Sandawe verbal plurality[1]

Roland Kießling, University of Hamburg

1 Introduction

Sandawe grammar widely lacks morphological means for marking nominal plurality. Instead it has an elaborate system of verbal plurality that serves to indicate the number of participants in an event by a head-marking strategy on the verb of the clause itself. The aim of this contribution is to give a first description of the way verbal plurality works in Sandawe, to sketch some of its morphological details and conditions of syntactic distribution and to point to its sociohistorical implications in a wider areal perspective.

Typologically, Sandawe has head-final characteristics (DEMPWOLFF 1916:17f., DALGISH 1979:274, ELDERKIN 1989), which is manifest in the pre-head position of nominal modifiers such as pronominal and nominal possessors, demonstratives, and numerals. In what seem to be the pragmatically least marked contexts, the object preferably occupies the preverbal position, though a wide range of syntactic variation has been observed (DALGISH 1979).

Beside uncommon phonemes such as ejectives and lateral fricatives, the phonological system of Sandawe comes along with clicks of at least three influx types (dental, alveolar and lateral) and five secondary modifications (voiceless, voiced, aspirated, glottalised, nasalised) which gives a total of 15 click phonemes (ELDERKIN 1989:33). There is a distinctive contrast of nasalisation in vowels (marked by a *sub*script tilda here), and a contrast of at least two tonological levels plus downstep.

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[1] The data that serve as a basis of this investigation have been collected during one month's fieldwork in the Sandawe speaking area in Kurio near Kwa Mtoro, Kondoa district, Dodoma region in Central Tanzania. I am very much indebted to my Sandawe friends Didas J. Tamba and Joseph Gele. I am also very grateful to Bonny Sands and Ed Elderkin who both have generously made their field notes and compilations of published and unpublished data accessible to me and who have commented extensively on an earlier version of this paper. Any mistakes are my own.

Sandawe has a system of nominal classification based on number and gender (SANDS 1998:100). The noun classes masculine and feminine are a direct projection of the semantic category sex. Targets of morphological marking for class are the independent pronouns, pronominal agreement markers for subject and object (see table 1) and some rare nouns for human referents such as 'person' which distinguishes a feminine singular *ŋ|èmésú*, a masculine singular *ŋ|èmésé*, and a plural *ŋ|òmósô*. The large majority of nouns, however, lack classification, both for gender and for number. Whereas a gender distinction in nouns could easily be dispensed with in discourse without posing problems to effective communication, the absence of a number distinction in most nouns creates much more of a referential vagueness which is balanced in Sandawe by the alternative strategy to instead head-mark the plurality of nominal arguments of a verb on the verb itself.

Basically, it is necessary to distinguish three types of plural marking in Sandawe verbs: (a) the plural agreement or plural concord as accomplished by inflectional morphemes which combine person, gender and number marking, presented in (Table 1), not to be discussed here, (b) the plural stem in *-waa* which does not show person agreement, but indicates the plurality of participants, objects or subjects, depending on the case frame of the verb, and (c) the iterative (or pluractional) stem in *-im* which indicates a temporal extension or repetition of the event.[2]

[2] The term "pluractional" has been coined by NEWMAN (1980:13) to distinguish terminologically the "derived plural verb stems denoting semantic plurality" (NEWMAN 1990:53) from "the inflected plural form of a verb required by a conjugational concord system (where agreement is either with the subject in a nominative system or with the patient in an ergative system)" which is called "plural stem". "Although pluractional verbs sometimes relate to plurality of a nominal argument in the sentence (e.g. subject, direct object, even indirect object), the essential semantic characterisation of such verbs is almost always plurality or multiplicity of the verb's action" (NEWMAN 1990: 53f.). Apart from Chadic, pluractionals and plural stems have been observed in a couple of language groups in Africa, such as Benue-Congo languages of the Nigerian Middle Belt (GERHARDT 1984, BOUQUIAUX 1970), but also in East African languages, such as Southern Cushitic Alagwa and Burunge (KIEßLING 1994) and Southern Nilotic Datooga (KIEßLING 1998)

	INDEPENDENT PRONOUNS	SUBJECT MARKING CLITICS FOR NON-FUTURE TENSE (REALIS)	SUBJECT MARKING CLITICS FOR FUTURE TENSE (IRREALIS)	OBJECT MARKING CLITICS
1sg	tʃɪ́	-́ s	-̀ s	-se
2sg	hà pú	-i	-po	-po
3sgf	[h]ù sú	-sa	-sụ	-su
3sgm	[h]è wé	-[y]a	-i	-a
1pl	sụ́	-o	-sụ	-sụ -sụ
2pl	sị́	-ye, -we	-sị -sị	-sị
3pl	[h]ò só	-aʔạ -a	-so	-[y]ị

Table 1: Person, gender and number markers in Sandawe

The person & gender & number markers in table (1) have the status of enclitics. Throughout this presentation they are marked off by the morpheme break marker – for reasons of better legibility.

