RELATIVE CONSTRUCTIONS AND THE BANTU RELATIVE AGREEMENT CYCLE IN WESTERN SERENGETI

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This is the first comprehensive examination of relative constructions within the Western Serengeti (WS) group, a cluster of closely related Great Lakes Bantu language varieties spoken in northern Tanzania's Mara region. The study combines synchronic and diachronic perspectives, providing a systematic analysis of relativization types based on phonological (prosodic) and (morpho-)syntactic traits. Positioned within Van de Velde's Bantu Relative Agreement (BRA) Cycle, our findings trace the evolution of the main relative marker from the proximal demonstrative, suggesting that WS constructions instantiate Stage 1b of the BRA cycle with remnants of either Proto-Bantu's relative construction or an earlier cycle's Stage 3b, thus capturing the intricate dynamics at the intersection of old and new relative cycles.

1. Introduction

The Western Serengeti (WS) grouping of Bantu languages forms a branch of the Mara (JE40) subgroup of the Great Lakes Bantu (zone J) languages (Roth & Gibson 2019, Aunio et al. 2019, Schoenbrun 1990).[1] The group consists of Ngoreme (*ngq*; JE402) together with Ikoma, Ishenyi and Nata (all jointly coded as *ntk*; JE45). All varieties are spoken in the Mara region, situated in the northern parts of Tanzania, east of Lake Victoria and west of the Serengeti National Park, bordering Kenya to the north. The Mara region is linguistically dense, home to a plethora of Bantu varieties, but also to Nilotic languages (Luo, Datooga) and with the putative historical presence/influence of Cushitic (Heine 1976, Schoenbrun 1990, 1994, Shetler 2003).

The purpose of this study is to offer a detailed description of relative constructions as they appear in the WS language varieties, while also disentangling their historical background. Relative constructions have been a popular topic of research and a well-investigated area within Africanistic and Bantu linguistics. Larger comparative and typological works spanning the African continent include Kuteva & Comrie (2006), and, for Bantu specifically, Nsuka Nkutsi (1982) and Henderson (2006, 2007). Two book chapters on Bantu relative constructions awaiting publication are Cheng (forthcoming) and Yoneda (forthcoming). Some work has had a specific areal focus, viz. the volume edited by Atindogbé & Grollemund (2017) targeting relative constructions in Cameroon and the article by Zeller (2004) specifically focused on South African (S40) languages. There are also plenty of language-specific investigations of relative constructions in Bantu languages, e.g., the many contributions in the volume edited by Downing et al. (2010). This volume also contains a questionnaire specifically designed to capture different kinds of relative clause constructions (designed with Bantu languages in mind).[2]

From a comparative-historical perspective, the seminal work on Bantu relative constructions to date has been Nsuka Nkutsi (1982), along with the two articles by his mentor Meeussen (1971, 1978), as well the paragraph on relatives in Meeussen's (1967) general work on Bantu grammatical reconstruction. (Zeller's 2004 study of relative constructions, restricted to the Bantu languages of

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[1] See the geographical distribution of the Mara language communities in the map in the Appendix.

[2] This questionnaire has been translated into Swahili by us and used as an elicitation tool for the WS language varieties. Paired with other strategies of language elicitation and used together with other non-elicited sources of data it has served as an important contribution to the language descriptions offered and the conclusions drawn in this paper. We have indicated on the examples when they are drawn from this questionnaire.

South Africa, also has a comparative-historical angle.) However, relatively little attention has been directed towards the history of Bantu relative constructions, including the historical implications of the variation attested across the Bantu languages. Recently, however, interest has been directed towards diachronically informed explanations for relative constructions in Bantu, in particular for the typologically rare trait where the relative verb agrees with the head in non-subject relative constructions, rather than with the subject (see Van de Velde 2018, 2021, 2022, Guérois & Creissels 2020).[3] More specifically, Van de Velde (2021, 2022), based on cross-Bantu data, shows that relative constructions are subject to a recurrent cyclic pattern of change which can explain this feature, while also explaining several other features of different Bantu relative systems, especially with regard to their agreement patterns. Drawing on these inferences, Van de Velde (2022) furthermore offers a revision of Meeussen's reconstruction of relative construction(s) for Proto-Bantu (and, in effect, for every lower subbranch in Bantu too). We will frame our novel language data of the previously un(der)-documented WS within this cycle – referred to as the Bantu Relative Agreement (BRA) cycle. In this manner, we will be able to zoom in from the macro- to the micro-level to offer a fine-grained description and investigation of the motivation and mechanics behind variation and change within the construal of relative clauses. As will be argued, the WS language varieties can be understood as being at the cross-roads of (re-)instantiating the BRA cycle, by concurrently showing signs of being in the initial Stage 1, or more specifically 1b, of the BRA cycle while at the same time exhibiting traces of a pre-initial stage which occur as a direct reflex of Van de Velde's reconstructed structure, but which could also represent the structurally identical final Stage 3b of a previous cycle.

    The remainder of the article is organized as follows. In Section 2, we offer some typological background information on the WS varieties. In Section 3, we present a comprehensive description of relative clause constructions of various formal and functional types, as they occur in these varieties. In Section 4, we look at the realization of relatives through a historical-comparative lens, both from a general perspective and in relation to the BRA cycle in particular. Section 5 closes with a summary and some general conclusions.

2. Western Serengeti typological profile
The WS language varieties are lexically very close (see Hill et al. 2007), yet they feature significant structural differences in different domains of their grammars (see, e.g., Gibson & Roth 2019, Bernander & Laine 2020). The relative constructions in these varieties are overwhelmingly identical. However, as will be made apparent throughout the paper, there are interesting instances of (micro-) variation both within this group and especially in relation to closely related languages. Before embarking on the description of relatives, however, some structural information about the WS varieties in general and about the building blocks of relative constructions in particular needs to be outlined.

    The basic constituent order of the WS language varieties is SVO, but this order is quite flexible (based on variation in information structure), even for Bantu languages. All varieties are tonal, with lexical tones in the nominal system and grammatical tones for verbal inflection. However, the patterning of the tone systems of the WS varieties differs considerably and in Ngoreme tone assignments of nouns are even completely predictable from the syllable structure, unlike in the other varieties (see Aunio 2017). Phonologically, the varieties are characterized by rather small consonant inventories of typical Bantu segments, but complex and varying systems of ATR-based vowel harmony (Robinson 2015, Aunio et al. 2019).[4]

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[3] See also Van de Velde (2017) and Van de Velde & Ambouroue (2017) on other features of relatives in Bantu framed in a diachronic perspective.

[4] WS also makes productive use of Dahl's Law, i.e., the phonological dissimilation process where voiceless

As expected for Eastern Bantu varieties, the members of the WS group are agglutinative, with complex noun class systems and verbal morphology. WS has elaborate noun class systems consisting of up to 20 noun classes (with some minor variation in the inventory and productivity of certain classes).[5] The noun class system itself triggers an agreement system affecting both nominal constituents and verbs. Table 1 illustrates the noun class system of Ishenyi and some of the ensuing agreement patterns that will be important for the analysis in this paper. These are all reconstructible to Proto-Bantu (Meeussen 1967) and thus inevitably inherited into WS. Beyond the verb-specific prefixes illustrated in the table, viz. the verbal prefixes typically used for subject indexation (SP) and the object-prefixes (OP), the most important agreement prefix series for our analysis here is the "pronominal prefix" (PP). This agreement prefix type appears in several nominal elements, but most importantly for us here, it is used in the formation of both demonstratives and relatives (cf. Meeussen 1967: 96), i.e., what will be shown to be the source marker and the target in the grammaticalization of the relative marker in WS.

Table 1. Noun class system and some ensuing agreement prefixes in Ishenyi

NC	NCP	Ex.	translation	SP	OP	PP
1	omo-	omoɾemi	'farmer'	a-	mo-	o-
1a	∅	maaɣo	'mother'	a-	mo-	o-
2	aβa-	aβaɾemi	'farmers'	βa-	βa-	βa-
2a	βáá-	βáámaaɣo	'mothers'	βa-	βa-	βa-
3	omo-	omoɣóndo	'farm'	o-	wo-	o-
4	eme-	emeɣóndo	'farms'	ɣe-	ɣe-	ɣe-
5	ɾii-	ɾiiɣúha	'bone'	ɾe-	ɾe-	ɾe-
6	ama-	amaɣúha	'bones'	ɣa-	ɣa-	ɣa-
7	eke-	ekehóóɾe	'skull'	ke-	ke-	ke-
8	eβe-	eβehóóɾe	'skulls'	βe-	βe-	βe-
9	e(N)-	embóɾi	'goat'	e-	je-	e-
10	t͡ʃe(N)-	t͡ʃembóɾi	'goats'	t͡ʃe-	t͡ʃe-	t͡ʃe-
11	oɾo-	oɾoɾéme	'tongue'	ɾo-	ɾo-	ɾo-
12	aka-	akaβóɾi	'small goat'	ka-	ka-	ka-
14	oβo-	oβosóngo	'poison'	βo-	βo-	βo-
15	oko-	okoɾeɣísa	'quarrel'	ko-	ko-	ko-
16	aha-	ahasé	'place'	ha-	ha-	ha-
17	(ko-)	-	-	(ko-)	-	(ko-)
18	mo-	-	-	-	-	-
19	ehe-	eheβóɾi	'small goats'	he-	he-	he-
20	oɣo-	oɣoβóɾi	'large goat'	ɣo-	ɣo-	ɣo-

The WS varieties make use of a three-way distinction between demonstratives, all containing the PP: the proximal demonstrative PP-*nɔ,* the referential demonstrative PP-*jo,*[6] and the distal demonstrative PP-V*re* (the <V> here standing for an unspecified vowel which merely prolongs the preceding prefix vowel).

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stops are voiced when the succeeding syllable also consists of a voiceless consonant (see Davy & Nurse 1982).
[5] As seen in examples (20), (27) and (49b), the WS varieties also show remnants of an additional noun class, the locative class 23 common for Great Lakes Bantu (see Laine 2023: 72–75).
[6] We follow Nicolle (2014) in referring to this paradigm as the "referential demonstrative" series, due to its common anaphoric function cross-Bantu.

The morphological structure of the WS verb can be analyzed by means of the usual Bantu template as in Figure 1.

Pre-initial	initial	post-initial	pre-radical	radical	pre-final	final	post-final
focus (NEG)	SP	TA	OP	root	extension	TA	phoric LOC

Figure 1. The Bantu verbal template as it applies to WS

The purely positional labels of the template come from Meeussen (1967; see also Nurse 2008: ch.2; Güldemann 1999). We chose to follow Van de Velde (2021, 2022) in sticking to these labels when discussing Bantu relative verbs, although it is not so important for our analysis of the WS varieties. Using positional labels such as "initial" instead of "subject marker" or "subject prefix" is particularly neat when analyzing those cases in Bantu where the head noun rather than the subject agrees alone on the verb (as was discussed in §1). This does not take place in WS, though, as will be clear in the discussion(s) that follow. Thus, functional characteristics of the various positions as they occur in the WS varieties, including "subject prefix", are also indicated below the positional labels in Figure 1.

3. Relative constructions – A synchronic account

3.1 Introduction For this study, we treat relative constructions as consisting of a subordinate clause acting as an attributive modifier of a noun phrase, thus following, e.g., Lehmann (1984, 1986) and Heine & Kuteva (2007: 225); see also Hendery (2012) and Schmidtke-Bode & Diessel (forthcoming).[7] The noun (phrase) being modified, or relativized, will be referred to as the head, which occurs (as an antecedent) with its full identity in the main clause (i.e., the non-relative clause). The relative clause, in turn, consists of the relative marker, a relative verb (and potentially other clause members). The relative marker, in this study also referred to as the relativizer (or the linker; Guérois & Creissels 2020), combines the roles of acting as a boundary between the main clause and the relative clause while at the same time anaphorically representing the head in the relative clause. It is the grammatical role of this relative marker that decides the status of the relative clause as encompassing either subject or non-subject relativization.

