Two Verbal Plurals in Endo-Marakwet: A Corpus-Study

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Abstract. The Kalenjin languages (Southern Nilotic, Kenya) have two verbal suffixes with an unclear interpretation and distribution. Their been common meaning has characterised as '(as)sociative', 'contemporative', 'plural', 'reciprocal', 'repetitive' and their difference as aspectual ('perfective' versus 'imperfective'). This article uses data from the New Testament translation in one of the Kalenjin languages, Endo-Marakwet, to argue that both suffixes $(-y\bar{o} \text{ and } -s\bar{o}\bar{o}t)$ are optional markers of the *plurality* of the verb's subject and that $-s\bar{o}\bar{o}t$ differs from $-v\bar{o}$ in having incorporated imperfective aspect. This conclusion contributes to a more complete understanding of the diversity of plural marking in Kalenjin and across languages more generally.

Keywords: Kalenjin, Endo-Marakwet, Verbal Morphology, Plurals, Kenya

Languages: Endo-Marakwet

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1.0 Introducing $-y\bar{o}$ and $-t\bar{o}\bar{o}s$

There are two verbal suffixes in the Kalenjin languages with the same sort of meaning. (1) gives two Cherang'any examples from Mietzner (2016, pp. 142–143), with the morphemes in question both glossed as con 'contemporative', following Rottland (1982, p. 127), while assuming an aspectual contrast, following Creider & Creider (1989, p. 94):^{2,3}

(1)	a.	kù-cʻʻəl-yi	cúút	òéŋú	[]
		3-scared-CON	DEM	two	[]
		'The other two were hor	rified []].'	(perfective)
	b.	ki-sòmón-dóós-ii			
		1PL-read-CON-IPFV			
		'we study together'			(imperfective)

Other terms used are 'sociative' (Rottland, 1982, p. 127), 'associative' (Creider & Creider, 1989, p. 94), and 'reciprocal' (Bii, 2014, p. 16).⁴ Authors transcribe the suffixes in different ways; in line with what follows, we render the suffixes with the vowels \bar{o} and $\bar{o}\bar{o}$, with a macron for advanced tongue root, abstracting away from additional phonological aspects.

However, these and other authors touch upon these two morphemes only very briefly. Jerono, Chelimo, Chebet & Chepkirui (2014) mention $-to\bar{os}$ (glossed as com) only briefly in a discussion about passive in Southern

¹ This work was supported by the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation programme (grant agreement No. 742204, *Forests and trees: The formal semantics of collective categorization*). The first author did linguistic fieldwork on Endo-Marakwet between 1997 and 2002 in the context of a Bible translation project of BTL/SIL, building on work that was started by Iver Larsen. The data about plural suffixes in the present article were collected in the first part of 2022 in the context of the sufpporting theoretical project about collective categorization. We gratefully acknowledge the helpful comments of an anonymous reviewer on an earlier version of this paper.

² Cherang'any is part of the Marakwet cluster (Rottland, 1983), to which Endo-Marakwet also belongs. The main other Kalenjin languages besides these two are Keiyo, Kipsigis, Nandi, Pökoot, Sabaot, Terik, Tugen (Rottland, 1982).

³ Abbreviations in glosses: 1, 2, 3 = first/second/third, APPL = applicative, CON = contemporative, DEF = definite, DAT = dative, DEM = demonstrative, DP = distant past, IMP = imperative, IPFV = imperfective, INTR = intransitive, NEG = negation, NOM = nominaliser, PL = plural, PURP = purpose, REL = relativiser, RP = recent past, SG = singular, STAT = stative, TH = theme vowel, TOP = topic.

⁴ An unpublished lexical database of Endo-Marakwet compiled by Iver Larsen and expanded by the first author between 1997 and 2002 labels $-y\bar{o}$ as 'plural subject' and $-s\bar{o}\bar{o}t$ as 'repetitive'. The rationale for those labels can not be recovered anymore, but, as we will argue later on, repetitive effects with $-s\bar{o}\bar{o}t$ are best seen as a consequence of its imperfective aspect.

Nilotic; Jerono (2019) has examples with $-y\bar{o}$ (glossed as 3pl) in a study of Tugen motion verbs. In the absence of a thorough empirical study it remains largely unclear what role the two suffixes are playing and what distinguishes them from each other. This article intends to contribute to our insight in the domain of verbal plurality by a corpus-based study of these two suffixes in Endo-Marakwet (EM), the northern variety of Marakwet (Rottland, 1983). We will conclude that these suffixes mark the plurality of the subject of the verb, that one of the two suffixes has incorporated imperfective aspect, and that this largely accounts for their properties.

After an explanation of the corpus and the identification of the morphemes in it (\S 2), we characterise their semantics (\S 3) and their morphological differences (\S 4), and conclude with remaining issues (\S 5).