Plural stem marker and iterative are integrated into the derivational complex that is arranged in three postverbal slots at least (Table 2). The taxonomic status of these verbal extensions is less clear. For lack of counterevidence they will be treated as suffixes here.

0	1	2	3
Verb	*-im[e]* IT	*-e* SG	*-ku* CAU
		-waa [or suppletion] PL	*-k* ~ *-x* APL
			-s[i] DN, CAU
			-ts' ST

Table 2: Verbal extensions in Sandawe

The examples in (1) illustrate the use of the applicative marker *-k* (1b) to introduce a recipient role into the case frame of the verb *xwànté* 'cook' (1a), and in combination with iterative plus plural stem marker (1c).

where it constitutes an areal feature in the Tanzanian Rift Valley (KIEßLING, MOUS & NURSE 2008).

(1) a. núa xwàntê-s.
porridge cook-S.1sg.FUT
'I will cook porridge.'

b. núa xwànté-k-pô-s.
porridge cook-APL-O.2sg-S.1sg.FUT
'I will cook porridge for you (sg).'

c. núa xwànt-ím-áa-k-sḭ̂-s.
porridge cook-IT-PL-APL-O.2pl-S.1sg.FUT
'I will cook porridge for you (pl).'

2 Plural stem marker *-waa*

The plural stem marker *-waa* is used to indicate a plurality of participants in the event, as they are encoded either in the syntactic object or in the subject. With a restricted set of basic verbs of locomotion, posture and manipulation, the plural stem is formed by suppletion instead, to be discussed below in Table (7-8) and examples (22-23). The iterative marker *-im* on the other hand indicates that the event is repeated several times, possibly habitually, e.g. *ts'òk'ìsê* 'chase' derives an iterative stem *ts'òk'ìmsê* which implies that one object, e.g. a single animal, is chased several times. If it should be indicated though that several animals are being chased, the iterative is not appropriate any more and the suppletive plural stem *tɬ'ı̰̂sê* is needed instead. Lexicalised iteratives could be found in verbs that refer to inherently repetitive actions such as */ʰéem* 'sweep', */'ìm* 'clear a field', *ɬòom* 'cultivate'. The iterative could also imply a temporal extension of the event, take over durative function or might even extend into the aspectual domain in that it signals imperfectivity (ELDERKIN 1994).

On first sight, iterative and plural stem might seem to compete for the same semantic domain of event multiplicity. There is, however, a functional difference: the iterative highlights the plurality of the event or its temporal extension, whereas the plural stem highlights the plurality of the participants. Therefore it would make perfect sense to follow NEWMAN (1990) in calling the iterative "pluractional"; this is avoided here, however, since its similarity to the term "plural stem marker" might cause confusion.

The distinction between plural stem and iterative is illustrated in (2) by the verb ‘come’ which has suppletive stems for singular and plural and might be extended by the iterative in both cases. The singular stem */ʔî* in (2a) is replaced by the suppletive plural stem *ŋ|àtí* in (2b), since the subject is plural. In (2c) the singular stem is extended by the iterative suffix to indicate the repetition of an action carried out by a singular subject, whereas in (2d) the plural stem is combined with the iterative because of the plural subject.[3]

(2) a. |ʔî-s.
come.SG-S.1sg.IRL
‘I shall come (once).’

b. ŋ|àtí-sʊ̀.
come.PL-S.1pl.IRL
‘We shall come (once).’

c. |ʔì-mê-s.
come.SG-IT-S.1sg.IRL
‘I shall come repeatedly.’

d. ŋ|àtí-mé-sʊ̀.
come.PL-IT-S.1pl.IRL
‘We shall come repeatedly.’