3.2 The standard relative construction in WS In the WS language varieties, the main type of relative construction – and the main focus of this paper – consists of a relative marker segmentally identical and thus transparently derived from the proximal demonstrative. Just like the proximal demonstrative, the relative marker is made up of a stem *-nɔ* inflected with the PP (pronominal prefix; see §2 above), which takes agreement with its antecedent, i.e., the head Noun Phrase (NP) of the main clause, in this case. As indicated in the examples (1) – (4), in each variety, the relativizer directly follows the head NP and precedes the relative verb (as well as other potential members of the relative clause).[8]

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[7] We choose such a broad, semantic definition as we also want to capture non-restrictive or supplementary relative clauses, which definitions like that of Kuteva & Comrie (2006) and Comrie & Kuteva (2013) leave out. Notice, furthermore, that the relative constructions discussed have formal features which, at least to some extent, keep them apart from other nominalizing strategies in these languages, thus motivating them to be separately treated (*pace* Shibatani 2018, 2019, who criticizes the very concept of relatives as a distinct category). See also Kuteva & Comrie (2006: 218), who note that general noun-modifying constructions seem to be rare in African languages.

[8] Note that this rigidity differs from the more flexible constituent order apparently available for the relativizer in closely related and neighboring Kuria (JE43), as described by Gould (1988).

(1) Ikoma

βa-ɾa-ɣɛ́ɣ-a	a-m-bóri	[í-nɔ	e-ɲí	a-nda]
SP2-NARR-carry-FV	AUP-9-goat	[9-REL	SP9-COP	9-stomach]

'They carried the pregnant goat (lit. the goat which has a stomach).'

(2) Ishenyi

tu-tɛɣ-ɛ́	mo-βi-βáŋga	βé-ése	[βi-nɔ	βe-ɾéŋge	βe-tw-ináári]
SP1PL-trap-SBJV	LOC18-8-hole	8-all	[8-REL	8-PST.COP	SP8-OP1PL-surround]

'Let's set traps at all the places that surround us.'

(3) Nata

a-ma-mboɣeɾá	[ɣá-nɔ	n-ta-ɣóre]	ŋ-ga-aɲí	na=βejí	ŋ-koɾu
AUP-6-maize	[6-REL	SP1SG-NEG-buy.PFV]	FOC-SP6-PRS.COP	COM=9.price	9-big

'The corn that I did not buy is expensive.'

(4) Ngoreme

#⁹a-aɾe=hɔ	o-mo-nto	[ɔ-nɔ	a-ɣɔɔtɛ	o-mu-ɣaikoɾo	na=a-βa-ana]
SP1-PST.COP=LOC16	AUP-1-person	[1-REL	SP1-have	AUP-1-wife	COM=AUP-2-child]

'There was a man who had a wife and children.'

The relative marker is also prosodically identical to the proximal demonstrative in WS. In Ikoma, Nata and Ishenyi, the relative marker – as well as the demonstrative – has a HL pattern (as in example 3 above) which is shifted to LL utterance-initially, most notably in Ikoma and Ishenyi. In Ngoreme, the tone pattern is LL (see example 4 above). All four varieties show variation in the tone pattern of the relative marker (e.g., in Ishenyi the H tone is not realized utterance-medially, as in example (2) above), but the same type of variation is attested in the proximal demonstrative and is thus not a specialized trait of the relative marker.

The relative verb As further indicated in the examples above, relative constructions are not exclusively marked by the relative marker in the WS language varieties. The relative verb form is also different from the corresponding verbs in independent clauses. As pointed out by Guérois & Creissels (2020), it is a common trait in Sub-Saharan Africa for relative verb forms to differ from those of corresponding "independent" clauses, being morpho-syntactically de-ranked in contrast to main clause verbs and behaving similarly to other dependent verb forms. More specifically for WS, the relative verb differs from main clause verbs while resembling other subordinate verbs, given the following factors. To begin with, the relative verb can never appear with the focus marker N- in the pre-initial position of the verb. This is evident when comparing examples (5) and (6), where the same formal construction, consisting of PP2-*nɔ*, acts as a demonstrative in (5) but as a relative marker in (6). Another example of the restriction of the relative verb in relation to independent verbs is (7) from Ngoreme, which consists of two verbs where the main (predicate) verb is prefixed with a pre-initial focus nasal whereas the relative verb is not.

(5) Ikoma

βaa-má	βá-nɔ	m-ba-aɣo-tú-ɲaaki	n-to-βíít-e
2a-our_mother	2-PROX.DEM	FOC-SP2-IPFV-OP1PL-bother	FOC-SP1PL-kill-SBJV

'These mothers (of ours) annoy us, let's kill them.'

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⁹ We lack recordings for a handful of the examples (e.g., the proverbs in §3.7.). Consequently, we have not been able to analyze and mark them for tone. Such examples are indicated with an octothorpe <#> throughout the paper, like in this Ngoreme example.

(6) Ikoma

a-βa-βúréní	βa-βeɾe	[βá-nɔ	βa-aɲí	há-nɔ]
AUP-2-youth	2-two	[2-REL	2-PRS.COP	16-PROX.DEM]

'The two youths who are here.'

(7) Ngoreme

e-ɣi-táβɔ	[ki-nɔ	ke-eɣu-sɔ́m-ɛk-a]	ŋ-gé-siɾe
AUP-7-book	[7-REL	SP7-IPFV-read-NEUT-FV]	FOC-SP7-be_finished-PFV

'The book which was readable is finished.'

Furthermore, the relative verb behaves like other dependent verb forms in negative constructions. This is most visible in Ngoreme, which differs from the rest of WS in that it generally makes use of a negative prefix in the pre-initial position in independent main clauses and a post-initial negative prefix in dependent non-main clauses, including relatives (see Laine et al. forthcoming). This means that in relative clauses the negation strategy automatically switches from pre-initial (8) to post-initial position (9).

(8) Ngoreme

e-βj-ákoɾi	βí-nɔ	té-ŋ-ko-βe-tun-a
AUP-8-food	8-DEM	NEG-SP1SG-IPFV-OP8-want-FV

'This food, I don't want (it).'

(9)

βí-nɔ	ne=e-βj-akoɾi	[βí-nɔ	n-tá-áɣo-tun-a]
8-DEM	COP=AUP-8-food	[8-REL	SP1SG-NEG-IPFV-want-FV]

'This is food that I don't want.'

The other WS members use post-initial negation throughout. The only exception is that of vowel-initial subject-marking verbal prefixes consisting of a vowel only – i.e., for 2SG, 3SG (class 1) and class 9. In these contexts, the negative prefix in main clauses may switch to occur verb-initially, acting as an onset for the subject prefix. This is illustrated in (10) with the class 1 subject marker *a-* in Ikoma. As seen in the relative construction in (11), however, the negative prefix "falls back" into a regular post-initial position.

(10) Ikoma

ta-a-rúɣ-iɾi	βi-ɲakuɾe	it͡ʃo
SP1.NEG-PST-cook-PFV	8-food	yesterday

'He did not cook food yesterday.'

(11)

u-mu	[ú-nɔ	a-ta-kɔ́ɾ-iɾi	me-ɾémo]	motííro
1-one	[1-REL	SP1-NEG-do-PFV	4-work]	COP.Motiiro

'The one who has not finished his work is Motiiro.'

For marking continuous-progressive aspect, Ngoreme furthermore makes use of a comparatively rare auxiliary inversion construction, with the predicate verb preceding the auxiliary (see Roth 2018: passim, Gibson 2020), illustrated in (12). However, in the relative construction, the aspectual conjugation of the verb shifts to a simple and regular verb form, as in (13).

(12) Ngoreme (from relative questionnaire in Downing et al. (2010))

a-βá-ŋke	[βá-nɔ	βa-ako-és-a	ɣo-tíβa]
AUP-2-girl	[2-REL	SP2-IPFV-be_able-FV	INF-swim]

ŋ-ku-βáɾaan-a	βa-ani	mó-ɣi-sima
FOC-INF-play	SP2-PRS.COP	LOC18-7-well

'The girls who can swim are playing at the well.'

(13) Ngoreme (from relative questionnaire in Downing et al. (2010))

na=a-βá-ŋke	[βá-nɔ βa-aku-βaɾáán-a	haɣuhe	n=e-ɲántʃa]
COP=AUP-2-girl	[2-REL SP2-IPFV-play	near	COM=9-lake]

'It's the girls who are playing by the lake.'

While the tonal behavior of verbs in relative constructions seems to be the same as in independent clauses in Nata and Ngoreme, some verb forms shift in their tonal behavior in Ikoma and Ishenyi. Aunio (2013) shows for Ikoma that verb forms that renounce any "melodic" (i.e., grammatical) high tones receive an initial high tone, i.e., a high tone on the verb prefix of the verbal word. Compare the relative perfective verb in example (15) with the original form in (14) .[10]

(14) Ikoma (Aunio 2013: 280, glossing adapted)

m-b-em-iri
FOC-SP2-sow-PFV
'They have sown.'

(15) Ikoma (Aunio 2013: 311, glossing adapted)

o-mó-óto	[ú-nɔ	ém-iri	am-búsúró]
AUP-1-person	[1-PROX.DEM	SP1.sow-PFV	9-seed]

'Person who sowed the seed.'

In addition, our new data show that in Ikoma there is a tendency to insert an initial high tone into relative constructions when there is no other high tone on the first or second syllable of the verb (see (24) below). In Ishenyi, an initial H is inserted in the perfective, but not in other verb forms.

Prosodic features of the relative clause Except for tone marking on the relative verb, WS uses sentence-level prosodic cues to separate the relative clause from the main clause. In many Bantu languages relative clauses are followed by a prosodic break. This is the case, for example, for all relative clause types in Chewa (Downing & Mtenje 2017), while in South African isiNdebele, a prosodic break is more common at the right edge of the relative clause (Aunio et al. 2023). Both Chewa and isiNdebele use penultimate lengthening to mark prosodic phrasing. In WS, penultimate lengthening is not found, but a short break can precede or follow the relative clause; this is usually only attested in careful or hesitant speech, not in normal speech, and much more frequently at the right edge of the relative clause (Figure 2).

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[10] Additionally, the persistive 'still' form -*keeɾé* shifts its tonal structure from a final high to a high in initial position.

Figure 2: Ikoma sentence *aβasaaní [βáno βáákuutʃa mwántʃa] mbaakúútʃa mooʃúúre iito* 'The friends who are going to Mwanza go to our school.' with a break following the relative clause. The horizontal bars mark the approximate pitch levels of the H tones.
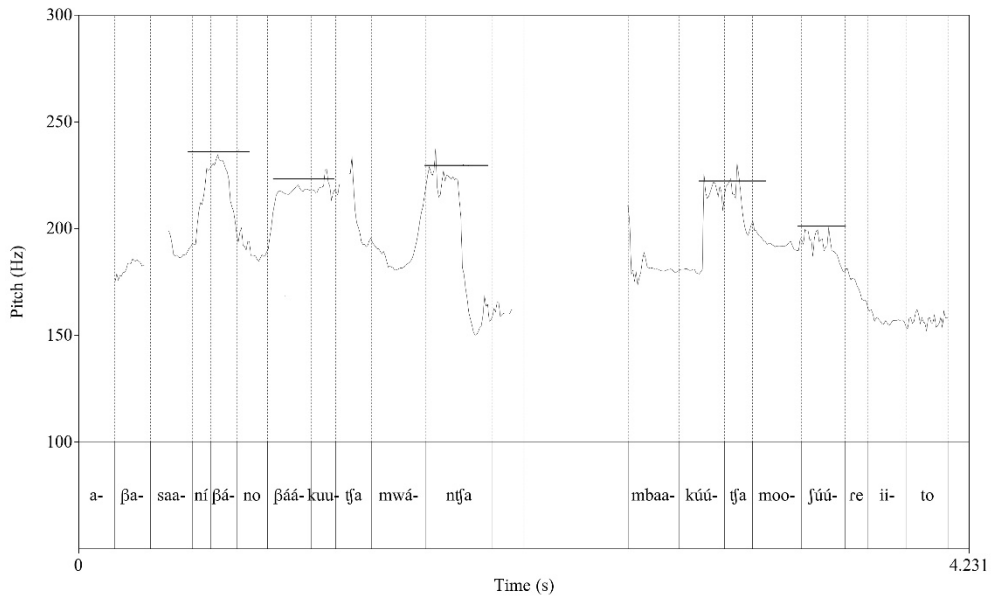
Instead, relative clauses are more often marked with the suspension of automatic downstep. Automatic downstep – i.e., when each H tone or stretch of H tones is realized at a lower pitch than any preceding H tone when L tones intervene (Downing & Rialland 2016) – is a common feature of tone languages and indeed very common in WS as well. This is seen in the latter part of Figure 2 above: the H tone on the word *mooʃúúre* 'in school' is much lower than the H of the preceding word. However, in the first part of Figure 2 – which includes the relative clause – this lowering of the pitch is suspended, meaning that the H tones following L tones are not lowered in pitch: the third H peak of the clause in the word *mwántʃa* 'Mwanza' is realized at approximately the same level as the first H of the clause, that is, the H tones in the first part are not downstepped. While all the four WS varieties show this suspension, it seems to be optional. It should also be noted that suspension of downstep seems to apply to other types of complex sentences as well.