2.0 Identifying $-y\bar{o}$ and $-s\bar{o}\bar{o}t$

The data in this paper data come from the New Testament in EM (Bible Translation and Literacy, 2008), which presents a relatively large corpus with many relevant tokens of both morphemes, in context.⁵ Clearly, a translation, and a translation of the Bible in particular, does not count as the most natural text. The source language might influence the target text and what we learn from this corpus might then not be representative for the language. However, this is not a concern for the morphemes that we are studying. These morphemes do not directly translate something from a source text, but their introduction is motivated by properties of the target language. But even then, it seems wise to treat the language of this translation as a *doculect* that approximates the more abstract linguistic entity referred to as Endo-Marakwet. With the appropriate care, Bible translations, and parallel corpora in general, can play a role in typology for broader comparisons (Cysouw & Wälchli, 2007). What is special about the present study is that it uses the Bible translation of one language as a corpus for a

⁵ This translation can be found online on <u>https://marakwetlanguage.com/read-marakwet-bible-online</u>, but for this study we used the flat text file that is part of the JHU Bible Corpus (McCarthy et al., 2020). The earlier BTL translation of the New Testament in Sabaot (completed in 1997) was taken as an example for the Endo-Marakwet translation. Note that the translation itself uses the more general name *Marakwet* for what is strictly speaking only the northern variety, called *Endo-Marakwet* here. The translation shows the distinguishing phonological features that Rottland (1983) identified for that variety. We find *kas* 'harvest' (not *kes*), *laang'* 'climb' (not *laany*), *teek* 'build' (not *teech*), *pka* 'swell' (not *pwa*), *nyariil* 'green' (not *nyaliil*), *ra* 'bad' (not *ya*), *tuurin* 'darkness' (not *tuuin*), *laakwa* 'child' (not *leekwa*).

more in-depth analysis of one phenomenon in that language. Two relevant corpus examples are given in (2).⁶

(2) a. *ku-kwōng*'-yō kiineetan-ik 3-be.surprised-CON₁ disciple.PL-DEF 'the disciples were surprised' (Luke 24:41)

> b. riir-soot pi-choochēē cry-CON₂ people-those 'those people cry' (Revelation 18:15)

We largely follow the orthography of the Bible translation, which is like Swahili for the consonants, but which uses double vowel characters for long vowels and the macron for advanced tongue root (+ATR) on the mid vowels \bar{e} and $\bar{e}\bar{e}$ and \bar{o} and $\bar{o}\bar{o}$ and the short low vowel \bar{a} . +ATR is not indicated on the high vowels i(i) and u(u) and long $\bar{a}\bar{a}$ is written (and pronounced) as *oo*. Tone is not directly marked in the orthography.⁷ What is added in this paper are hyphens for morpheme segmentation (without an attempt to make the underlying forms of morphemes explicit). The morphemes are glossed as $con_1 (-y\bar{o})$ and $con_2 (-s\bar{o}\bar{o}t)$, even though we will ultimately conclude that 'contemporative' is not a good label. Interestingly, what is reported as $-t\bar{o}\bar{o}s$ for some other Kalenjin languages, is $-s\bar{o}\bar{o}t$ in the EM corpus (and never $-t\bar{o}\bar{o}s$). We have found the form $-s\bar{o}\bar{o}t$ also in Keiyo, Pökoot, and northern Tugen. We set this puzzling fact aside here, as well as the question whether this results from metathesis or something else.⁸

The morpheme $-s\bar{o}\bar{o}t$ is unique and invariant in the EM corpus, which makes it straightforward to identify its 264 tokens, combining with 42 different verb types. It usually combines directly with an intransitive verb root (3a), but there is an additional initial *-ii-* when the verb root is transitive (3b) [77 tokens with 10 verb types]. What was the object in the verb *ir* 'do' is promoted to subject in *ir-iisoot* 'happen' in a passive-like way ('happen' < 'be done'), but there is never a subject.⁹

(3)	a. <i>nyāril-sōōt</i>	pi-choochēē
	suffer-CON ₂	people-those
	'those people suff	fer' (Revelation 20:10)

⁶ Obviously, these EM examples might differ lexically and grammatically from the way other Kalenjin languages express this.

⁷ Tone marks nouns in nominative and verbs in the impersonal construction. In the Endo-Marakwet orthography, these are represented by : and /, respectively, but left out here.

⁸ Rottland's comparative work on the Kalenjin languages mentions only $-t\bar{o}\bar{o}s$ and does not offer a reconstruction of the Proto-Kalenjin form of this suffix.

⁹ There is one instance of *iisyōōt* in the corpus, in the verb *tēpiisyōōt*, with the letter y, that is otherwise *tēpiisōōt*.

b. *ir-iisōōt* ng'al-e-e-chu do-CON₂ word.PL-TH-DEF-these 'these things happen' (Luke 1:20)

c. āko-o-choom-soōt and-2PL-love-CON₂
'and you love each other' (Ephesians 4:2)

The verb *choom* in (3c) is a special case in this respect. It can not just be an allomorph of the transitive verb *cham* 'love', because then we would still expect the suffix to be *-iisoot* (**choomiisoot*). On the other hand, if it is glossed as 'love', then it is not a straightforward intransitive verb either. We will return to this verb in §3.

