domains of variation can potentially be used for cross-linguistic comparison of Bantu languages. The study has also shown that examining microvariation can provide new insights to our understanding of processes and pathways of diachronic change. For example, the data from Kimakunduchi suggests that vowel copying with negation can follow a diachronic path from habitual to future, while the behaviour of de-

fective verbs also provides insights into the development of the inflectional final vowel both in Swahili and across Bantu.

We focused on the verbal domain since this is an area in which the variation found between the two languages could be studied in a systematic manner. However, future avenues for investigation could include the extension of the comparison to other aspects of morphosyntax to reveal other domains of convergence or divergence. An interesting question in this regard is whether the microvariation found in the verbal domain is similar or different to the levels of microvariation found in other aspects of the grammar of these two varieties, as well as how these differences can be contextualised within our knowledge of variation within the Bantu language family more broadly.

Abbreviations

CFL	counterfactual
COM	comitative
COMPL	completive
COND	conditional
CONN	connective
CONSC	consecutive
COP	copula
DEM	demonstrative
DIST	distal
FUT	future
FV	final vowel
HAB	habitual
INF	infinitive
IPFV	imperfective
LOC	locative
MED	medial
NEG	negative
NEU	neuter
OM	object marker
PASS	passive
PERS	persistive
PFV	perfective
PL	plural

PN	proper noun
PRF	perfect
PRO	pronoun
PROH	prohibition
PROX	proximal
PRS	present
PST	past
REFL	reflexive
REL	relative clause marker
SBJV	subjunctive
SG	singular
SM	subject marker
VC	vowel copy

Acknowledgments

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