What is often attested together with the suspension of the automatic downstep in WS is substantial lowering of the whole register for the part that follows the relative clause: in Figure 3 the H tones of the latter clause are slightly lower than the toneless syllables in the first clause. Again, this lowering is optional, as can be seen by comparing Figure 2 with Figure 3. In addition, the end of the relative clause can be further emphasized by raising the pitch of the last H tone before the clause break, which is seen in the word *aβaróótʃe* in Figure 3.

Figure 3: Nata sentence *aβaakí [βáno meerí aβaróótʃe] mbaabáraɣí ɣutáha amaantʃé* 'The girls who Mary saw are going swimming.' showing the lowering of the pitch register after the relative clause. The horizontal bars mark the approximate pitch levels of the H tones.
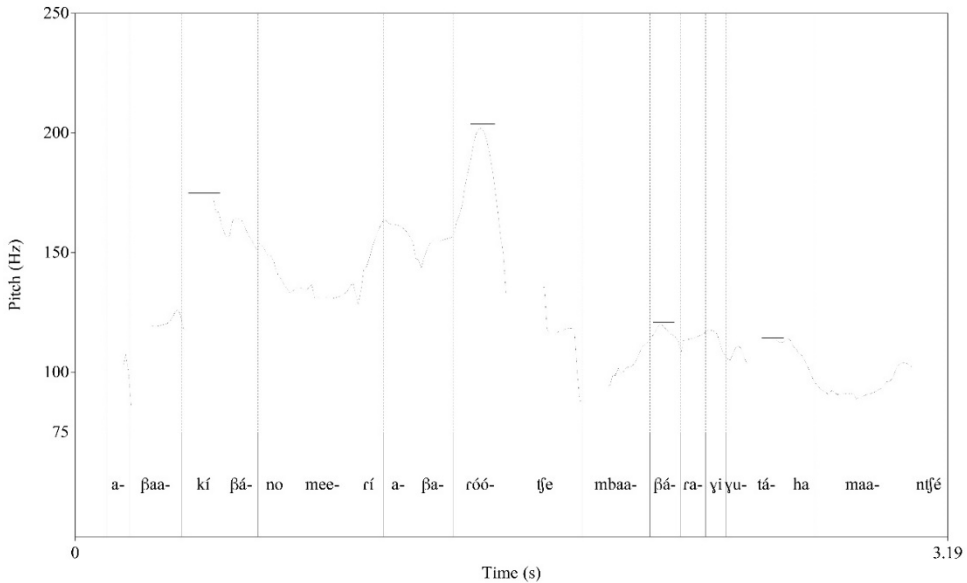
The suspension of downstep seems to apply to all types of relative clauses, but since short sentences are not subject to automatic downstep in the first place, suspension of the automatic downstep is seen only when the utterance has enough syllables with alternating H and L tones. In addition, sometimes the suspension of the automatic downstep does not take place in longer sentences either, indicating the optional nature of this prosodic marking. While the relative tone patterns discussed above show variation between the WS languages, the suspension of the automatic downstep works in the same way throughout WS.

3.3 Subject relative constructions As already indicated in several examples above, a subject relative construction consists of a relativized subject which serves as the head NP, with which the relative marker agrees. The relative marker typically occurs in a position immediately after the subject head, preceding the relative verb and other potential members of the relative clause. As is always the case in WS, the "initial" verb prefix on the relative verb agrees with the subject (see the discussion in §2 and §4.4). Example (16) from Ishenyi may serve as an additional example of a basic subject relative construction.

(16) Ishenyi

    #um-oona [ɔ-nɔ   a-aɣu-teɾeki   ɾi-βantʃa]
    1-child   1-REL   SM1-IPFV-sweep 5-yard
    'The child who sweeps the yard.'

Relativized locative adjuncts may behave as the subject of the relative clause, controlling the agreement with the relative marker and the subject-indexing initial position of the verb. The WS varieties are characterized by general "inner agreement" with locative nouns (see Aunio et al. 2019). Locative nouns, with the exceptions of *aha-sé* and *aha-ɣíro* both meaning 'place' in class 16, are

formed by being added to a noun already carrying an inherited class prefix. Thus, as seen in (17), it is this inherited noun class membership that controls agreement in WS.

(17) Ikoma

to-ɾa-sɔ́h-a	mo-ɣi-sáka	[kí-nɔ	ɣe-ta-aɲí	na=mó-te]
SP1PL-NARR-enter-FV	LOC18-7-bush	[7-REL	SP7-NEG-PRS.COP	COM=3-tree]

'We entered the bush where there were no trees.'

3.4 Non-subject relative constructions The term "non-subject relative construction" encompasses object relativization, here exemplified with direct object relativization in Ikoma (18), as well as relativized adjuncts.

(18) Ikoma

e-βí-ɲakuɾe	[βí-nɔ	taata	ta-ɾaaɣííɾe]	n-oo-βa-h-é	a-βá-ána
AUP-8-food	[8-REL	1a.father	SP1.NEG-eat.PFV]	FOC-SP2SG-OP2-give-SBJV	AUP-2-child

'The food which father does not eat, give it to the children.'

As seen, the pattern where the relative marker occurs in a position directly following the head NP, as described for subject relativization in the section above, also holds for non-subject relativization (but see §3.7 for some important exceptions to this general characterization). Importantly, this means that the lexical subject interferes between the head NP and the relative verb and that the initial verbal prefix of the relative verb continues to mark the subject.

These facts additionally tie in with the two main parameters of variation concerning the behavior of non-subject relatives as noted across the Bantu family (see, e.g., Van der Wal 2015, Downing & Marten 2019, Guérois & Creissels 2020), to be discussed for WS in the following subsections. The first parameter concerns object marking and the second word order within the relative clause. We close the section by discussing adjunct relativization specifically, which introduces non-subject relative head resumption techniques other than object marking.

Object marking on the relative verb The attitude to object marking – a source of much variation across the Bantu family; see Marten & Kula (2012) – can be described as *laissez faire* in WS (and the Mara languages in general; see Aunio et al. 2019). Indexing the object on the verb seems to be truly optional in relative constructions. That is, an object prefix is never obligatory while at the same time it does not seem to be unacceptable to include it either. Even animate referents are optional, as illustrated in the equally acceptable sentences (19a)and (19b) from Ngoreme. (Comitative and instrumental adjuncts may be resumed within the relative clause with the comitative preposition and a short substitutive pronoun; see examples (22), (23) below.)

(19) Ngoreme

a.
a-βá-ána	[βa-nɔ	sóókoɾo	a-hééɾe	t͡ʃi-ŋɔ́mbɛ]	βa-ani	mo-ɣi-tááɾo
AUP-2-child	[2-REL	1a.grandfather	SP1-give.PFV	10-cow	SP2-PRS.COP	LOC18-7-river

b.
a-βá-ána	[βa-nɔ	sóókoɾo	a-βa-hééɾe	t͡ʃi-ŋɔ́mbɛ]	βa-ani	mo-ɣi-tááɾo
AUP-2-child	[2-REL	1a.grandfather	SP1-OP2-give.PFV	10-cow	SP2-PRS.COP	LOC18-7-river

'The children, to whom grandfather gave the cows, are at the river.'

In cases with no object marking verb prefix, as in (19a) above, the relativizer is the only device cross-referring to the antecedent head in the main clause.

Constituent order within the non-subject relative clause The second parameter of variation typical of non-subject relative constructions in Bantu has to do with the fact that the position of the lexical subject may differ in Bantu languages, with a post-verbal subject being obligatory in some languages and optional in others (see, e.g., van der Wal 2015).

For WS, the lexical subject in all our data occurs preceding the relative verb. Given the fact that the main relative marker is a free-standing marker (and not a verbal proclitic or prefix), we may note that the WS varieties adhere to the claim brought forward by Givón (1972), Demuth & Harford (1999), that Bantu languages with a free relativizer always keep their main clause word order in relatives (but see, e.g., Simango (2006), Downing & Marten (2019) for a rebuttal including several counterexamples to this proposed universal). Similar to the situation with the (omitted) object prefix discussed above, the pre-verbal relative subject might also be connected to a more general tendency – albeit far from exceptionless, see, e.g., (17) above – of not resorting to subject inversion (see, e.g., Marten & van der Wal 2014 for a general introduction to subject inversion and other inversion constructions in Bantu). In several other contexts strongly associated with (obligatory) subject inversion in Bantu, such as thetic (i.e., topic-less) constructions, presentatives and existentials, the subject may remain in the preverbal position in WS (see, e.g., Bernander & Laine 2020, Aunio et al. 2019).

Adjunct relativization Adjuncts are relativized with the typical strategies employed in Bantu languages (see, e.g., Riedel 2010; Downing & Marten 2019). Some adjuncts are relativized in a manner identical to objects, as is the case with the relativized locative adjuncts from Nata in (20)[11] and (21). As further discussed in §3.6, these constructions are, with the exception of the explicit lexical head, identical to locational/temporal adverbial clauses.

(20) Nata

tw-aɣá-ɣaɾok-a	a-wiitó	[há-nɔ	tu-hi-ikár-a]
SP1PL-IMM.PFV-return-FV	LOC23-our	[16-REL	SP1PL-HAB-stay-FV]

‘We are returning to our home where we live.’

(21)

a-ha-ɣéɾó	[há-nɔ ni-haa-sɔ́m-a]	mo-ʃuuɾé
AUP16-place	[16-REL SP1SG-HAB-study-FV]	COP.LOC18-9.school

‘The place where I studied was at school.’

Discontinuous associatives, as in (22), and comitatives, as in (23), are reintroduced in the relative clause through the use of a prepositional phrase made up of the comitative preposition *na* 'with' and a resumptive pronoun, the so called short substitutive PP-*o* (~PP-*e* for noun class 1; see Persohn & Devos 2017 and references therein).

(22) Ishenyi

#[βa-nɔ	tw-iβateene	na=βo]	to-oɣa-teen-a	ɣu-ɣamb-a
[2-REL	SP1PL-neighbour.PFV	COM=2]	SP1PL-IMM.PFV-fear-FV	INF-talk-FV

‘We who are neighboring with them, we are afraid to talk.’

(23) Ikoma

a-ma-ʃááɣa	a-βeɾe	[ɣá-nɔ	ne-eɲí	ná-ɣo
AUP-6-disease	6-two	[6-REL	SP1SG-PRS.COP	COM=6

‘The two sicknesses which I have contracted.’

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[11] Notice the generalized use of class 16 as locative agreement marker in example (20) which contains a nominal head carrying the noun class prefix of the archaic class 23; cf. Table 1 and fn. 5 in §2.

Instrumental adjuncts are instead promoted to argument status through the addition of an applicative (valency-increasing) extension on the verb. Example (24) from Ikoma illustrates this strategy.

(24) Ikoma (from relative questionnaire in Downing et al. (2010))

e-ke-huɾeró	[kí-nɔ	tó-óɣu-téɾɛk-ɛɾ-a	ó-mu-t͡ʃaɾe]	ɣe-taa-kuβ-á
AUP-7-pot	[7-REL	SP1PL-IPFV-cook-APPL-FV	AUP-3-rice]	SP7-NEG-be-FV

'The pot with which we cook rice has split.'