The subject (implicit or explicit) of these $s\bar{o}\bar{o}t$ -predicates is always plural. There is an example where this subject is 'discontinuous': the predicate $m\bar{a}chooms\bar{o}\bar{o}t$ 'agree' in (4a) does seem to have a singular subject (headed by *chiich* 'person') in topic position, before *ku*, but the 'remnant' of the subject in (4b) is in a postverbal position, introduced by $nk\bar{o}\bar{o}$ 'and, with'.¹⁰

(4) a. <i>chiich</i>	nyoo	mā-ting'-ēy	Т	ku	mā-choom-sōōt		
person	REL.SG	NEG-have-IPFV	Н	top	$NEG-love-CON_2$		
'the person who does not have the Spirit does not agree'							

b. <i>nkōō</i>	tukun	choo	pkoon-ēē	wōloo	mii	Т
and/with	thing.PL	REL.PL	come.PL-APPL	where	be	Η
' with th	ne things	that come	e from the Spirit'	(1 Corint	hians 2	2:14)

There is also an example where the subject is grammatically singular, but semantically plural, i.e., a collective noun, $k\bar{o}\bar{o}kw\bar{o}$ 'council'.

(5) <i>nyoo</i>	kii-tuu-sōōt	kōōkwo-o	Areeyopaakō				
REL.SG	DP-meet-CON ₂	council-of	Areopagus				
'where the council of the Areapagus met' (Acts 17:19)							

Identifying $-y\bar{o}$ is much more difficult because of its allomorphy and its phonological overlap with other morphemes. It is impossible to identify the tokens of this suffix with one single search and without further manual inspection. We need to take into account that $-y\bar{o}$ is also realized as $-ch\bar{o}$ (6a) and $-ny\bar{o}$ (6b) after particular consonants and as $-\bar{o}$ after specific verbs (6c), and that its vowel can coalesce with the vowel of the next suffix (7)¹¹:

¹⁰ T and H abbreviate *Toomirmiir nyoo Tiliil* and 'Holy Spirit', respectively.

¹¹ The basic pattern is that the glide *y* assimilates in manner to preceding consonants, becoming the nasal *ny* after nasals and the plosive *ch* after plosives. However, the allomorphy is not entirely predictable, since we have also *ch* after nasals ($p\bar{o}\bar{o}t\bar{a}n-ch\bar{o}$). When followed by another vowel, the \bar{o} can become \bar{e} , as in example (7), but also *o* in other examples (e.g., *poor-yo-ot* 'fight'). The allomorphy also seems to vary across Kalenjin

- (6) a. piryoon(g')-chō 'be satisfied (pl.)', pōōtān-chō 'tremble (pl.)' tuup-chō 'be brothers', sāp-chō 'live (pl.)' (but also sāp-yō)
 - b. choom-nyō 'agree', chuunchuun-nyō 'disagree'

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c. mēēr-ō 'die (pl.)'
(cf. kōr-yō 'blind (pl.)', lār-yō 'burn (pl.)', riir-yō 'mourn (pl.)', etc.)
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(7) a. so-o-poor-yē-ē
PURP-2PL-fight-CON1-IMP
'[...] so that you fight' (Acts 7:26)
b. poor-yo-ot
fight- CON1-NOM
'fighting' (Matthew 24:6)
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We also need to be aware of various false hits, like $k\bar{a}rtiity\bar{o}$ 'coldness', $p\bar{a}yp\bar{a}y\bar{o}$ 'happy (pl.)', $sikiry\bar{e}\bar{e}$ 'the donkey', Iskaryoot 'Iscariot'. Nevertheless, we have been able to determine that $-y\bar{o}$ occurs a total of 1092 times with 37 different verbs, which is much higher token frequency than the 187 occurrences of $-s\bar{o}\bar{o}t$. The reason is that $-y\bar{o}$, but not $-s\bar{o}\bar{o}t$, can be followed by other suffixes (as we will see in more detail in §3), which allows for some frequent nominalisations (especially *choomnyoot* 'love' and *pooryoot* 'war') and that the importance of brotherhood in the New Testament makes *tuupchō* very frequent.

The string *iisy* presents another difficulty. There is an intransitive or antipassive suffix *-iisyō* that allows transitive verbs to be used without an object and that can be used with both singular (8a) and plural (8b) subjects.¹²

(8) a. *i-nēēt-iisyō* nkōō oor nyoo chuulaat 2SG-teach-INTR in way REL.SG straight 'you teach (something) in a straight way' (Titus 2:7)

b. *ā-mo-o-wār-iisyō*and-NEG-2PL-fear-INTR
'and you do not fear (something)' (1 Peter 3:14)

But *-iisyō* in (9a) is different. Here the string *iisyō* can not be the intransitivising suffix intr ('the guards turned (something)', with the object still implicitly present), but the situation is like (9b), with an object promoted to subject in an anticausative way ('guards/people (re)turn', i.e., 'turn themselves').

