

## The relative verb forms of Cuwabo (Bantu P34) as contextually oriented participles

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**Abstract.** Cuwabo (Bantu P34, Mozambique) illustrates a relativization strategy, also attested in some North-Western and Central Bantu languages, whose most salient characteristics are that: (a) the initial agreement slot of the verb form does not express agreement with the subject (as in independent clauses), but agreement with the head noun; (b) the initial agreement slot of the verb form does not express agreement in person and number-gender (or class), but only in number-gender; (c) when a noun phrase other than the subject is relativized, the noun phrase encoded as the subject in the corresponding independent clause occurs in post-verbal position and does not control any agreement mechanism. In this article, we show that, in spite of the similarity between the relative verb forms of Cuwabo and the corresponding independent verb forms, and the impossibility of isolating a morphological element analyzable as a participial formative, the relative verb forms of Cuwabo are participles, with the following two particularities: they exhibit full contextual orientation, and they assign a specific grammatical role to the initial subject, whose encoding in relative clauses coincides neither with that of subjects of independent verb forms, nor with that of adnominal possessors.

### 1. Introduction

In the languages of Sub-Saharan Africa, it is very common that the verb forms found in relative clauses are different from those found in the corresponding independent clauses. However, most descriptions do not discuss the precise nature of the verb forms in question:<sup>1</sup> do such ‘relative verb forms’ constitute a *dependent mood*, i.e. a set of verb forms that, although distinct from those found in independent clauses, are structurally similar to them (in the same way as ‘subjunctives’ in European languages)? or do they show the kind of deviation from the standard of the independent clause predicate that characterizes the forms traditionally designated as *participles*? In other words, in reference to the distinction between *deranking* and *balancing* introduced by Stassen (1985: 76-83), in the languages of Sub-Saharan Africa, are relative clauses headed by special verb forms *balanced* or *deranked* dependent clauses?

Crucially, at least in some of the Sub-Saharan languages in question, the verb forms found in relative clauses show reduced agreement, in comparison to those found in plain assertive clauses. In languages in which verbs in plain assertive clauses agree with their subject, reduction in the features involved in subject-verb agreement (or total lack of subject-verb agreement) constitutes an essential aspect of the traditional notion of non-finite verb forms. The same phenomenon has been discussed as ‘anti-agreement effect’ and explained in terms of constraints on  $\bar{A}$ -movement (in particular, with reference to some Bantu languages) in the recent generative literature.

In this paper, we discuss this question from the point of view of the typology of relativization with reference to Cuwabo, a Bantu language spoken in north-central Mozambique. In Cuwabo relativization, as in many other Bantu languages, when the

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<sup>1</sup> van der Wal (2010) is a notable exception.

relativized noun phrase (henceforth NP) is not the subject, verb agreement does not refer to the subject, but to the head noun. After briefly considering a possible analysis according to which the relative clauses of Cuwabo would be balanced dependent clauses, and this apparently quirky agreement would be the consequence of full demotion of the lexical subject and promotion of the relativized NP to the role of subject, we show that this analysis must be rejected. The Cuwabo verb forms heading relative clauses must rather be analyzed as contextually oriented participles that differ from the corresponding independent verb forms in that their construction lacks a grammatical function ‘subject’, and their initial agreement slot expresses modifier-head agreement.

The paper is organized as follows. In Section 2, building on Shagal (2017), we briefly discuss the notion of participle, and the aspects of the typology of participles relevant to the analysis of Cuwabo relativization. Section 3 gives an overview of the typological parameters accounting for the variation observed across Bantu languages in the *noun – relative clause* construction. Section 4 discusses in more detail agreement in the *noun – relative clause* construction. Section 5 describes the subject and non-subject relatives of Cuwabo. In Section 6, we first show that some aspects of verb agreement in relative clauses are incompatible with an analysis in terms of covert promotion of the relativized phrase to subject role, and rather support an analysis of Cuwabo relative verb forms as contextually oriented participles; we then briefly discuss the possibility of a relationship between our analysis and the analyses put forward in the anti-agreement literature; we conclude section 6 by showing that Van de Velde’s (2018) diachronic explanation provides a satisfying account of the emergence of the situation found in Cuwabo. Section 7 summarizes the main conclusions.

The Cuwabo data analyzed in this article stem from Guérois (2015).