It is important to note that plural stem marking – either by *-waa* or by suppletion – is dependent on the argument structure of the verb and displays ergative-like characteristics in this. Thus, with intransitive verbs such as *dʒìxé* ‘rot’, *!ǫ́o* ‘be cut’ and *kwàpé* ‘sprout, blossom’ (3-5) the plural stem marker indicates the plurality of the subject (3b, 4b, 5b), whereas with transitive verbs such as *ŋǁóo* ‘milk’, *tɬʊ̀i* ‘build’ and *tɬ’áak^{h}w* ‘uproot’ (6-8) it indicates the plurality of the patient object (6b, 7b, 8b).

(3) a. ŋ|ɪ̂i dʒìxâa.
meat rot:S.3M.RL
‘The (piece of) meat is rotten.’

b. ŋ|ɪ̂i dʒìxé-wâa.
meat rot-PL:S.3M.RL
‘The pieces of meat are rotten.’

[3] Elderkin 1994 also reports a form */ʔìméwà* in which a regular morphological plural stem is based on the singular stem */ʔî*, extended by the iterative marker.

(4) a. kû !o̱o-gâ.
rope be.cut-ASS:S.3M.RL
'The rope has been cut.'

b. kû !o̱o-wáa.
rope be.cut-PL:S.3M.RL
'The ropes have been cut.'

(5) a. t^{h} ĕe-yâ kwàpé.
tree-NOM blossom
'The tree has blossomed.'

b. t^{h} ĕe-yâ kwàpé-wâa.
tree-NOM blossom-PL
'The trees have blossomed.'

Table (3) presents the realis paradigms of two intransitive verbs, *gàndà* 'grow thin' and *k'ìtɬ'é* 'get angry', and shows how plural subjects are double-marked for plurality by person-specific agreement markers on the one hand and by the person-insensitive plural stem marker on the other hand: although the plural nature of the subject is already indicated by the enclitics for personal agreement that attach to the nominal host *ʔùur* 'force, power' (which serves adverbial function here and translates as 'very'), i.e. by *-ò̱* 1pl, *-é̱* 2pl and *-àʔa̱* 3pl, respectively, in all plural forms the plural stem marker *-waa* (bold in (Table 3)) is needed on top of that to derive the plural stems *gándàwàa* and *k'ìtɬ'éwàa*.

	gàndà 'grow thin'[4]	*k'ìtɬ'é* 'get angry'[5]
1sg	tʃí ʔúur-gè-s gàndà	tʃí ʔúur-ì-sɪ̰ k'ìtɬ'ê
2sg	hàpú ʔúur-g-ì gàndà	hàpú ʔúur-ɪ̰̂ k'ìtɬ'ê
3sgf	ùsú ʔúur-sà gàndà	ùsú ʔúur-sɑ̰̀ k'ìtɬ'é
3sgm	èwé ʔúur-g-â gàndà	èwé ʔúur-ɑ̰̂ k'ìtɬ'ê
1pl	sʊ̰́ ʔúur-ʊ̰̀ gándà-**wàa**	sʊ̰́ ʔúur-ʊ̰̂ k'ìtɬ'é-**wàa**
2pl	sɪ̰́ ʔúur-ɛ̰̀ gándà-**wàa**	sɪ̰́ ʔúur-ɛ̰̂ k'ìtɬ'é-**wàa**
3pl	òsó ʔúur-àʔɑ̰ gándà-**wàa**	òsó ʔúur-âʔɑ̰ k'ìtɬ'é-**wàa**[6]

Table 3: Realis paradigms of 'grow very thin' and 'get very angry'

With transitive verbs, it is the plurality of the patient object that triggers the selection of the plural stem rather than the plurality of the subject. This is illustrated in (6-10) where the (b) sentences have a plural object which is marked by the verbal plural stem marker *-waa*, replacing the singular stem marker *-e* in the (a) sentences.

(6) a. ʔùmbù-s ŋǁóo-wé.
cow-S.1sg.RL milk-SG
'I have milked a cow.'

b. ʔùmbù-s ŋǁóo-wâa.
cow-S.1sg.RL milk-PL
'I have milked cows.'

(7) a. kʰoo-s tɬɪ̰̀i-ge.
house-S.1sg.RL build-SG
'I have built a house.'

b. kʰoo-s tɬɪ̰̀i-waa.
house-S.1sg.RL build-PL
'I have built houses.'