3.5 Non-restrictive relative constructions Schmidtke-Bode & Diessel (forthcoming), who refer to non-restrictive relatives as "supplementary relatives", point out that in contrast to prototypical, restrictive relatives, which function to restrict the potential referents of the head NP, non-restrictive relatives lack such a potential but merely function to provide "elaborative information" about the head. Despite this functional difference, non-restrictive relatives are expressed in an identical manner to restrictive ones in WS, as evidenced in (25) and (26).

(25) Ishenyi (from relative questionnaire in Downing et al. (2010))

meeɾi	[ɔ́-nɔ	á-t͡ʃ-a	ɣw-íʃaɣa]	mu-sááni	o-one
Mary	[1-REL	SP1-know-FV	INF-swim]	COP.1-friend	1-mine

'Mary, who knows how to swim, is my friend.'

(26) Nata (from relative questionnaire in Downing et al. (2010))

aβa-akí	[βá-nɔ	βa-aɣo-túɾ-a	ɣw-isáɣa]	m-ba-aku-βáɾaan-a	mo-ɣe-síma
AUP-2-girl	[2-REL	SP2-IPFV-be_able-FV	INF-swim]	FOC-SP2-IPFV-play-FV	LOC18-7-well

'The girls, who can swim, are playing by the river.'

A prosodic difference between restrictive and non-restrictive relatives has been described for example in Zulu (Cheng & Downing 2007) but not in closely related (South African) isiNdebele (Aunio et al. 2023). This difference is not evident in WS, where prosodic breaks are optional in both restrictive and non-restrictive relative clauses alike and suspension of downstep is available in both relative clause types.

3.6 Free relatives "Free" or "headless" relative constructions have no explicit lexical noun as a head in the main clause. A case in point is (27); (22) above is another example.

(27) Ikoma (from relative questionnaire in Downing et al. (2010))

[βi-nɔ	né-ɾi-iɾe	táβooɾi]	m-be-eɾé	βi-t͡ʃɔ́mu	ne-βi-imok-iɾi
[8-REL	SP1SG-eat-PFV	yesterday]	FOC-SP8-PST.COP	8-good	SP1SG-OP8-take-PFV

na-ané	a-mo-ɣóndo
COM-1SG	LOC23-3-field

'Those that I ate yesterday were good, I took them with me to the fields.'

From a synchronic perspective at least (see the discussion on the historical implications in §4.5), it can be said that free or headless relatives are formed with the relative marker acting as the head. At the same time, as the relative marker also has pronominal and phoric qualities, a lexical head referent is often retrievable as an antecedent from the previous discourse (see Kula & Marten 2009 on relative clauses in Bemba (M42) for a similar case in another Bantu language). Alternatively, the free relative refers to a general or generic antecedent, characteristic of the noun class within which the relative marker is inflected. Typically, this generic referent adheres to the prototypical "core" semantics of a Bantu noun class (pair), e.g., class 1/2 'human beings', class 7/8 'thing(s)', class 16 'place (>time)'

(cf. Maho 1999: 91, Katamba 2003: 115). For example, the use of noun class 2 in (22) above indicates that the proposition refers to human beings, whereas the relative marker in class 7 in (28) below refers to '(any)thing' (see §3.7 for more on the second relative clause in this example, devoid of the standard relative marker).

(28) Nata

[ki-nɔ	n-dóótʃe]		n-kjó	n-di-iɾe
[7-REL	SP1SG-see.PFV]		COP-SBST7	SP1SG-eat-PFV

'What I see is (indeed) what I eat.'

In other cases, the generic referent can be traced to a noun that just "happens" to occur in a certain noun class, like the Ngoreme noun class 6 word *ma-ng'ana* 'words (> matters)', as in (29), or the noun class 11 word *ro-siku* 'day', as in (30).

(29) Ngoreme

#a-ɾa-tɛɣɛɾ-a	[ɣa-nɔ	ɣa-aɣu-kɔɾ-u	ki-βaɾa	mu-nɔ]
SP1-NARR-listen-FV	[6-REL	SP6-IPFV-do-PASS	7-outside	LOC18-PROX.DEM

'…he listened to what [matters] were being done there outside.'

(30)

#[ɾu-nɔ	ɲakoβjeɾa	w-aβo	a-a-tʃ-eɾe	ko-mu-keeɾi]
11-REL	mother-in-law	1-their	SP1-PST-come-PFV	INF-OP1-greet

'…(the day) when the mother-in-law came to greet him.'

Extension to adverbial clause constructions There is a clear functional and formal continuum from headless relative constructions of the type illustrated above to adverbial clause constructions. The extension of relative clause constructions to adverbial clause constructions is cross-linguistically common as both are clausal constructions, both are subordinate and both act as modifiers (Hendery 2012: 97). Unlike relative clauses, however, adverbial clauses are dependent on and modify a verb phrase or an entire clause rather than an NP (Diessel 2019, Thompson et al. 2007).

The most prominent adverbial clause marker derived from a relativizer in WS is *ha-nɔ*, inflected with a locative class 16 PP, used extensively in locational and in extension temporal adverbial clause constructions.

(31) Nata

[ha-nɔ	ŋína	e-ɣe-súsu	a-ku-ɾi	tʃǎ-ɲama]	á-ka	i-ɾa-mú-ɣwata
[16-REL	1.mother	AUP-7-hare	SP1-IPFV-eat	10-meat]	9-lion	SP9-NARR-OP1-catch-FV

'As Hare's mother was eating the meat Lion caught her…'

(32) Ikoma

[ha-nɔ	βá-tiŋ-iɾi	o-mw-éne	aká]	a-ɾa-βúɣ-a	aa
[16-REL	SP2-approach-PFV	AUP-1-owner	23.home]	SP1-NARR-say-FV	oh

'When they approached the house owner, he said 'oh'…'

See Roth (2018: 78–84) for further exploration of the temporal adverbial use of *hanɔ* in Ikoma and Ngoreme and Laine et al. (forthcoming) for its behavior when negated in Ngoreme.

3.7 Relative(-like) constructions without a relativizer derived from a proximal demonstrative It is not uncommon to have several different strategies for relativization, whether from a cross-linguistic perspective (Comrie & Kuteva 2013), in African languages in general (Kuteva & Comrie 2006) or in Bantu in particular (Van de Velde 2021). As made abundantly clear above, there is a preference for the use of a relative marker of the form PP-*nɔ* in WS, i.e., a relativizer

transparently derived from the series of proximal demonstratives. As further argued in §4 below, the PP-*nɔ* relativizer is also the only dedicated (i.e., functionally and structurally specialized) relative marker. With that said, exceptions to this pattern of relativization in the WS language varieties exist where other forms act as linkers, albeit arguably not as dedicated relativizers, between the main clause and the relative clause. These other types of relativization strategies also need to be accounted for to complete both the synchronic and diachronic picture with regard to WS relative constructions. In §4, it will be argued that these alternative constructions are remnants of an earlier system of relativization in WS.

The use of non-proximal demonstratives as linkers As a first exception to the general rule of using (derivatives of) a proximal demonstrative as a relativizer, representatives from the other two series of demonstratives found in the WS languages (cf. §2) can assume a similar role to that of a linker between the antecedent head in the main clause and the relative clause. Van de Velde (2022) notes that it is common for Bantu languages with demonstrative relatives to have engaged several types of demonstratives as markers of relative constructions. Example (33) illustrates the use of the referential demonstrative and (34) that of the distal demonstrative (see §4.2 for more on their specific functional characteristics). Both of these examples are taken from Ishenyi, but the pattern applies to all of WS.

(33) Ishenyi

a-aku-βuɣ-a	i-ika	ɛ-nɔ	n-o-tiɣ-e	n-sɔh-ɛ
SP1-IPFV-say-FV	9-homestead	9-PROX.DEM	FOC-SP2sg-cease-SBJV	SP1SG-enter-SBJV

n-diɣi	[ki-jɔ	kee-mu]
SP1SG-see	[7-REF.DEM	SP7-LOC18]

‘He said “wait, let me go into this house to see what is in there”.’

(34)

o-ɾusí	o-ɾó-wa	[ɾú-úɾɛ	ɾú-tɔŋ-iɾɛ	mú-úɾɛ]
SP2SG-take_out	AUP-11-steam	[11-REL	SP11-evaporate-PFV	LOC18-DIST.DEM]

‘You take out the evaporated steam (lit. the steam which has evaporated).’

As may be inferred from example (34) (as well as from (35) below), the use of different demonstratives as relative linkers in Ishenyi does not appear to be as strictly delimited as in closely related Ikizu, where non-proximal demonstratives are described as only occurring as linkers in relative constructions when they simultaneously act as independent (i.e., pronominal) arguments (Gray 2013: 59). We may further notice that the function of the distal demonstrative in (34) also retains its original determining function within the noun phrase (see §4.2 for more on this seemingly “bivalent” function of the demonstrative).

As seen in (35) from Ishenyi, non-proximal demonstratives – like the referential demonstrative in this case – may also occur as linkers in non-subject relative constructions. The semantically identical example in (36) from Nata making use of a proximal demonstrative as relativizer, however, indicates that non-proximal demonstratives are freely exchangeable with the proximal demonstrative in forming this type of relative constructions.

(35) Ishenyi (from relative questionnaire in Downing et al. (2010))

ne-ekw-énd-a	ɣu-tááɾa	e-se	[έ-jɔ	o-oku-ɾwéɾ-a]
SP1SG-IPFV-want-FV	INF-visit	9-country	[9-REL	SP2SG-IPFV-come_from-FV]

‘I want to visit the country where you come from.’

(36) Nata (from relative questionnaire in Downing et al. (2010))

ni-kwɛ́nd-a   ɣu-táár̠-a a-se   [í-nɔ   o-r̠óór̠e]
SP1SG-want-FV   INF-visit-FV 9-country [9-REL SP2SG-come_from-FV]
'I want to visit the country where you come from.'

Taken together it is hard to pinpoint the exact contexts that trigger the use of the other demonstratives in relative constructions instead of the proximal demonstrative, at least from a synchronic perspective. We conclude for now that the proximal demonstrative has a more generalized use in relation to its non-proximative counterparts. This ties in with the argumentation further on in this paper that those relative markers originating from the proximal series of demonstratives constitute the only dedicated relativizer in the WS languages.

Clefts Clefts may also be formed without a relative marker derived from a proximal demonstrative. In such constructions, the focus marker N- (historically derived from an identificational copula) occurs either directly on the head NP or separated from it in a construction with a resumptive pronoun consisting of the same short substitutives discussed for adjunct relativization above. Examples (37) and (38) illustrate each of the two strategies.

(37) Ikoma

na=a-βá-áke   o-o-r̠óót͡ʃe
COP=AUP-2-girl   SP2SG-PST-see.PFV
'It's the girls that you saw.'

(38) Ishenyi (from relative questionnaire in Downing et al. (2010))

t͡ʃumapííri   nu-hɔ́   mɛɛri   a-aku-hík-a   há-nɔ
Sunday   FOC=SBST16 Mary   SP1-IPFV-arrive-FV LOC16-PROX.DEM
'It's on Sunday that Mary will come here.'

Notice again, however, that although not obligatory in any of the WS varieties, the relativizer derived from a proximal demonstrative may also be included in such constructions.

(39) Nata (from relative questionnaire in Downing et al. (2010))

ná=á-ma-ɲembɛ   [ɣá-nɔ   a-βa-ana   βa-a-r̠i-ir̠é]
COP=AUP-6-mango   [6-REL   AUP-2-child   SP2-PST-eat-PFV]
'It's the mangoes that the children ate.'

(40) Ishenyi (from relative questionnaire in Downing et al. (2010))

na=a-βá-ŋke   [βá-nɔ   βa-aɣu-tém-a   iŋ-gɔ́má]
COP=-AUP-2-girl   [2-REL   SP2-IPFV-hit-FV 9-drum]
'It's the girls who are playing the drums.'