## 2. Participles

### 2.1. Definition

In this article, we adopt Shagal’s (2017) cross-linguistic definition of participles as morphosyntactically deranked verb forms that can be employed for adnominal modification. Not all languages have forms meeting this definition, which is however cross-linguistically valid in the sense that such forms can be found in a number of genetically and geographically diverse languages. We refer readers to Shagal (2017: 15-20) for a detailed discussion of the advantages of this formulation of the definition of participles, in comparison with others that can be found in traditional grammars or have been proposed in the literature, such as “forms derived from verbs and used as adjectives” (traditional grammars), or “verb forms that behave like adjectives with respect to morphology and external syntax” (Haspelmath 1994: 152).

Of course, the current use of the label ‘participle’ in descriptive grammars must not be expected to always be consistent with this cross-linguistic definition: forms meeting this definition are not necessarily identified as participles in descriptions of individual languages; conversely, the label ‘participle’ has sometimes been applied to forms that, according to this definition, are not participles.

The mismatch between the cross-linguistic definition of participles to which we adhere, and the use of the term ‘participle’ in language descriptions, seems to be particularly marked in Bantu linguistics. In descriptions of Southern Bantu languages, ‘participle’ is the traditional

label for a set of dependent verb forms that are neither morphosyntactically deranked, nor used for adnominal modification. Although morphologically distinct from independent verb forms, the so-called ‘participial forms’ of Southern Bantu languages are found in subordinate clauses having the same internal structure as independent clauses, and express TAM-polarity distinctions and subject agreement exactly like independent verb forms. They are typically found in some types of adverbial subordination, and are distinct from (although morphologically related to) the verb forms used in relativization.

In descriptions of Bantu languages, it is also common to find the label ‘participle’ attached to forms that are deverbal adjectives rather than deranked verb forms, in the sense that they fulfill a noun-modifying function but do not project a phrasal category with an internal structure at least partially similar to that of independent clauses.

Conversely, as will be discussed in detail for Cuwabo, one may suspect that forms falling under the cross-linguistic definition of participles can be found in some Bantu languages in which their presence has not been acknowledged so far, due to the current practice of leaving open the question of the precise status of forms noncommittally designated as relative verb forms.

## **2.2. Participles as morphosyntactically deranked verb forms**

The definition of participles adopted in this article refers to the distinction between *deranked* and *balanced* dependent clause predicates introduced by Stassen (1985: 76-83).

Among the languages making systematic use of dependent verb forms in relative clauses, the distinction between balanced relative clauses as opposed to deranked (i.e., participial) ones can be illustrated by comparing the properties of the verb forms used in Jóola Fóoñi (Atlantic) for subject and non-subject relativization. Both types of relative verb forms are morphologically distinct from the verb forms found in the corresponding independent clauses, and at the same time do not show evidence of deranking as regards the TAM and polarity distinctions they express, or their behavior with respect to grammatical relations other than subject. There is however a crucial difference between the verb forms used in Jóola Fóoñi for subject relativization and those used for the relativization of other grammatical relations. As illustrated in (1a), where the square brackets show the borders of the relative clause, the verb forms used for non-subject relativization include an initial agreement slot expressing subject agreement with exactly the same possible person-number and gender-number values as the initial agreement slot of independent verb forms. By contrast, as illustrated by (1b), the initial agreement slot of the verb forms used for subject relativization can only express gender-number agreement: with a first or second person antecedent, the value expressed can only be ‘class A’ (i.e. ‘human singular’) or ‘class BK’ (i.e. ‘human plural’). In other words, the forms used for subject relativization do not agree like independent verb forms with their subject, but rather like noun modifiers with their head. This constitutes clear evidence of the deranked (i.e., participial) status of the verb forms used for subject relativization in Jóola Fóoñi, as opposed to the balanced status of the dependent verb forms used in non-subject relatives.