(8) a. ŋǃɪ̰̂i –gî tɬ'áakʰw-é.
root-S.2sg.RL uproot-SG
'You have torn out a root.'

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[4] The voiced velar stop preceding the subject marking enclitic in 1sg, 2sg, and 3sgm is a declarative assertion marker.

[5] The nasalisation in the vowels of the subject marking enclitics in all persons except 3pl with *k'ìtɬ'é* and in 1pl and 2pl with *gàndà* has not been explained.

[6] The variant *k'ìtɬ'éwàʔɑ̰ òsó ʔúrâʔɑ̰* hints at a prior form *-wàʔɑ̰* of the plural stem marker which is in the process of losing the glottal stop.

b. ŋǃĩ̯i-gî tɬ'áak^{h}ú-wáa.
root-S.2sg.RL uproot-PL
'You have torn out roots.'

The singular stem in *-e* presents a problem in morphological analysis. In the (a) examples of (6-8) one may recognize a marker *-e* (with allomorphs *-we* and *-ge*) in the singular which is replaced by *-waa* in the plural. With some verbs that terminate in short *e*, though, such as *!'întsʼé* 'forget' and *tɬ'ĩ̯k^{h}é* 'tread upon', it might only be found in the lengthening of that vowel, as shown in the (a) examples of (9-10):

(9) a. hàpú ‖wâ-s !'în^{ɬ}tsʼé-e.
2sg name-S.1sg.RL forget-SG
'I have forgotten your name.'

b. sĩ̯ ‖wâ-s !'întsʼù^{ɬ}-wáa.
2pl name-S.1sg.RL forget-PL
'I have forgotten your names.'

(10)a. ŋǃĩ̯i-gî tɬ'ĩ̯k^{h}ê-e.
snake-S.2sg.RL tread.upon-SG
'You have trodden upon a snake.'

b. ŋǃĩ̯i-gî tɬ'ĩ̯k^{h}é-wáa.
snake-S.2sg.RL tread.upon-PL
'You have trodden upon snakes.'

Verbs that terminate in short vowels *a* or *o,* such as *màntʃà* 'eat' and *báló* 'tend, herd', seem to assimilate the singular stem marker totally, as seen in the (a) examples of (11-12):

(11)a. èwé dìyâ màntʃà-a.
he egg-S.3M.RL eat-SG
'He has eaten an egg.'

b. èwé dìyâ màntʃà-wàa.
he egg-S.3M.RL eat-PL
'He has eaten eggs.'

(12)a. tʃí hùmbù-sĩ̯ báló-o.
I cow-S.1sg.RL tend-SG
'I have tended a cow.'

b. tʃí hùmbù-sĩ̯ báló-wáa.
I cow-S.1sg.RL tend-PL
'I have tended cattle.'

Finally, with verbs that terminate in long vowels *ee* or *aa* (but not *oo*, cf. (6) above), such as *ŋǁwěe* 'break', *kʰăa* 'beat' and *ŋ|ěe* 'cut', the singular stem marker *-e* seems to be absorbed entirely (13-14).[7]

(13)a. tʰěe-s ŋǁwěe.
pot-S.1sg.RL break.SG
'I have broken a pot.'

b. tʰěe-s ˈŋǁwée-wáa.
pot-S.1sg.RL break-PL
'I have broken pots.'

(14)a. dʒwà-yĩ̯i kʰăa-pô-s.
stick-INSTR beat.SG-O.2sg-S.1sg.IRL
'I will beat you (sg) with a stick.'

b. dʒwà-yĩ̯i kʰăa-wàa-sĩ̯i-s.
stick-INSTR beat-PL-O.2pl-S.1sg.IRL
'I will beat you (pl) with a stick.'

That it is definitely not the plurality of the subject, but that of the object that triggers the plural stem with transitive verbs could be seen clearly from the examples (15-16) where the plural stem is needed, as soon as the direct object is meant to be plural in the (b) examples, but not if the object is singular, in spite of the plurality of the subject in the (a) examples.

(15)a. gélé tʰěe-yâʔa̰ ŋ|ěe.
baobab tree-S.3pl.RL cut.SG
'They have cut down a baobab.'

b. gélé tʰěe-yâʔa̰ ŋ|ěe-wáa.
baobab tree-S.3pl.RL cut-PL
'They have cut down baobabs.'[8]

[7] Alternative interpretations are possible. What has been labelled the singular stem marker *-e* here, might also turn out to represent a lexical ending or another derivational suffix not identified so far which becomes subject to deletion in front of the plural marker *-waa* for purely phonological reasons.