(9) a. ku-wārāk-iisyō	askari-ik
3-turn-CON ₁	guard.PL-DEF
'The guards returned	d' (Acts 23:32)

dialects and sometimes the initial glide is more stable, as in Tugen, for instance.

¹² See Jerono (2018) for an analysis of this suffix in Tugen as antipassive.

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b. <i>paani</i>	wārāk-iisōōt	kaaw	pichoochēē
when	turn-CON ₂	home	people-those
'When th	nose people returne	ed home' (Ma	tthew 2:12)

This suggests the parallelism between the plural suffixes $-(iis)s\bar{o}\bar{o}t$ and $-(iis)y\bar{o}$ in (10), maybe with a role for a shared suffix *-iis* in making the verb root intransitive in the appropriate way.

(10)		con ₁	con ₂
	intransitive	-yō	-sōōt
	transitive	-iis(-)yō	-iis(-)sōōt

The methodological problem is that the distinction between intransitive $-iisy\bar{o}$ and plural $-iisy\bar{o}$ can only be made after carefully studying each example, like we did with (9a). As a result of the different difficulties with $-iisy\bar{o}$, it is not feasible to extract the set of all relevant tokens of this morpheme from the corpus, so we will work opportunistically but carefully with what we can find.

As with $-s\bar{o}\bar{o}t$, the subjects of $-y\bar{o}$ -verbs seem always to be plural. One important class of exceptions concerns verbs with $-y\bar{o}$ that are inherently plural (see also §3), including *chuumnyo* 'agree', *tuuyo* 'meet', *pēēsyo* 'disperse', and *tēēniityo* 'be the same'. These verbs have transitive alternants (*chuumnyo* 'cause to agree, reconcile', *tuuyo* 'cause to meet, combine' and *pēēsyo* 'cause to disperse, split', *tēēniityo* 'make equal, compare') that clearly have no plural requirement on the grammatical subject:

- (11) a. *kii-kuu-choom-ny-ook* Iriin $\bar{a}k\bar{o}\bar{o}$ inyeentee DP-3-reconcile-CON₁-2PL God with him(self) 'God has reconciled you with himself' (Colossians 1:22)
 - b. *ki-yoo kaa-kuu-tuu-yō Iriin nyuun ku mēē-pēēs-yō chiich* thing-REL RP-3-join-CON₁ God then top NEG-split-CON₁ person 'What God has joined together then, let man not separate.' (Mark 10:9)

c. kuu-tēēniit-yō	keey	nkōō	Iriin
3-make.equal-CON ₁	self	with	God
'He (Jesus) made himself	equal wi	ith God' (.	John 5:18)

Iriin 'God' in (11a) is the one who causes *-ook* 'you (plural)' and *inyeentee* 'himself' to love or agree with each other. *Iriin* and *chiich* 'a person' in (11b) are the singular causers of events in which plural themes (namely a man and a woman) meet and disperse, respectively. In (11c) the grammatical subject is Jesus, but the object refers to the plurality consisting of Jesus (*keey*) and God (*Iriin*).

3.0 Characterising $-y\bar{o}$ and $-s\bar{o}\bar{o}t$

Given what earlier authors have written about their meanings ('(as)sociative', 'contemporative', 'reciprocal'), we might wonder whether $-s\bar{o}\bar{o}t$ and $-y\bar{o}$ do indeed express anything more than that the subject is plural. Are the subject referents all involved in the event of the verb at the same time? Are they involved in the event 'together', spatially, socially, or psychologically?¹³ In fact, this does not seem to be necessary. The dead in (12a), intended generically, clearly did not die at the same time ('contemporative').¹⁴ The suffering people in (12b), also meant generically, are not necessarily suffering 'together' ('(as)sociative').¹⁵

(12) a. <i>r</i>	па	Iriin-to-o	piich	choo	kii-ku-n	ıēēr-ō
Ν	VEG	God-TH-of	people	REL.PL	DP-3-di	e-CON ₁
د	He is not	the God of the d	ead (= peo	ople who have die	ed)' (Luke	20:38)
				-		
b	ākoo-pko	ot-ēy	$mp\bar{o}$	akwaaneek	choo	nyāril-sōōt
	and.2PL-r	emember-IPFV	also	3pl	REL.PL	suffer-CON ₂
'And remember also those who are suffering' (Hebrews 13:3)						

Of course, there are also examples that are clearly reciprocal or collective (13).

(13) a. choom-nyō/-sōōt	'love each other'
b. <i>chuunchuun-nyō/-sōōt</i>	'disagree'
c. <i>pēēs-yō</i>	'disperse'
d. poor-yō/-sōōt	'fight'
e. <i>tēēniit-yō</i>	'be equal'
f. <i>tuup-chō</i>	'be brothers' (< <i>tuup</i> 'follow')
g. tuu-yō/-sōōt	'meet'

These verbs can be seen as 'inherent' plurals. The verb root does not exist without the plural suffix (or only in a meaning from which the plural verb has drifted away). There are a few nominalisations of $y\bar{o}$ -verbs in the corpus with the suffix *-at* and these are all from this class: *choomnyoot* 'love', *pēēsyoot* 'separation', *pooryoot* 'war', *tuuyoot* 'meeting'. This confirms the

¹³ Rottland (1982, p. 127): "Das Suffix drückt aus, daß eine Handlung von mehreren Personen gleichzeitig und in gleicher Weise vollzogen wird, was im Ergebnis zu einem gemeinschaftlichen Verhalten führen kann." (The suffix expresses that an action is performed by multiple persons simultaneously and in the same way, what can lead to a collective performance in the event.)