(1) Jóola Fóoñi (Niger-Congo > Atlantic; Denis Creissels' fieldnotes)

(1a) **b-iit-a-b** [b-an u-wañumi]<sub>RCL</sub>  
 CLb-rice\_field-CLb-DEF CLb-which SM1PL-cultivate.CPL  
 'the rice field that we have cultivated'

(1b) **úlí** [k-a-jamom di ka-legen-a-k k-óolólí]<sub>RCL</sub>  
 we CLbk-PTCP-be\_famous with CLK-honesty-CLK-DEF CLK-our  
 'we who are known for our honesty'

Cross-linguistically, the features that may justify analyzing relative clauses as participial can take various forms: lack of categorial distinction typical for the independent verb forms of the language in question (such as TAM or person agreement), use of categories not pertaining to independent verb forms (such as nominal agreement), or changes in the encoding of core arguments (subjects or objects). The readers are referred to Shagal (2017) for a detailed discussion of this aspect of the typology of participles.

### 2.3. Participial orientation

In European languages, each participial form is typically used for relativizing specific syntactic relations: subjects in the case of so-called 'active participles' (2a), objects in the case of so-called 'passive participles' (2b).

(2) Russian (Indo-European > Slavic; Shagal (2017: 15))

(2a) **devočk-a** [piš-ušč-aja pis'm-o]<sub>RCL</sub>  
 girl(F)-NOM.SG write-PTCP.PRS.ACT-F.NOM.SG letter(N)-NOM.SG  
 'the girl [*writing* a letter]'

(2b) **pis'm-o** [na-pisa-nn-oe devočk-oj]<sub>RCL</sub>  
 letter(N)-NOM.SG PFV-write-PTCP.PST.PASS-N.NOM.SG girl(F)-INS.SG  
 'the letter [*written* by the girl]'

Using the notion of participial orientation (Lehmann 1984: 152, Haspelmath 1994: 153-154), one can say that European languages typically have *inherently oriented* participles. The Jóola Fóoñi participle illustrated in (1b) above is also an inherently oriented participle, comparable to so-called 'active participles' of European languages, since it can only be used for subject relativization. For a review of the grammatical relations that can be encoded by means of inherently oriented participles, cf. Shagal (2017: 73-99).

Other languages, for example Kalmyk (Mongolic), may have *contextually oriented* participles, which means that the same participial form can be used to relativize several participants / syntactic relations (in example (3): agent, patient, and location).

(3) Kalmyk (Mongolic; Shagal 2017: 16)

(3a) [**bičəg bič-žä-sən**]<sub>RCL</sub> **küükə-n**  
 letter write-PROG-PTCP girl-EXT  
 ‘the girl who is writing a letter’

(3b) [**küük-n-ä bič-žä-sən**]<sub>RCL</sub> **bičəg**  
 girl-EXT-GEN write-PROG-PTCP letter  
 ‘the letter which the girl is writing’

(3c) [**küük-n-ä bičəg bič-žä-sən**]<sub>RCL</sub> **širä**  
 girl-EXT-GEN letter write-PROG-PTCP desk  
 ‘the desk at which the girl is writing a letter’

Since the range of syntactic relations accessible to relativization (be it within the frame of balanced or deranked relative clauses) shows important cross-linguistic variation, a more precise characterization of contextually oriented participles is in order. Shagal (2017: 99-110) puts forward a distinction between *full contextual orientation* (characterizing contextually oriented participles able to relativize at least subjects and objects) and *limited contextual orientation* (characterizing contextually oriented participles able to relativize a wide range of non-core syntactic relations, plus possibly objects, but not subjects). In the remainder of this article, we will be concerned by full contextual orientation only.

Example (4), in which the same participial form **oxada** is used to relativize the three core participants of the trivalent verb ‘give’, illustrates full contextual orientation of participles in Northern Akhvakh (Nakh-Daghestanian).

(4) Akhvakh (Nakh-Daghestanian; Creissels (2009: 126)

(4a) [**jaše-ga kemeti o-x-ada**]<sub>RCL</sub> **ak’i**  
 girl-LAT sweets N-give-PTCP.PFV woman  
 ‘the woman who gave sweets to the girl’

(4b) [**ak’o-de kemeti o-x-ada**]<sub>RCL</sub> **jaše**  
 woman-ERG sweets N-give-PTCP.PFV girl  
 ‘the girl to whom the woman gave sweets’

(4c) [**ak’o-de jaše-ga o-x-ada**]<sub>RCL</sub> **kemeti**  
 woman-ERG girl-LAT N-give-PTCP.PFV sweets  
 ‘the sweets that the woman gave to the girl’