[8] This example may also have a resultative reading: 'they have cut a baobab in several pieces'.

(16)a. gélé tʰěe-yâʔa̰ gìyă-a.
baobab tree-S.3pl.RL hew-SG
'They have felled a baobab.'

b. gélé tʰěe-yâʔa̰ gìyă-wáa.
baobab tree-S.3pl.RL hew-PL
'They have felled baobabs.'

The plural stem marker is restricted to indicate the plurality of the patient role (17b, d, f), not the plurality of the recipient: it is the singular marker *-e* which is found to occur with singular patients (17a, c, e) in spite of a plural recipient in (17e) with the zero stem verb 'give'.

(17)a. dìʔá ˈpʰóo-wê-s.
egg give.REC.2.sg-SG-S.1sg.IRL
'I will give you an egg.'

b. dìʔá ˈpʰòʔò-wâa-s.
egg give.REC.2sg-PL-S.1sg.IRL
'I will give you eggs.'

c. dìʔá ʔìy-êe-sḭ.
egg give.REC.3-SG-S.1sg.IRL
'I will give him an egg.'

d. dìʔá ʔìyì-wâa-sḭ.
egg give.REC.3-PL-S.1sg.IRL
'I will give him eggs.'

e. tʃí sḭ́ dìyá sḭ́-gêe- sḭ.
I you.PL egg give.REC.2pl-SG-S.1sg.IRL
'I will give you (pl) an egg.'

f. tʃí sḭ́ dìyá sḭ́-wâa- sḭ.
I you.PL egg give.REC.2pl-PL-S.1sg.IRL
'I will give you (pl) eggs.'

The plural stem marker *-waa* could also be combined with the iterative *-im* to indicate repeated action applied to multiple objects. Both markers then merge to form the complex *-imaa* in which the initial labiovelar approximant of the plural stem marker *-waa* has been elided. These effects could be seen with *tɬ'àpé* 'thresh, spank' which contrasts a singular iterative stem *tɬ'àpìmée* used with singular objects (18c) and a plural iterative stem *tɬ'àpìmáa* used with plural objects (18d).

(18)a. ŋ|wą̰a-s tɬ’àpé-e.
millet-S.1sg.RL thresh-SG
‘I have threshed millet.’

b. ŋ|èmésé-s tɬ’àpé-e.
person-S.1sg.RL thresh-S
‘I have spanked the person.’

c. ŋ|èmésé-s tɬ’àp-ìm-ée.
person-S.1sg.RL thresh-IT-SG
‘I have spanked the person several times.’

d. ŋ|òmósô-s tɬ’àp-ìm-áa[9].
people-S.1sg.RL thresh-IT-PL
‘I have spanked the people several times.’

Sometimes it is difficult for speakers to imagine a situation where they would use a plural stem without applying at the same time the iterative. This may be because especially multiple animate objects are felt to necessarily entail a repetition of the action, whereas actions applied to multiple inanimate objects are not necessarily perceived to entail reiteration. This becomes clear with the verb *tʰàts’é* ‘shoot’ (19a) which may take the instrument or the patient as a direct object. As long as an inanimate plural instrument like ‘arrows’ is direct object (19b) the plain plural stem is used. But with an animate plural patient object like ‘dwarf antelopes’ (19c) the combined iterative cum plural stem is chosen.

(19)a. !ínôo ŋ|èmésée dʒàn-â tʰàts’é-kʰ-á.
hunting person arrow-S.3M.RL shoot.SG-APL-O.3M
‘The hunter has shot an arrow (at something).’

b. !ínôo ŋ|èmésée dʒàn-â tʰàts’é-wá-kʰ-áa.
hunting person arrow-S.3M.RL shoot-PL-APL-O.3M
‘The hunter has shot arrows (at something).’

c. òsó |ʰíâ tʰàts’-ím-áa dʒàn-i̱i-gàʔa̰.
they dwarf.antelope shoot-IT-PL arrow-INSTR-S.3pl.RL
‘They have shot dwarf antelopes with arrows.’