¹⁴ The context makes clear that the dead are Abraham, Isaac, and Jacob.

¹⁵ Hebrews 13:1-3 in the ESV, with the relevant part underlined: "Let brotherly love continue. Do not neglect to shows hospitality to strangers, for thereby some have entertained angels unawares. <u>Remember</u> those who are in prison, as though in prison with them, and <u>those who are mistreated</u>, since you also are in the body." These adhortations clearly involve individual people at different occasions who need love, hospitality, and care, at the present, but also in the future.

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lexicalised nature of the forms in (13), as does the possibility to have the transitive, causative alternants that we saw in (11).

The suffixes $-s\bar{o}\bar{o}t$ and $-y\bar{o}$ have no relation to a 'stative' category. As the examples throughout this paper show, these suffixes are possible with verbs of any Aktionsart, not just stative verbs (like $s\bar{a}p$ 'live'), but also activities (*poor* 'fight'), accomplishments ($m\bar{e}\bar{e}r$ 'die'), and achievements (*tuuy* 'meet'). There is also no reason to categorise the 'plural' situation that the derived verb describes as stative because sentences with $-s\bar{o}\bar{o}t$ and $-y\bar{o}$ typically involve some change over time.

There are suggestions in the literature that $-s\bar{o}\bar{o}t$ and $-y\bar{o}$ have an animate (or even human) restriction. Rottland (1982, p. 127) talks about *Personen* 'persons' and Mietzner (2016, p. 143) writes: "Human partipants are the basis for the use of the contemporative. When describing a simultaneous use or act of non-human participants, the instrumental is used". However, although animate subjects are most frequent in the data set, examples like (14) attest to the existence of inanimate (14ab) and non-human (14cde) examples (and similar examples are possible in the varieties of the two Kalenjin-speaking authors).¹⁶

(14) a. <i>paani</i> when 'When the grapes w	<i>kā-rur-yō</i> RP-ripen-CON ₁ were ripe' (Mark	grape-PL-D		
ti nen the grupes t	(intuition of the second secon	12.2)		
b. <i>ki-lār-sōōt</i>	teereer tisap			
DP-burn-CON ₂	-			
'Seven torches we	re burning' (Rev	elation 4:5)		
	Û X	,		
c. kii-mā-choo-sōōt	tukuu-choochēē	Ī		
DP-NEG-tire-CON ₂	things-those			
'Those creatures of	did not get tired'	(Revelation 4	1:8)	
d. <i>mā-mēēr-sōōt</i>	kuut-yey			
NEG-die-CON ₂	worm-PL			
'The worms will	not die' (Mark 9	:48)		
e. toomirmiir-ōō-ch		L J		nchōō-sōōt
spirit-PL.DF-those			OP DP-	scream-CON ₂
'Those evil spirit	s screamed' (Luk	te 4:41)		

We conclude that $-s\bar{o}\bar{o}t$ and $-y\bar{o}$ are best characterised as plural verbal suffixes, i.e. suffixes that mark the plurality of the subject of the verb. The suffixes do not seem to work like obligatory agreement markers, given

¹⁶ Anthropomorphic personification is not required to make this possible. There are of course cases where an inanimate object is metaphorically presented in an animate way, as in example (16a) below.

that we find (15a) and (15bc) side by side, without and with the plural marker:¹⁷

- (15) a. *ku-kwōng*' *piich tōkōl* 3-be.amazed people all 'all the people were amazed' (Mark 7:37)
 - b. ku- $kw\bar{o}ng'$ - $y\bar{o}$ piich chaa chaang' 3-be.amazed-CON₁ people REL.PL many 'many people were amazed' (Matthew 9:33)
 - c. ki- $t\bar{a}$ -ku- $kw\bar{o}ng$ '- $s\bar{o}\bar{o}t$ piich $t\bar{o}k\bar{o}l$ DP-still-3-be.amazed-CON₂ people all 'all the people were still amazed' (Luke 9:43)

Another argument against treating these plural suffixes as agreement morphology is that $-y\bar{o}$ can be part of a more complex adjective that shows itself plural agreement:

- (16) a. *kor-in* choo sāp-y-oot-ēēn stone-PL REL.PL live-CON₁-STAT-PL 'living stones' (1 Peter 2:5)
 - b. *piich choo mnyoon-ch-oot-ēēn* people REL.PL sick-CON₁-STAT-PL 'sick people' (Mark 2:17)

The suffix *-aat* (vowel-harmonized as *-oot* here) derives the adjectives $s\bar{a}pyoot$ 'alive, living' and *mnyoonchoot* 'sick' from the plural verbs $s\bar{a}py\bar{o}$ 'to live' and *mnyooncho* 'be sick', respectively. Number agreement is expressed on the relative pronoun *choo* and also through the suffix *-een* on the adjective. This makes it less natural to see the embedded *-yo* as an agreement marker, because agreement tends to be at the edge.