Among the languages of Sub-Saharan Africa, relativization by means of contextually oriented participles has been described in Jamsay (Dogon):

“In relative clauses (and therefore in various spatio-temporal and manner clauses in relative form, as well as in various agentive compounds), the verb takes a *Participial* suffix instead of a pronominal subject suffix (§14.1.8). The Participial suffixes are

Nonhuman -Ø, (human) Sg -n, and (human) Pl -m. These are the same suffixes used with most simple nouns, and with adjectives. The Participial suffix *agrees with the head* of the relative, regardless of its grammatical relation (subject, object, etc.).” (Heath 2008: 14)

### 3. Basic typology of Bantu relatives

Since Nsuka Nkutsi’s (1982) seminal work, relativization in Bantu has been a much investigated topic – see among others Downing et al. (2010), Grollemund and Atindogbé (eds.) (2017). The parameters commonly proposed to account for the variation observed across Bantu languages in the *noun – relative clause* construction can be summarized as follows:

- the verb forms found in relative clauses may differ from the verb forms heading independent assertive clauses in the details of TAM and polarity marking;
- the initial agreement prefix of relative verb forms may differ from that of independent verb forms, both formally and in the range of values it expresses;
- a relativizer (or relative linker – ‘substitut relatif’ in Nsuka-Nkutsi’s (1982) terminology) may be added at the junction between the head noun and the relative clause, to the right of the verb of the relative clause, or within the verb of the relative clause;
- relativizers may be invariable, or agree in class (i.e. gender-number) with the head noun;
- the relativizers that show class agreement may be formally identical to a demonstrative, or to the genitival linker;
- relative clauses may have the same SVO constituent order as independent assertive clauses, or a verb-initial constituent order;
- in non-subject relativization, it may happen that the initial agreement slot of the relative verb form does not express agreement with the subject (as in the corresponding independent verb forms), but with the head noun (Nsuka-Nkutsi 1982: 217-239);
- in non-subject relativization, the subject argument may be encoded as a possessive, either in preverbal or postverbal position (Nsuka-Nkutsi 1982: 71-73).
- in non-subject relativization, it may happen that the head noun is resumed by an object marker (in the case of object relativization) or a pronoun (Nsuka-Nkutsi 1982: 171-178).<sup>2</sup>

Examples (5) and (6) illustrate some of these parameters.<sup>3</sup>

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<sup>2</sup> In the traditional terminology of Bantu linguistics, the terms ‘subject / object marker’ designate verbal prefixes expressing features (person-number or noun class) of the subject / object argument. In typologically oriented works, such affixes are rather designated as ‘subject / object indexes’. As a rule, subject markers are obligatory, and their analysis as agreement markers is uncontroversial, whereas there is cross-linguistic variation in the status of the object markers. In some languages (for example, Tswana), they are never obligatory, and the choice between object markers and free object pronouns depends exclusively on information structure, whereas in some others (for example, Swahili), they may be obligatory in certain conditions.

<sup>3</sup> In some of the examples we quote, we have simplified the glosses (in particular, by ignoring the possible segmentation of verb stems), in order to make more apparent the elements that are directly relevant to our point.

(5) Tswana (Bantu S31; Denis Creissels' field notes)

(5a) **Lì-búrú**            <sup>h</sup>**lí-rékílé**            **dí-q<sup>h</sup>ò:mó.**  
 CL5-Afrikaner        SM.CL5-bought        CL10-cow  
 'The Afrikaner bought cows.'

(5b) **Lì-búrú**        **lí-dì-rékî:lè.**  
 CL5-Afrikaner    SM.CL5-OM.CL10-bought  
 'The Afrikaner bought them (the cows).'

(5c) **dì-q<sup>h</sup>òmó**    **tsé**            **lì-búrú**            **lí-dì-rékîlè:-<sup>h</sup>**  
 CL10-cow        CL10.RLK    CL5-Afrikaner    SM.CL5-OM.CL10-bought-RLK  
 'the cows that the Afrikaner bought'

(6) Swahili (Bantu G42; Zwart 1998)

(6a) **Wa-toto**    **wa-li-soma**        **ki-tabu.**  
 CL2-child    SM.CL2-PFV-read    CL7-book  
 'The children read a book.'

(6b) **Wa-toto**    **wa-li-ki-soma.**  
 CL2-child    SM.CL2-PFV-OM.CL-read  
 'The children read it (the book).'