Some verbs that refer to inherently repetitive events such as */ʰéem* ‘sweep’, */ʔìm* ‘clear a field’, *‖ʰwǎm* ‘trim, clip’, *!ìn* ‘hunt’, *ʔáam* ‘shatter’, *ɬòomé* ‘cultivate’, seem to contain a frozen iterative marker that tends to

[9] The finite verb *tɬ’àpìmáa* could also be reduced to *tɬ’àpmáa*, *tɬ’àkmáa*, or *tɬ’àamáa*.

be elided as soon as the plural stem marker is attached in the (b) examples of (20-21).

(20)a. kʰŏo-s ɬ|ʰéem-é.
house-S.1sg.RL sweep:IT-SG
'I have swept the house.'

b. kʰŏo-s ɬ|ʰée-wăa.
house-S.1sg.RL sweep-PL
'I have swept the houses.'

(21)a. tʃí mìndà-s ɬòomé-e.
I field-S.1sg.RL cultivate:IT-SG
'I have cultivated my field.'

b. tʃí mìndà-s ɬòomé-e.
I field-S.1sg.RL cultivate-PL
'I have cultivated my fields.'

In spite of the availability of the iterative marker, the plural stem marker may also take over habitual and frequentative meanings, as shown in the paradigms in table (4). On top of the subject plural marking by suppletive stem alternation, i.e. *hìk'ì* 'go' for singular vs. *nn̰ii* 'go' for plural subjects, the plural marker may take over habitual function in *hík'wà* vs. *níwàa*.

	COUNTEREXPECTUAL PERFECT: 'I/you etc. have already gone'[10]	HABITUAL PRESENT: 'I/you etc. go (there) every day'
1sg	tʃí hík'ì gèsì	tʃí hík'wàa gêsi̥
2sg	hàpú hík'ì gì	hík'wàa gî[i]
3sgf	ùsú hík'ì gèsà	hík'wàa gésà
3sgm	èwé hík'ì gà	hík'wàa gâa
1pl	sn̰ nî gǫ̀[o]	níwàa gǫ̂o
2pl	sí nî gę̀e	níwàa gę̂e
3pl	òsó nî gàʔa̰	níwàa gâʔa̰

Table 4: Habitual use of plural stem marker *-waa*

The iterative on the other hand is observed to take over plural function with intransitive verbs. This could be seen with the verb *ǁànt^{h}á* 'be

[10] In the unextended form of the verb, the ejective tends to be elided, so there is a free variation of the singular verb stem *hík'ì* ~ *hîi*.

satiated' in table (5) which is extended for the iterative in *ǁànt^{h}àmée* when used with plural subjects. For future tense, however, the compulsion to use the iterative in the plural is less strong which could be seen in that there is free alternation of iterative and simplex.

	PERFECT	FUTURE
1sg	ǁànt^{h}ás	ǁànt^{h}âsi̯
2sg	ǁànt^{h}îi	ǁànt^{h}ápò
3sgf	ǁànt^{h}ásâ	ǁànt^{h}áasù
3sgm	ǁànt^{h}â	ǁànt^{h}ây
1pl	ǁànt^{h}ámo̯, ǁànt^{h}àméewo̯o	ǁànt^{h}ásu̯, ǁànt^{h}áméesu̯
2pl	ǁànt^{h}ámệe	ǁànt^{h}áasi̯, ǁànt^{h}áméesi̯
3pl	ǁànt^{h}ámâʔa̯	ǁànt^{h}áasò, ǁànt^{h}áméesò

Table 5: Plural use of the iterative in -[i]*m* with *ǁànt^{h}á* 'be satiated'

3 Suppletive plural stems

Verbal plurality is a category so deeply rooted in Sandawe structure that it is not only encoded in the grammar, but also on the lexical level.[11] A considerable number of basic intransitive verbs of locomotion and posture (Table 6), and some basic transitive verbs of manipulation (Table 7) have suppletive stems that alternate for number. Their distribution is determined by the same morphosyntactic conditions as the morphologically derived plural stems, that is with intransitive verbs the suppletive plural stem indicates subject plurality, whereas with transitive verbs it generally indicates object plurality.

[11] Suppletive plural verb stems are also common in a number of Southern and Northern Khoisan languages such as ǂHoan (COLLINS 1998:50ff.), Ju|'hoan (DICKENS 1994), !Xun of Ekoka (BERND HEINE p.c.) and !Xóõ (TRAILL 1994:27, KIEßLING forthcoming).