We conclude, therefore, that $-s\bar{o}\bar{o}t$ and $-y\bar{o}$ derive *plural verbs*, which we understand here as verbs that have semantically plural subjects. There are also *non-derived* plural verbs in EM; the verbs for 'come' and 'go' have different roots for singular and plural.

(17)		singular	plural	
	'come'	$char{o}ar{o}$	pka	
	ʻgo'	wō	pa	

¹⁷ We were not able to detect a clear difference that $-y\bar{o}$ in (15b) might make compared to (15a). One of the authors had the impression that (15b) implies that the people were surprised 'in unison' and the people in (15a) at different times, but such a contrast is not supported by the contexts, which are both about a crowd becoming amazed about one miracle. There is a clear aspectual contrast with (15c), which is clearly imperfective, referring to a situation of amazement that is still ('phase' prefix *ta*-) going on. More about this contrast in §3.

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Crucially, the singular allomorphs $ch\bar{o}\bar{o}$ and $w\bar{o}$ never occur with either $-s\bar{o}\bar{o}t$ or $-y\bar{o}$, which strongly suggests that these suffixes derive the same type of plural verbs that already exist for 'come' and 'go' as non-derived roots.

Note that in the literature the notion of verbal plurality is typically used for situations with multiple *events*, possibly with one single participant, e.g. a person performing the same type of action multiple times (e.g., Corbett, 2000). We have not found such cases in our corpus. On the other hand, we have found examples where $-y\bar{o}$ and $-s\bar{o}\bar{o}t$ are used with *single* events, with verbs like $p\bar{e}\bar{e}sy\bar{o}$ 'separate' and *tuuyo* 'meet', but there is always a plurality of participants involved.

4.0 Distinguishing $-y\bar{o}$ and $-s\bar{o}\bar{o}t$

We know now what $-s\bar{o}\bar{o}t$ and $-y\bar{o}$ have in common, but what is the difference between them? One possibility is that $-(ii)s\bar{o}\bar{o}t$ and $-(iis)y\bar{o}$ combine with different verbs. The existence of quite a few verbs that go with both suffixes (18) makes this unlikely.¹⁸

(18) chaas 'be tired', char 'divide', choom- 'love (each other)', chuun 'wander', chuunchuun 'disagree', iit 'count', ir 'do', 'be strong', kwong' 'be surprised', lar 'burn', meer 'die', mar 'germinate', mnyaan 'be sick', nareek 'be sad', nchoo 'scream', ng'at 'break', ng'eet 'stand up', ng'waal 'limp', nyaril 'suffer', poor- 'fight', pet 'get lost', piit 'grow', pol 'shout', pookit 'be drunk', put 'fall', riir 'cry', ru 'sleep', ryaang' 'stand', sap/sop 'heal, live', tep 'sit', tuu 'meet', warak 'turn', yaam 'dry up'

As is clear from (18), both suffixes occur with a mixed class of verbs, including both stative and dynamic verbs, and unergative and unaccusative verbs. If there is a difference between $-(ii)s\bar{o}\bar{o}t$ and $-(iis)y\bar{o}$, it can not be in the type of verbs they select. We can, however, observe a clear difference when we compare the morphology of the words constructed with $-(ii)s\bar{o}\bar{o}t$ and $-(iis)y\bar{o}$. In contrast to $-(iis)y\bar{o}$, as shown in (19), $-(ii)s\bar{o}\bar{o}t$ is never followed by another suffix in the corpus of the EM New Testament.

(19) a. *poor-y-oot* fight-CON₁-NOM 'fight'

> b. *ku-sop-y-oot-ēēn* 1PL-live-CON₁-STAT-PL 'we will live' (Romans 6:8)

¹⁸ In fact, it seems that any verb that can occur with one suffix can also occur with the other suffix. This is not clear from the EM corpus, but this was our impression for a varied list of intransitive verbs in Tugen. For instance, even though the EM corpus features $p\bar{e}\bar{e}s$ - $y\bar{o}$ 'separate', but not $p\bar{e}\bar{s}$ - $s\bar{o}\bar{o}t$, this combination does exist.

c. kuu-ryoon-ch-ēērō	(tapan)
3-stand-CON ₁ -APPL	(shore)
'they stood on (the shor	re)' (Matthew 13:2)
d. <i>ā-kiil-yē-ē</i>	
2PL-be.strong-CON ₁ -IMP)
'be strong' (Acts 27:25))
e. <i>ku-tuu-yēē-chi</i>	Chēērusālēēm
3-meet-CON ₁ -DAT	Jerusalem
'they met in Jerusalem'	(Acts 4:5)