(6c) **ki-tabu**    **wa-li-cho-ki-soma**            **wa-toto**  
 CL7-book    SM.CL2-PFV-CL7.RLK-OM.CL7-read    CL2-child  
 'the book that the children read'

Example (5c) shows that, in Tswana, relative clauses have the same constituent order as independent assertive clauses, and the subject of the relative clause controls verb agreement in the same way as in independent clauses. Two relativizers are present. One of them is inserted between the head noun and the relative clause; it is identical to the demonstrative and expresses class agreement. The other is invariable, and occupies the post-final position in the verb form.<sup>4</sup> In non-subject relativization, resumption of the head noun is obligatory, as illustrated by the resumptive object marker in (5c).

Although this is not apparent in this particular example, the TAM-polarity markers in the relative clauses of Tswana are different from those found in independent clauses, and are rather similar to those found in circumstantial verb forms (a set of dependent verb forms used for adverbial subordination, traditionally – but misleadingly – designated as 'participial forms' – cf. Section 2.1). However, in both cases, the distinctions expressed by TAM-polarity marking are the same as in independent clauses. Similarly, the set of subject markers in the relative verb forms of Tswana is not identical to that used in independent assertive clauses,

<sup>4</sup> In the traditional terminology of Bantu linguistics, 'final' designates a vowel analyzable as the inflectional ending of the verb, since it varies depending on the TAM-polarity value expressed by the verb form, and 'post-final' applies to suffixes or enclitics attached to the right of this vowel, which may be very diverse functionally.

and is more similar to that used in other types of dependent verb forms, but there is no reduction as regards their possible values. Consequently, it would not be correct to analyze the morphological distinction between the relative verb forms of Tswana and the corresponding independent verb forms in terms of deranking (or in terms of ‘anti-agreement’ as this term is used by generativists).

Example (6c) shows that, in Swahili, relative clauses are characterized by subject inversion, but the inverted subject controls verb agreement like the preverbal subject in independent clauses. A resumptive object marker is present, and a relativizer expressing class agreement with the head noun is inserted between the TAM marker and the object marker.

#### 4. Agreement in the *noun – relative clause* construction of Bantu languages

The studies on agreement in the *noun – relative clause* construction of Bantu languages (Demuth and Harford 1999, Zeller 2004, Henderson 2007 among others) generally agree that, in Bantu languages, there are three possible types of agreement in non-subject relatives. Henderson (2007: 167) posits these three types as follows:

Type 1: agreement with the subject and relativized NP;

Type 2: agreement with subject only;

Type 3: agreement with relativized NP only.

##### 4.1. Type 1

This type is characterized by the combination of two distinct agreement mechanisms. First, the relative linker displays agreement with the head noun. Second (and as expected), the initial agreement prefix of the verb displays agreement with the subject (either inverted, as in Swahili, cf. (6c) above, or in its canonical pre-verbal position, as in Tswana, cf. (5c) above). This double agreement can be further illustrated by Shona: in example (7), the proclitic relative linker *dza-* agrees with the head noun *mbatya* ‘clothes’ while the subject marker *va-* expresses agreement with the subject NP of the relative clause *vakadzi* ‘woman’.

(7) Shona (Bantu S10; Demuth and Harford 1999)

**m-batya<sub>i</sub> dza<sub>i</sub>-va<sub>j</sub>-kasonera va-kadzi<sub>j</sub> mw-enga**  
 CL10-cloth CL10.RLK-SM.CL2-sewed.APPL CL2-woman CL1-bride  
 ‘clothes which the women sewed for the bride’

In Shona, as in Swahili, the subject of the relative clause is in post-verbal position, but this type of double agreement is also found with the subject of the relative clause in pre-verbal position, for example in Tswana. As regards the position of the relativizer expressing agreement with the head noun, it is most commonly found at the junction between the head noun and the relative clause, but it may also be found in other positions, as in Swahili – see example (6) above. As illustrated by the Tswana and Swahili examples, agreement with the head noun may also be expressed by a resumptive pronoun or object marker.