GLOSS	DEMPWOLFF 1916	ELDERKIN 1994	KAGAYA 1993	KIEßLING 2000
go, walk	hik'i, niʔ	hík'ì, nís	hik'i, niʔ	hík'ì, nís
run	t^{h}a, giri̯be	t^{h}â, gìrìbé	t^{h}a[a], giribe	t^{h}á, gìrìbé
stay, dwell, live	ʔìye, nè	ʔíé, nĕe	ie, ne	ʔìyé, nèhée[ŋ]
stand	ŋ‖ume, ɬe	ŋ‖úmé, ɬée	‖ume, ɬee	ŋ‖úmé, ɬée
fall	ǂ'a, ǂ^{h}o	ǂ'àwé, ǂ^{h}óo	|awe, |^{h}oo	ǂ'àwé, ǂ^{h}òo
sit	hakets', hanaki	hàkíts'ì, hăanàkí	-	hàkíts'ì, -
come	ʔi|'i, ŋ|ati	|í, ŋ|átí	-	|'í, ŋ|àtí
live, exist	gòse, nèse	-	-	-
die	tɬasi, ɬasi	tɬăasì, ɬàʔté	-	tɬăasì, ɬà[ʔ]àté
talk	-	-, sàò	-	-, sâaw
jump up	-	ts'ok'i, tɬ'î̯i	-	ts'ok'i, tɬ'î̯i

Table 6: Sandawe intransitive suppletive verb stems for subject number[12]

GLOSS	DEMPWOLFF 1916	ELDERKIN 1994	KAGAYA 1993	KIEßLING 2000
carry, take	-	síé, tɬ'ăa	siee, tlaa	-, hétékà
put	-	pĕe, kăa	-	pĕe, kăa
throw	-	‖ê, k^{h}ùmʔsé	-	‖ê, k^{h}ùʔùmsímáa

Table 7: Sandawe transitive suppletive verb stems for object number

Table (8) illustrates the alternation of suppletive verb stems *hík'ì* (sg) vs. *níʔ* (pl) 'go' in the full paradigms of the perfect and the future tense.

[12] Tables (6) and (7) are compilations of my own data plus data taken from DEMPWOLFF (1916:20f.), KAGAYA 1993, ELDERKIN 1994, with an attempt to standardise the transcription. The first item in every square specifies the singular verb stem, the second one the plural verb stem.

	PERFECT	FUTURE
1sg	hɪ́k'ɪ́s	hɪ́k'ɪ̂s
2sg	hɪ́k'ɪ̂i	hɪ́k'ɪ́pô, hɪ́ipô
3sgf	hɪ́k'ɪ́sà	hɪ́k'ɪ̂sụ̀
3sgm	hɪ́k'â	hɪ́k'ɪ̂i
1pl	nɪ́ʔô̰o	nɪ́isṵ̀
2pl	nɪ́yêe	nɪ́isɪ̀
3pl	nɪ́yâʔą̰	nɪ́isò

Table 8: Alternation of suppletive verb stems *hík'ɪ̂* (sg) vs. *nɪ́ʔ* (pl) 'go'

Distributional restrictions on the alternation of suppletive verb stems such as *tɬàas* 'die' (sg) vs. *ɬà[ʔ]áté* (pl) 'die' are very rigid. People insist that only the sentences in (22) are correct, whereas those in (23) that display a mismatch of number features in the syntactic subject and the suppletive verb stem are wildly ungrammatical in spite of correct number agreement in the inflectional endings. Actually the use of the plural stem with a plural subject is more important here than the use of the inflectional ending for 3pl which could be omitted without problem as seen in (22b).

(22)a. ŋ|èmésée tɬàas-â.
man die.SG-S.3M.RL
'A man has died.'

b. ŋ|òmósóo ɬàaté.
people die.PL
'People have died.'

c. ŋ|òmósóo ɬàat-âʔą̰.
people die.PL-S.3pl.RL
'People have died.'

(23)a. *ŋ|èmésée ɬàaté. [... ɬàat-â]
man die.PL [… die.PL-S.3M.RL]
'A man has died.'

b. *ŋ|òmósóo tɬǎasì. [... tɬǎas- âʔą̰]
people die.SG [… die.SG-S.3pl.RL]
'People have died.'