1 -- -

f. *a-maa-kēē-ruu-yē-yii* and-NEG-1PL-sleep-CON₁-IPFV 'and we did't sleep' (2 Corinthians 6:5)

This is a puzzling contrast between $-y\bar{o}$ and $-t\bar{o}\bar{o}s$. What is it about $-s\bar{o}\bar{o}t$ in EM that prevents any further suffixes from following it? For other Kalenjin languages the literature reports an imperfective suffix after the contemporative $-t\bar{o}\bar{o}s$:

(20) a. <i>k</i> 1 - <i>s</i> 1 : <i>s</i> - <i>to</i> : <i>s</i> - <i>i</i> 1PL-be.quiet-CON ₂ -IPFV 'We are quiet'	(Terik, Rottland, 1982, p. 127)
b. <i>ke:-ca:m-tó:sí</i> like-CON ₂ -IPFV 'to like one another'	(Nandi, Creider & Creider, 1989, p. 94)
c. <i>k</i> í- <i>s</i> ð <i>món-dóós-</i> íí 1PL-read-CON ₂ -IPFV 'we study together'	(Cherang'any, Mietzner, 2016, p. 142)

An exploration of two Bible translations (OT+NT) leads to the suspicion that this is in fact the only suffix that can follow $-t\bar{o}\bar{o}s$: in the Sabaot translation and in *Bukuit ne Tilil*, a broad Kalenjin translation, the relevant suffixes ($-t\bar{o}\bar{o}s$ and -dos/tos, respectively) are mostly word-final and if there is a suffix following it, it is the imperfective -ii.¹⁹

Combining these findings with the observation that $-t\bar{o}\bar{o}s$ is associated to imperfective aspect, we propose the following analysis. Both $-s\bar{o}\bar{o}t$ and $-t\bar{o}\bar{o}s(ii)$ are 'portmanteau' suffixes that conflate the 'plural' component (glossed as con₂) with the 'imperfective' component (ipfv). With $-t\bar{o}\bar{o}sii$ there is an overt but optional residue of the imperfective, that has been completely 'swallowed' by $-s\bar{o}\bar{o}t$ (21).

¹⁹ The Kalenjin Bible can be found at bible.com and the Sabaot Bible is part of the JHU Bible Corpus (McCarthy et al., 2020).

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(21) $-t\bar{o}\bar{o}s(ii)$ most other Kalenjin language / \ -con₂-ipfv \ -s $\bar{o}\bar{o}t$ Endo-Marakwet

If the imperfective is part of $-to\bar{o}s$ and $-so\bar{o}t$, then this also blocks any further suffixes combining with it. After all, if the imperfective suffix occurs in a word form, it is always the last suffix of the verb (which corresponds with aspect being inflectional and coming 'outside' derivational material). This claim needs a minor qualification with respect to object suffixes, for first and second person (22), that also seem to come at the right edge of verbs.

(22)		singular	plural	
	1	-aan	-eech	
	2	-iin	-aak	

What happens with these object suffixes in the imperfective aspect of verbs? The word forms in (23) show that the imperfective suffix (that shows up as the imperfective suffix $-\bar{e}y$ if there is no object suffix, as in $ch\bar{a}m-\bar{e}y$ keey '(he) loves himself') manifests itself here as the +ATR feature of the object suffix vowel. Something similar can happen with the +ATR ventive suffix -u (Chelimo, 2015).

(23)		singular	plural
	1	chām-oon	chām-ēēch
		'(he) loves me'	(he) loves us'
	2	chām-iin	chām-ook
		'(he) loves you (sg.)'	(he) loves you (pl.)

More specifically, we can see *-oon*, *-iin*, *-\bar{e}\bar{e}ch*, and *-ook* in (23) also as portmanteaus, but now of object and aspect information. The competition between the imperfective and object suffixes for the final position of the verb is resolved in this way, by putting them in the same slot, in a sense. Both are then at the right edge of the verb. We can also understand now why object suffixes can follow $-y\bar{o}$, as in (24), but not $-s\bar{o}\bar{o}t$.