## 4.2. Type 2

This type, illustrated in example (8) by Swati, is characterized by one type of agreement only: the verb of the relative clause agrees with its subject as in independent assertive clauses, and if relativizers are present (as in Swati), they do not display agreement with the head noun. Note however that, in the relative clauses of Swati, the head noun is systematically resumed in the same way as a topicalized NP in an independent clause (hence the presence of an object marker of class 1 in this example) – Zeller 2004.

(8) Swati (Bantu S43; Zeller 2004: 79)

**umfati tintfombi; la-ti-m-elekelela-ko**<sup>5</sup>  
 CL1.woman CL10.girl RLK-SM.CL10-OM.CL1-help-RLK  
 ‘the woman whom the girls help’

## 4.3. Type 3

In this type, the relative verb form includes an agreement slot in the same position as the subject agreement slot in independent verb forms. However, when the relativized NP is not the subject, this agreement slot is not controlled by the participant expressed as the subject of the corresponding independent clause (henceforth ‘initial subject’), but by the head noun. A relative linker expressing also agreement with the head noun may be present, for example in Yao (Nsuka-Nkutsi 1982: 232), but this seems to be rather exceptional. As a rule, in the languages that have agreement of type 3, the initial subject occurs in postverbal position, which means that it loses the two properties that characterize canonical Bantu subjects: pre-verbal position and control of subject agreement.

Many North-Western and Central Bantu languages display this type of relativization. Note that, in the glosses of examples (9) to (11), as in the glosses of the Cuwabo examples in the remainder of this article, we avoid ‘SM’ in the gloss of the agreement prefix of relative verb forms, and verb forms are noncommittally glossed as .REL. The reason is that, as will be developed below, there is a suspicion that, at least in many of the languages with agreement of type 3 in the *noun – relative clause* construction, the initial prefix of relative verb forms should not be analyzed as expressing subject agreement.

(9) Lingala (Bantu C30b; Henderson 2007: 169)

**mu-kanda mú-tindaki Poso**  
 CL3-letter CL3-send.REL (CL1)Poso  
 ‘the letter that Poso sent’

(10) Mongo (Bantu C60; Hulstaert 1965: 569)

**li-lako lí-tóná ba-ékoli**  
 CL5-lesson CL5-hate.REL CL2-student

<sup>5</sup> **la-ti-m-elekelela-ko** is the underlying form, but it surfaces as **le-ti-m-elekelela-ko**, with a change from [a] to [e] triggered by the vowel of the following subject prefix.

‘a lesson that the students hate’

(11) Ciluba (Bantu L31a; Willems 1970: 149)

**lu-kàsù**    **lù-fùdìlè**    **mu-fùdì**  
 CL11-hoe    CL11-forge.REL    1-blacksmith  
 ‘the hoe that the blacksmith has forged’

#### 4.4. Types of agreement and other typological parameters of Bantu relativization

In this typology of agreement in Bantu relativization, Cuwabo exhibits the third type of agreement (as do neighbouring Makhuwa (van der Wal 2010) and Sena (Torrend 1900)). Table 1 summarizes the behavior of the Bantu languages quoted above with respect to three typological parameters of Bantu relativization: S-V inversion in non-subject relatives, use of a relative linker, and type of agreement.

**Table 1** Summary of Bantu relativization typology (including Cuwabo)

Language	S-V inversion	Relative linker	Type of agreement
Tswana	no	yes	T1
Swahili	yes	yes	T1
Shona	yes	yes	T1
Swati	no	yes	T2
Lingala	yes	no	T3
Mongo	yes	no	T3
Ciluba	yes	no	T3
<b>Cuwabo</b>	<b>yes</b>	<b>no</b>	<b>T3</b>

As already mentioned above, and illustrated by the languages included in Table 1, in the relative clause construction of most of the Bantu languages that have agreement of type 3, there is no relative linker, and the argument encoded as the subject of the corresponding independent clause cannot be expressed as an NP in pre-verbal position.

#### 4.5. The initial agreement slot of Bantu relative verb forms

In the perspective of a typological characterization of Bantu relative clauses as balanced or deranked dependent clauses, a more precise characterization of the initial agreement slot of relative verb forms is in order. In Section 2.2, we have argued that, in Jóola Fóoñi (Atlantic), the range of possible values expressed by the agreement prefix of relative verb forms is crucial to analyze non-subject relatives as balanced (since in non-subject relatives, the agreement prefix of the verb expresses person-number and gender-number agreement, exactly as in independent clauses), and subject relatives as deranked (since in subject relatives, the agreement prefix of the verb can only express gender-number agreement).