In relation to this description of clefts it should be noted that in many ways they constitute non-prototypical relative constructions. As pointed out by Hendery (2012: 16), they have, from a semantic perspective, more in common with a plain independent clause than a relative clause as they share the same main event of the proposition and truth value, whereas the main event of a relative clause has to be introduced by some other verb. Indeed, in some cases the construction with the nasal is arguably not a bi-clausal cleft at all but a mono-clausal focus construction in WS. Consider, for example, the exclusive focus reading in the Ikoma example in (41), further manifested syntactically in example (42) from Ngoreme, where the focused constituent has been shifted to a clause-medial position directly preceding the predicate verb but after the subject noun. See Bernander & Laine (2020) for some further remarks on focus constructions in WS.

(41) Ikoma (from relative questionnaire in Downing et al. (2010))
    n=a-ma-ɲémbɛ   a-βá-ána   βa-a-rí-íre
    COP=AUP-6-mango   AUP-2-child   SP2-PST-eat-PFV
    'The children ate mangoes (and nothing else).'

(42) Ngoreme (from relative questionnaire in Downing et al. (2010))
    a-βá-ána   n=a-ma-jémbɛ   βa-a-rí-írɛ
    AUP-2-child   COP=AUP-6-mango   SP2-PST-eat-PFV
    'The children eat mangoes (and nothing else).'

Subject relatives with a gap in archaic speech Some proverbs in Ikoma, such as (43) and (44), contain examples of subject relativization with a gap, i.e., without any free-standing relative marker at all. Example (44) with the present copula does not even contain a lexical subject.

(43) Ikoma
    #kj-aɾa   [ki-naɾ-iɾi   γu-kɔmb-a]   γe-ta-hɛɛβ-u
    7-finger   [SP7-get_used_to-PFV   INF-scrape_out-FV] SP7-NEG-drive_off-PASS
    'A finger that has become used to itching cannot be stopped.'

(44)   #[ke-eɲi   am-bɛɾɛ]   ni-kjo   o-ri-iɾɛ
    [SP7-PRS.COP   9-front]   COP-SBST7   SP2SG-eat-PFV
    'That which is in front of you is indeed what you eat.'

Unfortunately, there is no tone marking in the collection of proverbs from which these examples are culled. Thus, we do not know if the verbs carry an initial high tone or not, which in this case would help to identify them as relative verbs (as per the discussion in §3.2). However, the fact that the verbs lack a prefixed focus nasal in the pre-initial position strongly suggests that these are indeed relative verbs.

Several other proverbs contain a relativizer derived from the proximal demonstrative, e.g., the subject relative in (45) and the non-subject relative in (46).

(45) Ikoma
    #[ki-nɔ   ke-ri-iɾɛ]   wa-kj-aɾa ni-kjo   ke-ri-iɾɛ   na   wa-ɾo-komo
    7-REL   SP7-eat-PFV   ?-7-finger COP- SBST7   SP7-eat-PFV   COM   ?-11-nail
    'What has eaten the finger is indeed what has eaten the nails.'

(46)   #[u-nɔ   o-γo-kiɲ-a]   ni-we   n-ta-aɲi   iwe
    [1-REL   SP2SG-IPFV-believe-FV] COP=SBST1   FOC-NEG-PRS.COP PERS1
    'The one who you believe it is, it is not.'

In relation to the discussion on free relative constructions in §3.6, it may be asked whether these constructions constitute free (/headless) relative clauses consisting of a relative marker and a relative verb or relative clauses with a gap where the demonstrative acts a pronominal head. As further elaborated in §4, it is probably exactly these types of ambiguous contexts which caused the demonstrative to be re-interpreted as relative markers.

In our collection of proverbs from the other language varieties we do not have examples of this, all relatives being formed with the standard relative marker or via the other strategies discussed in this section. A case in point is example (28) above, being the Nata equivalent of the Ikoma proverb in (44).

Constituent order exceptions As described above, the subject does not lose its control of agreement on the verb in non-subject relative clauses, nor does it move from its canonical position before the verb. With that said, examples do exist where a relative marker occurs between the subject and the relative verb, as in (47) from Ngoreme.

(47) Ngoreme

e-híti	há-nɔ	e-húɾumukeɾe
9-hyena	16-REL	SP9-bolt.PFV

'When the hyena bolted…'

However, such "jumping" (as per Van de Velde 2021) only occurs when there is no explicit lexical antecedent – indeed, in this case the relative not only lacks a lexical referent but also has an extended adverbial function.

3.8 The WS data in relation to the Bantu typology of agreement control of the relative verb We close this section by considering how the WS relative data presented above can be related to the three-way (synchronic) typology of relative agreement (indexation) commonly assumed for Bantu (see Demuth & Harford 1999, Henderson 2006, 2007, Guérois & Creissels 2020):

>   Type 1 INDEXATION of subject and relativized non-subject head NP
>   Type 2 INDEXATION of subject only
>   Type 3 INDEXATION of head only

This taxonomy deals with what controls agreement on the relative verb for all types of relativization. However, since in subject relative constructions the subject and head are co-referential and thus there are no possibilities of disentangling any differences in terms of indexation, relative agreement does in effect only target non-subject relative clauses.

The WS language varieties can be classified as belonging to Type 1, as the linker (i.e., the relative marker) agrees with the head NP whereas the verb prefix in the initial position of the relative verb takes agreement with the subject of the clause. Note that this classification only applies to the main construction, however. The less common yet existing constructions described in §3.7 should rather be classified as belonging to Type 2. The WS varieties do not expose any Type 3 agreement with the head only, but subject agreement is always marked on the initial slot of the verb.

Importantly for the historical discussion to which we turn next in §4, these indexes can also be linked to what has been assumed in reconstruction work on Bantu relative constructions. Thus, Types 1 and 3 in this taxonomy correspond to the two variants of relative constructions suggested for Proto-Bantu by Meeussen (1967): Type 1 corresponds to his "indirect" variant whereas Type 3 conforms to his "direct" variant. In his recent attempt at a revised reconstruction of the relative construction for Proto-Bantu, however, Van de Velde (2022) considers Meeussen's reconstruction to be "untenable". Instead, he suggests a single construction type which instead conforms to Type 2 of the taxonomy above, which, as he argues, is the only constructional variant which can have given rise to the total of attested patterns of relativization witnessed across the Bantu family. Van de Velde (2022) further concludes that a Type 2 situation of relative verb indexation, i.e., where the relative verb agrees with the subject alone, not only conforms to Proto-Bantu but also to putative proto-stages of all of its sub-branches. With these remarks we leave the synchronic part of this paper and turn to the diachronic-comparative one.

4. The grammaticalization of the standard relative construction

4.1 Introduction Having described the synchronic strategies of relative marking in different contexts among the WS languages above, this section will deal with indications of the grammaticalization of the standard relative construction. These indications are set in relation to the historical inferences that can be drawn from the exceptions to the standard relativization strategy sketched in §3.7, as well to comparative data from genealogically and geographically adjacent languages. The section falls into two major parts. The first part focuses on the semasiological background of the relative marker and the evidence that it is a dedicated relative marker, both functionally and formally detached from its demonstrative etymon. In the second part of this section we attempt to situate the WS data within the confinements of the Bantu Relative Agreement (BRA) cycle, a type of diachronic cycle modeled by Van de Velde (2021, 2022) to account for the recurrent developmental pathway of change characterizing Bantu relative constructions.

As will be argued, the WS language varieties are in the initial stage of the BRA cycle, while still showing signs of having one foot left in a pre-initial stage. This situation allows us to focus on a careful investigation of the inception phase of the BRA cycle, i.e., the particulars around the recruitment phase of a Bantu relativizer and its enrolment in the BRA cycle. As the pre-initial stage connects structurally with both the reconstructed form and also with the final stage of a preceding cycle, thus simultaneously encompassing the beginning and the end of the cycle, this raises further queries on the origin of the relative construction in WS.

4.2 From proximal demonstrative to dedicated relative marker – Indications of a polysemic split Demonstratives are one of the most common sources, if not the most common one, for grammaticalization to relative markers cross-linguistically (Diessel 1999, Hendery 2012: 52–55). Kuteva et al. (2019: 146) point out that this pathway of change adheres to more general processes of language evolution where deictic-spatial markers are recruited to express textual/discourse reference and where NP constituents are recruited to flag subordinate clauses. The recruitment of demonstratives as relativizers is also common in Bantu (Meeussen 1971, 1978, Nsuka Nkutsi 1982, Downing & Marten 2019, Van de Velde 2021). In line with the WS data, Van de Velde (2021: 996) notes that demonstratives are common sources for both subject and non-subject relativization and that they "can be either optional or obligatory and they can be taken from one, some or all types of demonstratives available in the language". However, there are few careful accounts in Bantu studies – with the exception of Zeller's (2004) investigation of a group of South African languages – of the various conceptual and formal effects characterizing the recruitment of a demonstrative to a relative marker, nor of why one demonstrative type is preferred in relation to the others. It is worth beginning such an endeavor by looking at the particulars of the source demonstrative and its original function(s) in WS and, by extension, in Bantu at large.

The proximal demonstrative and other demonstratives in WS The most thorough recent investigations of demonstratives and their extended functions in Bantu are the work of Nicolle (2012, 2014),[12] the former specifically focusing on the proximal demonstrative (i.e., the source of the dedicated relative marker in WS). Although Nicolle does not explicitly discuss the extension of demonstratives to relative markers, he does account for several other non-categorical semantic changes and assign them to the different sets of Bantu demonstratives, which helps shed further light on the motivations and mechanics behind the recruitment of the proximal demonstrative in WS.

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[12] See Weier (1985), i.e., the study itself as well as the extensive literature review therein, for other (earlier) comparative work on Bantu demonstratives.

Nicolle (2012: 197), following Diessel (1999, 2006), argues that the fundamental function of a demonstrative is for the speaker to establish (or to manipulate) "a shared focus of attention" with the addressee to facilitate his/her correct identification of an intended referent found either in the physical world or within the linguistic context. A demonstrative may thus have both an *exophoric* (i.e. spatial-deictic) or *endophoric* (i.e. anaphoric, text-structural) use, the direction of any semantic extension going from the former to the latter. Bantu languages are characterized by having different series of demonstratives categorized mainly on the basis of their exophoric use, i.e., their relative deictic distance from the speaker or addressee. WS languages belong to the group of Bantu languages in Nicolle's (2012) typology, which merges what was initially four (or five according to Meeussen 1967: 107) series of demonstratives reconstructed for Proto-Bantu into a three-way series, viz. the proximal, the referential and the distal (see §2 and §3.7).[13] The proximal demonstrative in WS can be more or less directly linked to the reconstructions of Meeussen (1967: 107) – *PP-*nóò* [close to speaker] – and Guthrie (1970: 25) – *-*nó* 'this, these'. See also Nicolle (2012: 194) for the corroboration of this reconstruction through additional comparative data. Thus, although its relative function is a relatively recent development, the proximal demonstrative itself is definitely inherited in these language varieties.[14] Recall furthermore from §2 that the type of adnominal class prefix, the pronominal prefix (PP), that occurs in the forming of demonstratives (as well as in relative markers) is also inherited into WS.

Nicolle (2012) concentrates on different functional developments of reflexes of *PP-*nóò* in a wide and dispersed set of (mainly Eastern) Bantu languages, in particular semantic-pragmatic expansions from exophoric (spatial-deictic) to endophoric uses. Nicolle (2014), in turn, discusses other types of demonstratives as well as their expanded functions, with reference to several Mara languages (i.e., the larger branch of Great Lakes Bantu, of which the WS group is a part). Interestingly, we may note from his studies that reflexes of *PP-*nóò* are rarely used in narratives (i.e., for endophoric, text structuring functions) in Mara. Instead the key distinction on the discourse level seems to be between the distal and referential demonstratives; proximal demonstratives have a much more restricted role, being used for describing backgrounded "non-event line" material such as pre-existing situations, flashbacks and motivations for a participant's action (Nicolle 2014: 135). Such functions are conceptually related to the functions of relative clauses (and adverbial clauses), particularly non-restrictive ones, in that they are used for adding supplementary background information to a proposition, as discussed in §3.5 above (see also Güldemann 1998, 2003, Gibson 2020). Thus, it can be argued that there is a connection between the endophoric role of the proximal demonstrative in discourse structuring and its pre-eminent use in relative constructions in relation to the other demonstratives. These circumstances may, in turn, have motivated the further specialization of the erstwhile proximal demonstrative into a dedicated relative marker.[15] We will turn to the mechanism behind this specialization in the next section.