4 Conclusion

Nominal number marking is a prominent feature in the grammar of most languages of Central Tanzania that cuts well across the boundaries of genetic affiliation. Southern Cushitic languages come up with complex systems of nominal suffixes that derive a plural from a singular base, or a singulative from a collective base, or they are arranged in replacement patterns, e.g. in Iraqw (Mous 1993) and Burunge (Kießling 1994). This kind of nominal number marking could also be reconstructed for Proto-West-Rift, the hypothetical predecessor of all modern West-Rift languages (Kießling 2002, Kießling & Mous 2003). Southern Nilotic Datooga has a typologically similar system of nominal number suffixes (Rottland 1982, Creider & Rottland 1997, Kießling 2000). The Bantu languages of the area mark nominal number within the framework of their class systems which arrange nominal class prefixes in genders, i.e. number specific noun class pairings. And Hadza has a productive system of combined nominal gender and number suffixes (Wagner 1988). The only Central Tanzanian language that deviates in this respect is Sandawe. It has no regular morphosyntactic device to mark number on nouns, except in some rare cases of nouns for human referents such as 'person' which distinguishes a feminine singular *ŋ|èmésú*, a masculine singular *ŋ|èmésé*, and a common plural *ŋ|òmosô*. Instead, number of the nominal arguments of a verb is head-marked on the verb itself.

This Sandawean head-marking pattern is also found in neighbouring Alagwa (24) and Burunge (25). The parallel even extends to morphosyntactic conditioning. As in Sandawe, with intransitive verbs it is the plurality of the subject that triggers the choice of a plural stem (25), whereas with transitive verbs it is rather the plurality of the patient object than the plurality of the subject that triggers the selection of the plural stem. This becomes very clear in (24) where the singular stem of the verb is used in (24b) in spite of the plurality of the subject, as long as the direct object is singular. As soon as the object refers to a plural, however, the singular verb stem is replaced by the plural stem (24c).

(24)a. ʔana a-na saapis faʕa.
1sg S.1/2-PF move.SG.1sg porridge
'I have moved over a portion of porridge.'

b. handaaʔ a-na saapis-an faʕa.
1pl S.1/2-PF move.SG-1pl porridge
'We have moved over a portion of porridge.'

c. handaaʔ a-na saapimis-an faʕoo.
1pl S.1/2-PF move.PL-1pl porridges
'We have moved over portions of porridge.'

(25)a. qwałara y-áa gwaaʔ-i̯.
doctor S.3-PAST die.SG-3sg.M.PFV
'The doctor died.'

b. qwałeeri y-áa kakaʕ-ir-i̯.
doctors S.3-PAST die.PL-3pl-PFV
'The doctors died.'

With respect to the presence of a morphosyntactic feature like verbal plurality in West-Rift Southern Cushitic, in Southern Nilotic Datooga and in Hadza, one might wonder where it could have originated. At least in Southern Cushitic and Southern Nilotic there is no specific need for it, since a differentiation of number in the nominal arguments of the verb is already taken care of by the complex morphological apparatus of nominal plural and singulative derivation. Since this is different in Sandawe, which lacks a number distinction in nouns, it must be suspected that the strategy of head-marking the number of verbal arguments on the verb itself was spread together with its principal conditioning factors originating from a Sandawean predecessor to the neighbouring languages[13] of the area, via long-standing multilateral language contacts in the Central Tanzanian convergence zone, the details of which are still to be worked out (Kießling, Mouse & Nurse 2008:206-210).

[13] In this context it should also be noted that the Sandawe iterative marker *-im* is very close – formally as well as semantically – to the common Southern Cushitic verbal extension for the durative **-im* (Kießling 2002: 296), as could be seen in its modern reflexes, e.g. in Alagwa (24c).

Abbreviations

APL	applicative
ASS	declarative assertion marker
CAU	causative
DEM	demonstrative
DN	denominalizer
F, f	feminine
INSTR	instrumental
IRL	irrealis
IT	iterative
M, m	masculine
NOM	nominative marker
O	object
OP	object pronoun
PF	perfect
PFV	perfective
PL	plural verb stem marker
REC	recipient
RL	realis
S	subject
SG	singular verb stem marker
sg	singular
ST	stative
V	verb

Remarks on the phonetic transcription: In accordance with IPA, the arrow ˡ indicates tonal downstep. In contrast to IPA conventions, nasalisation is marked by a *sub*script tilda.

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