This criterion is clearly relevant to the analysis of Bantu relativization. Nsuka-Nkutsi (1982: 116) mentions it as one of the criteria that can be used to characterize the initial agreement slot of relative verb forms as a reflex of the Proto-Bantu ‘préfixe pronominal’ or ‘préfixe verbal’. Recall that Meeussen (1967: 96-97) reconstructed four distinct sets of

inflectional prefixes in Proto-Bantu and characterized their distribution as follows: the *nominal prefix* (in nouns, locatives, and adjectives), the *numeral prefix* (in words for “1-5” and “how many”), the *pronominal prefix* (in substitutives, connectives, possessives, demonstratives, determinatives, and relative verb forms), and the *verbal prefix* (in absolutive verb forms). Crucially, in Meeussen’s reconstruction, the pronominal prefix and the verbal prefix are very similar. They differ only in that: (a) the paradigm of the verbal prefix includes four person-number values (1st sg., 2nd sg., 1st pl., and 2nd pl.) that have no equivalent in the paradigm of the pronominal prefix, which includes only gender-number (‘class’) values, and (b) the form for class 1 (human singular) is not the same in the paradigm of the pronominal prefix and in that of the verbal prefix.

Given this formal resemblance, one can easily imagine that the original distinction between the pronominal prefix and the verbal prefix may have been more or less blurred by subsequent language-specific evolutions. The initial agreement slot of Bantu relative verb-forms is not always easy to identify as a reflex of the Proto-Bantu pronominal or verbal prefix. Moreover, this identification is not necessarily decisive for a synchronic characterization of Bantu relative clauses as balanced or deranked dependent clauses, due to various types of changes that may have affected the *noun – relative clause* construction in the history of individual languages.

To summarize, Nsuka-Nkutsi’s (1982) survey of Bantu relativization, although providing valuable insights about the nature of the initial agreement prefix of Bantu relative verb forms, does not resolve the question of the precise nature of the agreement mechanism it expresses synchronically, since the lack of person-number agreement is only mentioned in passing as one of the criteria that can be used to identify the initial agreement slot of Bantu relative verb forms as a reflex of the so-called ‘pronominal prefix’, and no systematic information is provided about the possibility of person-number agreement in the relative verb forms of the languages included in the survey. This is fully understandable, since very few descriptive grammars include information about the possibility of modifying 1st or 2nd person pronouns by relative clauses, and consequently Nsuka-Nkutsi had the relevant data at his disposal for only a tiny minority of the languages included in his survey.

This is the main reason why we will not try to discuss the possible extension of our analysis of Cuwabo relativization to the other Bantu languages that have agreement of type 3 in the *noun – relative clause* construction. The remainder of this article will deal exclusively with Cuwabo relativization.

## 5. Cuwabo relatives: the data

### 5.1. The relative verb forms of Cuwabo

Whereas most Bantu languages make use of relative linkers, or have important morphological differences between independent and relative verb forms, at first sight, Cuwabo seems to have no morphological marker of relativization. In relative clauses, Cuwabo uses verb forms that are formally almost identical to the conjoint forms found in independent clauses. However, the verb forms found in relative clauses have properties that justify distinguishing them from the conjoint forms found in independent clauses, as will be demonstrated below.

In Cuwabo, seven tenses/conjugations display the conjoint/disjoint<sup>6</sup> alternation: present (imperfective), past imperfective, perfective, past perfective, future, future imperfective and hypothetical. Table 2 below compares conjoint independent verb forms and relative verb forms, making apparent that the verb forms found in the relative clauses of Cuwabo have no specific morphology, nor do they exhibit a specific tone pattern, except for the perfective tense, in which an additional H tone associates to the second syllable of the stem, or to the first one in the case of bisyllabic stems (see the conjoint form **ofullé** versus the relative form **ofúllé**). The reason why a tonal difference between conjoint and relative forms exists only for the perfective is still unclear at this moment.