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[13]As mentioned already in fn. 6, we follow Nicolle (2014) in referring to this paradigm as "referential demonstratives" due to their common anaphoric function. Meeussen (1967: 107) reconstructs this demonstrative type as *V-PP-o (LLL ?) and as expressing "that (near you)" or "that (mentioned)", i.e., with both an exophoric and an endophoric function. Notice that the root is similar to the pronoun which the WS varieties use (together with the focus marker N-) to form clefts (§3.7), as well as in the resumptive construction, where a relativized adjunct is reintroduced in the relative clause with the comitative (§3.4).

[14] Reflexes of *PP-*nóò* often gain an emphatic reading (including in a close relative of WS, Zanaki (JE44); see Aunio et al. 2019). However, as noted by Nicolle (2012), this typically occurs in relation to another series of proximal demonstratives that WS has lost. Thus, the idea at least implied by Downing & Marten (2019), that emphatic demonstratives are more readily available to evolve into relativizers, does not seem to be borne out here.

[15] The choice of a proximal demonstrative is slightly marked from a typological perspective, as it is cross-linguistically more common for distal demonstratives to grammaticalize to relative markers (see Diessel 1999:

Indications of a polysemic split There are several indications that the proximal demonstrative has been grammaticalized, i.e., semantically altered and structurally reanalyzed, into a dedicated relative marker. These indications will be accounted for in this section. With that said, it is important to stress that it is only loosely grammaticalized. Thus, the WS relative marker does not adhere to many of the (more obvious) formal features associated with a grammaticalized relative marker. For example, it does not adhere to many of the characteristic morpho-syntactic and phonetic alternations found in the checklists provided by Diessel (1999: 118–119) and Heine & Kuteva (2007: 225). Functionally, some of the semantic shifts witnessed may not necessarily be exclusively confined to the categorical change from a demonstrative to a relative marker but may have to do more generally with the acquiring of endophoric functions (although, as pointed out in §4.2.1 above, these processes seem to be interrelated). What is more, as witnessed in §3.7, the erstwhile proximal demonstrative as a relative marker is not obligatory in all contexts (see Lehman (2015: 148–149) on obligatorification as a criterion of grammaticalization in general and Diessel (1999: 118) for grammaticalized demonstratives in particular). There is still variability allowed in the realization of relative constructions in WS to some extent. At the same time, it is important to keep in mind that the grammaticalization of demonstratives is typically a contiguous process (Diessel 1999: 119) and it would indeed seem that there are no contexts where the use of the erstwhile proximal demonstrative as a relative marker is unacceptable. That is to say, although other demonstratives may be used as relative linkers the proximal demonstrative may also freely replace them, as seen in §3.7.1. Similarly, although clefts may be formed without the proximal demonstrative, they can just as well be formed with them, as seen in §3.7.2. This clearly points towards a more generalized use of the proximal demonstrative as a relativizer.

Furthermore, there is evidence for a polysemic split between the WS relative marker and its proximal demonstrative source. One clear indication is the semantic bleaching of the exophoric and spatial deictic and hence deictically contrastive functions associated with the demonstrative (cf. Heine & Kuteva 2007: 225–226; Diessel 1999: 118–119). Thus, in example (48a) from Ishenyi, the itive reading of the verb (i.e., of movement away from the deictic center) and the adnominal distal demonstrative (here exophorically employed) would not be harmonic with a proximal meaning associated with the proximal demonstrative source, as exemplified in(48b).

(48) Ishenyi

a.

tʃe-tuɣú	tʃe-etʃo	tʃe-ɣa-jáár-a	tʃe-ɣú-jɛ	mo-ɣi-kɛɾɛɣi	**kí-írɛ**
10-livestock	10-yours	10-NARR-run-FV	10-IPFV-go	18-7-mountain	**7-DIST.DEM**

ke-ɣiɲarííɾi	**ki-nɔ**	o-ɣíɾɛ		n-ta-tʃi-hiɾ-a=hɔ
7-green	7-REL	SP2SG-say.PFV		SP1-NEG-OP10-take-FV=LOC16

'Your livestock ran to the mountain with the green grass where you told me not to take them.'

b.

e-ɣi-ɣɛsɔ	kí-nɔ	n-ké-éɣi
AUP-7-knife	7-PROX.DEM	COP-7-sharp

'This knife is sharp.'

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118). Connected to this, it is notable that in Table 2 in Nicolle's (2012) cross-Bantu overview of the proximal demonstrative at least four GL languages lack a reflex of the proximal demonstrative altogether; inevitably, this must have had an effect on what demonstrative paradigm eventually became specialized as a relative marker. Among the GL languages outside of the Mara subgroup it would instead seem that the referential demonstrative is the default choice to be grammaticalized into a relative marker.

The loss in deictic explicitness of the erstwhile proximal demonstrative is most clearly manifested when locative material is involved. Compare the original meaning of hanɔ 'here' in (49a) in Ngoreme in relation to its extended use as a relative marker in (49b), where it may co-occur with a demonstrative with the deictically opposite meaning 'there'.

(49) Ngoreme

a.
aa	ta-ɾe	há-nɔ	a-ɣí-íɾe	ku-ɣóɾ-a	e-βí-nto
no	SP1.NEG-NEG.PRS.COP	16-PROX.DEM	SP1-go-PFV	INF-buy-FV	AUP-8-thing

'No, he's not here… He has gone shopping.'

b.
há-áɾe	w-aɲu	[ha-nɔ	w-íbw-iɾu]
16-DEM	23-2PL.POSS	[16-REL	SP2SG-give_birth-PFV.PASS]

'There where you were born (**there here you were born).'

Another example of this phenomenon is (50) from Ikoma.

(50) Ikoma

há-áɾɛ	**há-nɔ**	a-híti	i-iɾɛ́	e-ɾa-ɾwátʃ-a	o-βu-kú
16-DIST.DEM	16-REL	9-hyena	9-DIST.DEM	SP9-NARR-get_engaged-FV	AUP-14-engagement

'There where the hyena was getting engaged (**there here the hyena was getting engaged).'

This Ikoma example is also an illustration of the stacking of two demonstratives, a feature which is generally disallowed in WS,[16] again pointing towards a polysemic split between the now relative marker and its demonstrative etymon. Another Ikoma example which contains the stacking of the segmentally identical relativizer and its demonstrative etymon is (51).

(51) Ikoma (from relative questionnaire in Downing et al. (2010))

ne-etʃé	e-ɣi-taβɔ	kohúsu	a-ma-ŋána	ɣá-nɔ	ɣa-nɔ	á-siiɣ-iɾi
SP1SG-know	AUP-7-book	about	AUP-6-matter	6-PROX.DEM	6-REL	SP1-like-PFV

'I know a book on this subject that she likes.'

From a structural perspective we can relate this feature to the fact that the relativizer has become fixed in its syntactic position. That is to say, it has a fixed position directly after the NP it modifies, i.e., the head of the relative construction. This stands in stark contrast to demonstratives in general and to the proximal demonstrative in particular, which may move around much more freely within the NP (and in relation to its head, i.e., the noun it modifies). Examples (52) from Ikoma and (53) from Ngoreme may serve as illustrations. As seen, whereas the relative marker has been assigned its specific syntagmatic position directly following the head NP (and preceding the verb) in both examples, its adnominal proximal demonstrative etymon moves around in the phrase. In (52) it occurs directly adjacent to the head noun of the NP and thus before the other modifying constituents. In (53), in contrast, it occurs even before the head noun.

(52) Ikoma (from relative questionnaire in Downing et al. (2010))

a-βá-áke	βá-nɔ	βɛ-βeɾe	a-βa-kóɾo	[βa-nɔ	βá-áɣo-toɾ-a	ɣw-íʃaɣ-a]
AUP-2-girl	2-PROX.DEM	2-two	AUP-2-big	[2-REL	SP2-IPFV-be_able-FV	INF-swim-FV]

m-ba-aku-βáɾaan-a	haaɣúhe	ne=ɣi-taaɾɔ
FOC-SP2-IPFV-play-FV	near	COM=7-river

'Those two big girls, who can swim, are playing by the river.'

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[16] With the exception of reduplication of the same demonstrative for emphasis, e.g., Ikoma *mo-nyúmba* **múno muno** [LOC18-9.house **DEM18 DEM18**] 'inside this very house'.

(53) Ngoreme

#baasi	a-ɣa-tɔɔk-a	o-nɔ	o-mo-ona	o-mwe	[ɔ-nɔ	βa-ako-ɣi
so	SP1-NARR-find?-FV	1-PROX.DEM	AUP-1-child	1-one	[1-REL	SP2-IPFV-go

ɣu-tɛɣ-a	na=sawaaβo	t͡ʃe-tjeɲi]
INF-trap-FV	COM=1a.her/his_father	10-animal]

'So, there was this one child who went with his father to set traps for animals.'

Concurrent with the features of a rigid position and stacking above, however, it needs to be pointed out that there are also instances where the role of the PP-*nɔ* is bivalent. That is, it either expresses an adnominal demonstrative, as with 'these' in (54), or a pronominal demonstrative function, as with 'one' in (55), and a relative function at the same time, indicative of persistence of the source semantics (cf. Hopper 1991).

(54) Ngoreme

ne=je=e-ɲúmba	j=á-βa-muɾa	[βa-nɔ	βa-aku-nááhan-a]
COP=PRON9=9-house	GEN9=-AUP-2-youth	[2-PROX.DEM/REL	SP2-IPFV-quarrel-FV]

'It is in the house of **these** youths **who** are quarrelling.'

(55) Nata

[u-nɔ	a-tá-a-maɾ-a	a-kɔɾ-a	o-mó-ɾemo	w-át͡ʃe]	m=faisáán
[1-REL	SP1-NEG-PST-finish- FV	SP1-do-FV	AUP-3-work	1-his]	COP=Faisal

'**(This) one who** has not done his job is Faisal.'

It is possible that for some of these cases the bivalent function (highlighted in bold in the examples above) is an artefact of the translation (due to the *de facto* polysemy between the demonstrative and the relative marker in WS, which differs from the translation language, Swahili, where relative constructions are marked by other means; see, e.g., Schadeberg 1989). However, in relation to the discussion in §3.7, where we showed that relative constructions may be formed without the proximal demonstrative, we believe that such constructions also serve to suggest an earlier stage where relative constructions were only indicated by a special verb form. See §4.4 for the implication such an analysis has for the incorporation of the WS data into the BRA cycle.

As mentioned above, there are no clear indications of formal erosion (i.e. phonological loss) of the relative marker relative to its demonstrative etymon or of any fusion with the verb (which would make it more affix-like, thus indicating a further advancement along the BRA cycle; see §4.3). There is a lot of omission of the final vowel of PP-*nɔ* but this seems to be due to the more general tendency of *sandhi* in (fast) speech in these language varieties and, importantly, it seems to affect the source demonstrative as much as the relative marker. In Ishenyi there are instances in the data of a weakening of the whole final syllable of the relativizer when occurring before the 1st person singular subject marker *ni-*, viz. [PP-~~nə~~ *ni*-VERB] > [PP' *ni*-VERB]. According to Van de Velde (2021, based on Nsuka Nkutsi 1982) it is common in Bantu for the erosion of the relative marker to start out as (optional) reduction due to haplology, as in this case. However, as the type of haplology seen in Ishenyi is confined to a single morphophonological context, namely when PP-*nɔ* precedes the 1st person singular verb prefix, we do not believe it has the same potential to lead to a paradigm shift (levelling) as do the South African languages described by Nsuka Nkutsi (1982: 14–15).