(24) a. <i>ny</i>		<i>tuu-y-ēēch</i>	ākōō	Iriin Cod	
	EL.SG	meet-CON ₁ -1PL	with	God	2.5)
```	vno drin	igs us together wit	in God		iy 2:5)
b. <i>k</i>	ii-kuu-cl	hoom-ny-ook	Iriin	ākōō	inveentee
		oncile-CON ₁ -2PL	God	with	him(self)
'(	God has	reconciled you w	ith himse	elf' (Colo	ssians 1:22)

In contrast to *tuuyō* and *choomnyō*, the verbs *tuusōōt* and *choomsōōt* contain inflectional material: the imperfective aspect incorporated in the suffix -soōt. This makes it impossible to lexicalise these complex words and

to derive their transitive versions. How EM  $-s\bar{o}\bar{o}t$  contributes imperfective aspect in larger contexts is illustrated in (25).

(25) a. <i>taayit nyoo</i> lamp REL.SG 'a burning lamp'	burn-IPFV
a'. <i>korin choo</i> stone-PL REL.PL 'burning stones' (.	burn-CON ₂
b. <i>pēt-ēy</i> perish-IPFV 'the heaven will p	<i>im-u</i> heaven-TH erish' (2 Peter 3:10)
perish-CON ₂	<i>tuku-u-choochēē tōkōl</i> thing.PL-DEF-those all will perish' (Hebrews 1:11)

In the ongoing situations in (25a/a') we see the imperfective suffix  $-\bar{e}y$  with the singular subject, but the suffix  $-s\bar{o}\bar{o}t$  with the plural subject. The same contrast is seen with the future situations in (25b/b'). The situations in (25) require imperfective marking and  $-s\bar{o}\bar{o}t$  can do that for the plural cases, because it incorporates the imperfective. As its non-imperfective counterpart on the other hand,  $-y\bar{o}$  tends to be used for perfective situations.

#### 5.0 Expanding $-y\bar{o}$ and $-s\bar{o}\bar{o}t$

Of course, our corpus exploration of these two suffixes far from settles it. The corpus data present puzzling differences in the distribution of the two variants. For instance, why would the sentence in (26) feature a combination of two different plural forms, in that order, despite the strong parallelism? Clearly, there is something about discourse structure that interacts with the two number/aspect suffixes.

(26) a. <i>poor-sōōt pōrōr</i> fight-CON ₂ nation 'Nation fights agai	<i>ākōō</i> and nst nation	<i>pōrōr-yē</i> nation-T n'		<i>aka</i> other
b. <i>ku-pooryō</i> 3-fīght-CON ₁ '(and) country aga	<i>kōōrēē</i> country inst coun	other	<i>ākōō</i> with k 13:8)	<i>aka</i> other

For Kalenjin in general, the question is how the different language situations might relate to each other, synchronically and diachronically. What is the system in the variation and how did it arise? How did the plural suffix  $-s\bar{o}\bar{o}t/-t\bar{o}\bar{o}s$  end up in symbiosis with the imperfective? Does the

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 $-so\bar{o}t/-to\bar{o}s$  distinction correlate with the possibility of incorporating the imperfective or not?

Even without the  $-s\bar{o}\bar{o}t/-t\bar{o}\bar{o}s$  variation, this suffix is phonologically special. In comparison to other verbal suffixes, its CV:C structure seems unusually heavy. No other verbal suffix (Mietzner, 2016; Rottland, 1982; Zwarts, 2004) has that kind of complexity with closed syllabes, as illustrated by the EM forms in (27), that are representative for Kalenjin in general.²⁰ What this phonological heaviness means for its morphology is still an open question.

(27) a. V(:) suffixes - <i>a</i> (subjunctive) - <i>ii</i> (imperfective)	- <i>a</i> (perfect) - <i>u</i> * (ventive)	- <i>e</i> * (applicative)
b. C(C)V suffixes - <i>chi</i> * (dative) - <i>yō</i> (plural)	-syō (intransitive)	- <i>ta</i> (itive)
c. V(:)C suffixes -ēy (imperfective) -eech (1 plural)	<i>-aan</i> (1 singular) <i>-aak</i> (2 plural)	- <i>iin</i> (2 singular)
d. V(:)C(C)V suffixes -aka (stative)	- <i>iisyō</i> (intransitive)	-aata, -oonu (ambulative)

We have demonstrated that  $-y\bar{o}$  and  $-s\bar{o}\bar{o}t$  do not *necessarily* have a contemporative or associative meaning. However, there might still be factors contributing to such meanings. First, across languages, there is a tendency to fill in plural predications in such a way. For instance, sentence (28) is usually fleshed out in a contemporative/associative way: John and Mary did it together (Huang, 2007, p. 225).

(28) John and Mary did some groundbreaking research on climate change.

In EM, the plural suffixes  $-y\bar{o}$  and  $-s\bar{o}\bar{o}t$  can be brought in to 'promote' such an associative reading even more. The imperfective aspect of  $-s\bar{o}\bar{o}t$  can then also potentially lead to an iterative reading, where the referents of the plural subject are involved in the event one by one, in the ongoing fashion that fits with the imperfective aspect.

From a more general typological perspective,  $-y\bar{o}$  and  $-s\bar{o}\bar{o}t$  seem to present an interesting category of verbal plurality in between agreement and pluractionality. They do not fit the agreement role, but they are also not

²⁰ The suffixes with an asterisk have an allomorph with a final *n* when followed by another suffix with an initial vowel. Even though *-chi* has an allomorph *-chin*, this is still not the kind of closed syllable suffix that *-soōt* presents. The object suffixes have variants with closed syllables (*naan*,  $ny\bar{e}\bar{e}n$ , *chaan*, *kwaan*), but these can be seen as cliticised personal pronouns and not as real suffixes.

typical event operators, as we have seen. How their status fits into the bigger picture of verbal plurality also remains a question for further research.

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