There are, furthermore, no alterations in the suprasegmental features of the relative marker contrasting it with its demonstrative etymon (see §3.2). This stands in stark contrast to the

comparative data from some of the closest relatives of WS, where there has occurred a further formal specialization of the relative marker vis-à-vis its proximal demonstrative with regard to its tone pattern. Thus, Walker (2013: 138), Overton & Walker (2017: 19) and Kiraka & Walker (2010: 15) claim for the North Mara language Kabwa (JE405) that their relative marker has a final high tone where the demonstrative etymon is toneless, whereas it seems to work the other way around in Simbiti (JE431), where the relativizer instead is toneless (cf. Aunio et al. 2019: 527). Nsuka Nkutsi (1982: 24) lists Gusii (JE42), another North Mara language, as one of the languages in his sample with alternations in tonality between a H-L patterned demonstrative source and a L-H patterned relative marker. For Jita (JE25), a language of the Suguti branch (directly related to Mara), Kagaya (2005: xviii) shows that the relativizer has a "special tone pattern" of polar tones in relation to the tone pattern of the head nouns. This assignment of tone to the relative marker differentiates it from the plain (proximal) demonstrative, where the tone pattern is regularly H-L. Compare the tone of the relative marker in (56a) with that of the original demonstrative in (56b).

(56) Jita (JE25; Kagaya 2005: xviii, xvii; our glossing)[17]

    a.   inyuumbá   **i-nú**   e-i-fúm-a
         AUP-9.house   9-REL   9-SP9-break-FV
         'The house which breaks.'

    b.   inyuumbá **í-nu**
         9.house   9-DEM
         'This house.'

    Languages of the West Nyanza subgroup of Great Lakes Bantu languages also seem to have a suprasegmentally specialized relativizer. Riedel (2010) notes that "The relative pronoun is morphologically identical to the demonstrative […] but has the tone pattern HH in Haya [JE22] and LH in Nyambo [JE21], while the non-relative demonstrative […] has LL."

    The WS data is not this straightforward, however. As already mentioned in §3.2, the element PP-*nɔ* is indeed the subject of tone changes, but this occurs regardless of whether it is acting as a proximal demonstrative or as a relativizer. The addition or reduction of high tones to PP-*nɔ* is instead dependent on general phonological conditions.

4.3 The Bantu Relative Agreement Cycle (BRAC) – an introduction Based on a comparative set of data (taking Nsuka Nkutsi's 1982 original sample as a point of departure), Van de Velde (2018, 2021, 2022) models a recurrent diachronic pathway of change of relative agreement across the Bantu family. The model, which refers to constructions, not languages, is encompassed as a cycle with three stages. As already mentioned, it is referred to as the "Bantu Relative Agreement cycle" (the BRA cycle for short). Figure 4 summarizes the stages.[18] Stage 1 is meant to refer to the emergence of a new relativizer and for each stage there are two alternative routes, an a- and a b-route, depending on

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[17] This verb form, a present (progressive), is marked with a prefix in the pre-initial position. With the exception of *kaa-* in SM1, this prefix is a lowered variant of the SM vowel (e.g. *e-ni-* [1SG-SM1SG-], *o-wu* [2SG-SM2SG]…). See Robinson (2015) for more information on the formal specifics of this construction; see also Massamba (1982) and Nurse & Muzale (1999) on a similar phenomenon in Jita's direct relative Ruri (JE253).

[18] The model in Figure 4 is based on Van de Velde (2021, 2022) although we have taken the liberty of visualizing the cycle itself.

the position of the constituents of the source construction. More specifically, the two routes differ in whether in non-subjective relativization the subject NP occurs before or after the relative verb.[19]
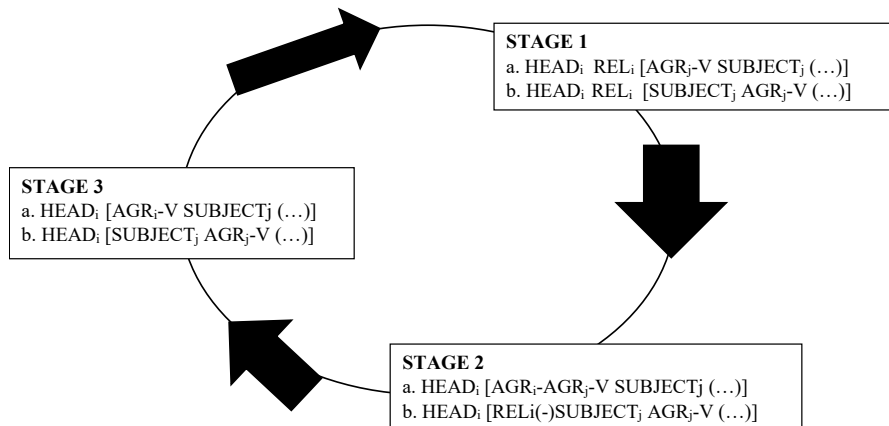
STAGE 1
a. HEAD$_i$ REL$_i$ [AGR$_j$-V SUBJECT$_j$ (…)]
b. HEAD$_i$ REL$_i$ [SUBJECT$_j$ AGR$_j$-V (…)]

STAGE 3
a. HEAD$_i$ [AGR$_i$-V SUBJECTj (…)]
b. HEAD$_i$ [SUBJECT$_j$ AGR$_j$-V (…)]

STAGE 2
a. HEAD$_i$ [AGR$_i$-AGR$_j$-V SUBJECTj (…)]
b. HEAD$_i$ [RELi(-)SUBJECT$_j$ AGR$_j$-V (…)]

Figure 4. Model of the Bantu Relative Agreement Cycle

Similar to other developments in Bantu, like demonstratives developing into augments or auxiliary verbs developing into TAM markers, the BRA cycle is "permanently available" (Van de Velde 2022: 482), i.e., it constitutes a recurrent pattern of change which takes place along a similar pathway in different languages, at different occasions, partly or in full. The stages in Figure 4 are not discrete and a language can re-instigate a new cycle without an older one having to be completed (as seems typical of other linguistic cycles too; see, e.g., Devos & van der Auwera 2013 on the negative Jespersen's Cycle in Bantu). Similarly, different instantiations of the cycle can affect different types of relative constructions (e.g. subject vs. non-subject relatives). We refer the reader to Van de Velde (2021, 2022), for further explanations of any specific traits and limitations of the BRA cycle not related to our analysis of the WS data.

As indicated by the name of the cycle, the focus is on an essentially formal pathway of change where relative agreement markers develop. They start out (**Stage 1**) as free-standing elements inflected with the pronominal pronoun (PP) – e.g. demonstratives – to become increasingly bound and coalescing prefixes on the very left side – the pre-initial position – of the relative verb (**Stage 2**). At the extreme (**Stage 3**), this coalescing can lead to a situation in which the PP "engulfs" the subject marking verbal prefix and takes its place in the initial slot in the verbal template. This, in turn, serves to explain the typologically notable feature of some Bantu languages where in non-subject relatives the head rather than the subject is indexed in the initial position of the relative verb – i.e., Type 3 in the typology of Bantu relatives presented in §3.8. Cuwabo (P34), as discussed in Guérois & Creissels 2020), is a case in point. As can be seen, the initial position is filled with a prefix indexing the relativized object (class 9 'thing') rather than the subject (class 1 'friend').

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[19] Note that we have slightly changed the representation of Stage 3b to better match up with this fact as well as to more accurately fit the WS (and GL) situation, which is characterized by the continuation of a pre-verbal subject NP rather than a post-verbal subject (as in the original representation).

(57) Cuwabo (P34; Guérois & Creissels 2020: 481)

	é-lobo	e-ní-log-a	mú-kwe
	9-thing	9-IPFV-tell-FV	1-friend

        'The thing [that] the friend is telling.'

As evident in the previous sections of this article, WS does not belong to the group of Bantu languages with this feature. Notice for example in (58) that it is clearly the case that the verb prefix in the initial position here is a subject-marking prefix and not a head-marking PP, as it is realized with the class 1 (3SG) subject marker *a-* and not the PP-formed *o-*, one of the diagnostics employed for identifying a Type 3 construction (cf. Nsuka Nkutsi 1982: 117–122; Van de Velde 2021, 2022).

(58) Ishenyi

#e-ɣe-nto	[ki-nɔ	o-mu-hiri	o-one	a-aku-βuɣ-a]
AUP-7-thing	[7-REL	AUP-1-friend	1-mine	SP1-IPFV-say-FV]

        'The thing [that] my friend is telling.'

As mentioned above, however, Figure 4 indicates two different scenarios for every stage of the BRA cycle (see also the types discussed in Meeussen 1978). Where the a-subtype is meant to explain the elusive head agreement type, there is also a b-subtype where it is the relative pronoun affix which "disappears". Importantly, this means that at the end of a cycle (and simultaneously at the beginning of a new one), a language with a b-subtype construction ends up with subject agreement only on the verb, making it appear "as if nothing has happened" (Van de Velde 2021: 986).[20] Recall from §3.8 that this type of pre-stage to Stage 1 marked by subject indexation and no explicit relative marker is also the construction suggested for Proto-Bantu. Thus, what this picture further entails is that the pre-stage of the BRA cycle also directly conforms to the suggested reconstructed form.

For WS, however, it can be argued that something did affect the verb, as indicated by the tone pattern, the subordinate morphology of the relative verb and the restriction in use of verbs forms. At the same time, the relative construction was left without any specialized relative segment, a plausible motivation for the reinterpretation of the proximal demonstrative. What is more, unlike the schematization in Figure 4, the subject NP continued to reside *in situ* before the verb. Thus, we suggest that the synchronic situation in the WS languagesis the result of their place on the b-route of the BRA cycle. This suggestion will be fleshed out in the following section, based on the WS-internal data as well as on comparisons with other closely related language varieties.

4.4 The BRA cycle in WS At first sight, the WS members appear to be clear-cut examples of Bantu language varieties with relative constructions instantiating Stage 1 of the BRA cycle, i.e., the stage which begins when a relativizer emerges at a position between the head noun and the relative clause. Given the pre-verbal position of the lexical subject in non-subject relative constructions, it would be more precise to say that WS varieties instantiate Stage 1b. As already mentioned, a demonstrative is (along with other pronouns and the connective) a likely source for such a free-standing marker. The evidence brought forward in §4.2 above points towards the functional specialization and structural re-bracketing of the relative marker relative to its demonstrative etymon.

At the same time, the construction has clearly not reached Stage 2, i.e., a stage where the relativizer has eroded and fused with the relative verb to become a relative prefix in the pre-initial slot of the relative verb, i.e., the position preceding the initial position dedicated for subject indexation. This is in contrast with relative constructions in other Great Lakes Bantu languages, like

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[20] Whereas a language with an a-subtype construction of the cycle cannot revert from Stage 3 to Stage 1 since the subject prefix – a crucial element of the developments within the BRA cycle and of verbal conjugation at large – has disappeared.

the one in the West Nyanza language Ganda (JE15) in (59), which serves as good example of Stage 2 (also appearing in Van de Velde 2018, a previous version of Van de Velde 2021, 2022).

(59) Ganda (JE15; Walusimbi 1976: 6)
      e-ki-tabo   ki-n-a-gula
      AUP-7-book   REL7-SP1SG-PST-buy-FV
      'The book I bought'

However, although the WS varieties seem to be *bona fide* Stage 1b-languages, there are arguably also remnant layers indicative of a pre-initial stage/Stage 3b of a preceding cycle in some contexts, i.e., a stage in which any PP-based relative marking has disappeared altogether, leaving a "gapped" relative construction. Segmentally, the variation in use with other demonstratives than the proximal one in relative and cleft constructions, presented in §3.7, can be interpreted as remnants of this stage. To be sure, one could also choose to interpret the use of other demonstratives as relative linkers as emerging alternative relative constructions. However, the mutual exclusivity between such relative constructions and those formed with the proximal demonstrative would in such an interpretation necessarily entail the existence of a situation preceding Stage 1 without any segmental marking (or with segments that eroded along with the introduction of the new linkers). The omission of any pronominal demonstrative whatsoever in the proverbs (see examples (43) and (44) in §37) further corroborates this conclusion, not least based on the fact that more ritualized discourse genres such as proverbs tend to preserve archaic and thus older structures in a language (see, e.g., Dimmendaal (2011: 101); see also Zeller (2004) who uses this argumentation with direct reference to the reconstruction of Bantu relative constructions – in this case for the Nguni languages.[21]

There is arguably also a supra-segmental feature indicative of the retention of Stage 3b, and thus of a Stage 3b construction establishing the pre-Stage 1b situation, as the typical H tone on the initial position on relative verbs can be interpreted as the remnant of a morphophonological pattern. That is, the typical tone pattern of languages in Stage 2 (following Meeussen 1967: 108, 1978) is a L-H sequence, i.e., with a low tone on the pre-initial relative prefix (< PP) and a H tone on the initial subject prefix. Thus, in a Stage 3b situation where the PP in the pre-initial position is dropped, we would expect the initial to remain high-toned exactly in the manner it does in those conjugations in Ikoma that are otherwise toneless. Indeed, such a situation appears to be attested in some other Great Lakes languages, namely the Western Lakes languages Rwanda, Rundi and Ha (Meeussen 1978; see also, e.g., Harjula 2004: 164).

We need to be careful, however, in concluding that the initial high tone and the other features of a situation preceding Stage 1 of the BRA cycle in WS necessarily indicate traces of an earlier cycle and are not just direct reflexes of an inherited relative construction. As mentioned, Van de Velde (2021) himself points out the difficulties in disentangling a Stage 3b instantiation of a BRA cycle from a pre-initial stage, as they are ultimately identical. What is more, in Van de Velde's (2022) recently revised reconstruction of relative clause constructions for Proto-Bantu, such a pre-Stage 1 construction is suggested for Proto-Bantu as well as for all sub-branches of the Bantu family – that is, a construction devoid of any linker, where the subject rather than the relative head NP is indexed, and with prefixes from the subject prefix paradigm (not the PP). In this scenario, the initial SP co-indexing the subject and the relative NP is also characterized by an initial high (and a final high) tone. Thus, although the tone patterns have clearly changed in WS since Proto-Bantu (or since any putative Proto-Eastern Bantu or even Proto-Great Lakes Bantu), they can also be considered as instantiating a direct reflex

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[21]See also Devos et al.'s (2010) study on Kanincin (L53) for a hands-on example of the preservation of earlier stages of a linguistic cycle (in this case, the Jespersen's Cycle of negation) in proverbs in another Bantu language.

of the Proto-Bantu situation or some other putative proto-stage, just as well as a preceding stage of the BRA cycle; i.e., it is important to stress that any prior full cycle is, as Van de Velde (2021) notes himself, difficult to prove.

From a retrospective to a prospective perspective (while striving to avoid any teleological connotations), we may note that although the WS language varieties clearly have not reached Stage 2, there are indications for a transition towards Stage 2, especially when seen in the light of the comparative data from other members of Great Lakes Bantu (Zone J). As pointed out by Van de Velde (2021), the entrance into this stage, characterized by the morphologization and univerbation of the relative marker with the relative verb, is hampered if the subject is not inverted but stays put in its position before the relative verb, which is the case in WS. At the same time, the Great Lakes languages in particular seem to be full of instances where the relativizer may "jump across" a preverbal subject in non-subject relatives, which can happen either optionally, as in Haya (JE22; Duranti 1977: 128), or obligatorily, as in Ganda (JE15).

(60) Ganda (JE15; Walusimbi 1976: 24; see also Van de Velde 2021: 999)[22]

o-mu-sajja	Petero	gwe	a-labye	mu-somesa
AUP-1-man	1.Peter	REL1	1-has.seen	1-teacher

'The man that Peter has seen is a teacher.'

We see such a tendency at play also in WS, albeit only optional, or at least only pragmatically motivated and only with evidence from extended relative markers without a lexical referent. Cases in point include the Ngoreme example (47) at the end of §3.7 and this example (61) from Ikoma (again with the extended use of the locative class 16 PP as introducing an adverbial time clause).

(61) Ikoma (Aunio 2013: 278)

a-híti	há-nɔ	é-huɾumuk-iɾi
6-hyena	REL16	SP6-rush.away-PFV

'When the hyena had rushed away'

In relation to the discussion in §4.2, we would have to assume that this tendency of "jumping" began as a process after the positional fixing of the relative marker as occurring after the head NP, in turn an indication of the further maturation of this construction and an ongoing structural reanalysis catering for the transition towards Stage 2.

4.5 Mechanisms and motivation for the new relative construction Following Lehman (1984, 1986; see also Hendery 2012: 44–45), relative markers can be seen as ultimately consisting of three features ("operations", in Lehman's terms), namely pronominal "gap-filling" qualities, adnominal modifying qualities and subordinating qualities. A demonstrative, arguably already providing the pronominal and the adnominal qualities, would need to acquire a subordinating quality to fulfil its role as a relative marker (recall the discussion with reference to Kuteva et al. 2019 in §4.2).

We propose that the proximal demonstrative became a relative marker in accordance with the cross-linguistic tendency, described by Hendery (2012: 3), for a relative marker to "creep in" via bridging contexts (i.e., a "specific context[s] giving rise to an inference in favor of a new meaning" (Heine 2002: 86)). Eventually, it got reinterpreted and conventionalized into a relative marker, a fact manifested in its ongoing functional and formal specialization vis-à-vis its demonstrative source. Importantly, it seems that the bridging contexts where the grammaticalization of the proximal

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[22] See also Letsholo (2009) who discusses these patterns in Luganda in relation to her analysis of a similar case found in the Shona-variety Ikalanga (S16).

demonstrative as a relative marker started out were contexts where the relative verb was already de-ranked and marked as subordinate (i.e., with an initial high tone). This gives support to Hendery's (2012: 34–35, 167) typologically informed proposal that relative clause constructions, somewhat counter to popular belief, do not originate from paratactic relationships. Instead, she points out other pre-existing non-relative (although still dependent) constructions (such as complement and adverbial clauses) as potential source constructions, but she also discusses the extensive presence of borrowed relative patterns cross-linguistically.[23] The comparative Bantu data suggest something slightly different, however, namely that relative constructions instantiate re-instigated diachronic cycles.[24] In such a scenario, the WS varieties bear witness to the turning point from one cycle into another, or, alternatively, to an inherited relative verb conjugation pattern. In any case, it was the association with what was already a relative clause that triggered the reanalysis of the proximal demonstrative into a relativizer.

In comparison with the cross-linguistic generalizations at hand, paired with the specific qualities of the proximal demonstrative described in §4.2, we can also speculate about the motivation behind the introduction of this relativizer into the WS group. The motivation goes back to the pronominal and adnominal qualities of the demonstrative. Thus, the proximal demonstrative may have been introduced in relative constructions to clarify the referent (head) and to disambiguate sentences (Diessel 2003). Recall that the original function of the demonstrative was to direct the addressee to the shared information referred to by the speaker. Arguably, this function would have been of extra importance in varieties like those in WS without strict verbal object marking (and with only subject marking in the initial position of the verb) as well as without any change in word order in the formation of relatives. Thus, an additional (plausibly conspiring) trigger for the reinterpretation of the proximal demonstrative as a relativizer may have been its recurrent use as a pronominal "stand-in" for a lexical noun (see Hendry 2012: 47–58; Diessel 1999: 54; Schmidtke-Bode & Diessel forthcoming). When set in apposition to another NP, the NP easily gets reanalyzed as the head of the relative construction, whereas the pronominally used demonstrative gets reanalyzed as a relative marker. Such a "stand-in" use of the proximal demonstrative is retained in what are now analyzable as free relatives and non-restrictive (supplementary) relatives.

5. Summary and conclusions
This study has accounted for the construal of relative clauses in the Western Serengeti group of Great Lakes Bantu from both a synchronic and diachronic perspective. The study is the first comprehensive investigation of relative constructions within WS. It has presented the strategies employed in WS for both subject and non-subject relativization, the forming of free and headless relative constructions and the extended use of relative clauses into adverbial clauses. In this endeavor, the study has also addressed how the typical traits associated with the (micro-)variation of Bantu relative constructions – such as various prosodic features, the morpho-syntactic effects on object marking and constituent order – are represented in WS. As shown, the standard relative construction within the WS group consists of a relativizer derived from an erstwhile proximal demonstrative PP-*nɔ*. At the same time, there do also exist instances where alternative constructions without this canonical relative marker occur. Prosodically, the WS relative clause is characterized by the suspension of automatic downstep. Ikoma, furthermore, applies an initial high tone to the relativized variants of those verb conjugations

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[23] As mentioned at the outset of this article, the WS language varieties are spoken in an area characterized by historical and modern contact with non-Bantu language families, namely Nilotic and presumably also Cushitic in the past. There are, however, no indications of contact being a contributing factor in the grammaticalization of relative constructions.

[24] In relation to this point it should be mentioned that Hendery (2012) only includes Nguni (S40; Zeller 2004) as representative of Bantu languages in her cross-linguistic sample.

that are otherwise toneless. This fact ties in with a number of other traits which the relative verb shares with other de-ranked and dependent verb forms, such as the absence of a pre-initial focus marker N-, the obligatory post-initial negation and the general restriction in the inventory of verbs forms being used. Object marking on the relative verb appears to be truly optional in WS; it may be included but it is never unacceptable to omit it. In both subject and non-subject relativization, the relative marker always follows the head NP whereas the lexical subject tends to stay in preverbal position. These factors together lead to the lexical subject interfering between the relative marker and the relative verb in non-subject relative constructions in WS.

WS relative constructions have also been analyzed from a historical viewpoint in this study. We have disentangled the semasiological background of the relative marker and the underlying motivation and mechanics behinds its recruitment while also thrashing out the initial incremental steps of formal and functional change – such as syntactic fixation and polysemic split – that characterizes the grammaticalization process. The developments witnessed within the relative constructions in WS have been connected to Van de Velde's (2021, 2022) proposal of a diachronic linguistic cycle – the Bantu Relative Agreement cycle – and his interrelated (re-)reconstruction of a relative construction for Proto-Bantu. As we argue, the development of relative constructions in the WS language varieties take the "b-turn" within the BRA cycle, with a preference for having the lexical subject positioned before the relative verb in the clause and also for having it indexed, via subject prefixing, on the verb. While clearly being in Stage 1 of the BRA cycle, the WS varieties simultaneously show clear remnants of a pre-existing situation of relativization. As the final Stage 3 and the pre-initial stage of the "b-turn" of the BRA cycle are segmentally identical, including in the suggested reconstructed construction, it is difficult to say with confidence whether the developments witnessed in WS represent the continuation of a new cycle out of an earlier one or from a direct reflex of the reconstructed form. In any case, however, the behavior of the relative verb in WS clearly indicates that the grammaticalization of the erstwhile demonstrative to a relative marker occurred in a context where the relative verb must already have been de-ranked, and the relative clause already subordinated.

To conclude, combining a synchronic-descriptive and diachronic-comparative angle to the analysis of the relative constructions within WS, we have, on the one hand, been able to account for the variation within the synchronic data when treated as an (ongoing) historical process viewed through a comparative lens. Bringing the novel and previously under-described WS data on relatives to the table has, on the other hand, helped to calibrate the cross-Bantu and typological proposal on the behavior and development of relative clauses.

Acknowledgements

Abbreviations

1, 2, 3	Noun classes 1, 2 3 etc.
AUP	Augment Prefix
COM	Comitative
COP	Copula
FOC	Focus
DEM	Demonstrative
DIST	Distal
FV	Final Vowel

GEN	Genitive (Connective/Associative)
HAB	Habitual
INF	Infinitive
IPFV	Imperfective
LOC	Locative
NARR	Narrative
NEG	Negation
NEUT	Neuter
OP	Object Prefix
PASS	Passive
PERS	Personal Pronoun
PFV	Perfective
PL	Plural
PP	Pronominal Prefix
PROX	Proximal
PRS	Present
PST	Past
REL	Relative
SBJV	Subjunctive
SBST	Substitutive
SG	Singular
SP	Subject Prefix
TA	Tense and Aspect

Other abbreviations used in the text:

BRA	Bantu Relative Agreement
GL	Great Lakes Bantu
WS	Western Serengeti
*	reconstructed form
**	unacceptable construction
#	example lacking tone analysis

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Appendix

Map 1: The Mara group (JE40), including the Western Serengeti branch (Ikoma, Ishenyi, Nata, Ngoreme)