**Table 2** Conjoint versus Relative verb forms in Cuwabo

	Conjoint	Relative
PRS IPFV	<b>ońgúlihá</b> nigagádda 'he is selling dry cassava'	<b>ońgúliha</b> <sup>7</sup> (nigagádda) 'who is selling (dry cassava)'
PST IPFV	<b>waágúla</b> nyumba 'he was buying a house'	<b>waágúla</b> (nyumba) 'who was buying (a house)'
PFV	<b>ofullé</b> mútede 'he washed the dress'	<b>ofúllé</b> (mutéde) 'who washed (the dress)'
PST PFV	<b>waaveéttíle</b> mbuga 'he had winnowed the rice'	<b>waaveéttíle</b> (mbuga) 'who had winnowed (the rice)'
FUT	<b>onaábúddúgélé</b> guluwe 'he will attack the pig'	<b>onaábúddúgélé</b> (guluwe) 'who will attack (the pig)'
FUT IPFV	<b>ogásákula</b> kalruúnga 'he will be choosing the hoe'	<b>ogásákula</b> (kálruúnga) 'who will be choosing (the hoe)'
HYP	<b>ogaattukúlle</b> nyangaséra 'he would carry the fishing basket'	<b>ogaattukúlle</b> (nyángaséra) 'who would carry (the fishing basket)'

This raises the following question: what may justify positing a distinction between relative and conjoint verb forms if they are so similar? A first reason is that, as will be developed in 5.2, the initial agreement slot of relative verb forms expresses a restricted range of possible values, in comparison with the conjoint forms found in plain assertive clauses. A second reason is that conjoint forms cannot occur in sentence-final position, whereas relative verb forms do not have this restriction in their distribution. Finally, in the case of transitive verbs, the tone pattern of the object following the verb distinguishes relative verb forms from conjoint verb forms: after a conjoint form, First H tone deletion (H1D) occurs, i.e. the

<sup>6</sup> The conjoint/disjoint distinction is an alternation in verb inflection, where one verb form ('disjoint', typically the marked form) can occur in clause-final position and often implies predicate focus, while the other form ('conjoint', typically the unmarked form) cannot occur clause-finally and often implies term focus on the following phrase. Such a distinction is found among others in Bemba, Kinyarwanda, Kirundi, Makhuwa, Tswana, and Zulu (cf. Hyman and van der Wal 2017).

<sup>7</sup> Note that the tonal difference between the conjoint and the relative forms is not relevant here, since it results from constraints on High Tone Doubling (see footnote 9 for more details on HTD). Furthermore, Cuwabo has retained a lexical H tone contrast on verbs, which is operational in certain tenses/conjugations, such as the present perfect. Whilst L stems remain toneless, in H-toned verbs, the lexical H tone surfaces on the penult mora of the stem (as in **muńvira** in (20c) below), or the ultimate mora in the case of a bimoraic stem (as in **ońgúliha** in Table 2). Cf. Kisseberth and Guérois (2014) for a detailed account of the different tonal patterns in Cuwabo.

augment,<sup>8</sup> which is purely tonal in Cuwabo, is deleted, as illustrated in (12a), whereas after a relative verb form, the object appears in its citation form, without any tonal alteration, as in (12b). Note that the structural form of ‘dry cassava’ is **nígagádda**, converted on the surface into **nígagádda** by High Tone Doubling, and into **nigagádda** by H1D.

(12) Cuwabo (Bantu P34)<sup>9</sup>

(12a) CJ **Múyaná ońgúlíhá nigagádda.**  
**mú-yaná o-ní-gul-íh-a** **ni-gagádda**  
 CL1-woman SM.CL1-IPFV-buy-CAUS-FV.CJ CL5-dry.cassava.H1D  
 ‘The woman is selling dry cassava.’

(12b) REL **múyaná ońgúlíhá nígagádda**  
**mú-yaná [o-ní-gul-íh-a** **ní-gagádda**]<sub>RCL</sub>  
 CL1-woman CL1-IPFV-buy-CAUS-FV.REL CL5-dry.cassava  
 ‘the woman who is selling dry cassava’

However, not all words following a conjoint form are affected by H1D. This means that under certain circumstances, both conjoint and relative readings are available, and only the context will help in determining which reading must be selected. By way of illustration, the usual tone pattern of the locative noun **mu-bára** ‘from the beach’ (marked by the class 18 locative prefix **mu-**) observed after a relative verb form (13b) remains unchanged after a conjoint verb form (13a). The absence of tonal modification on locative NPs following a conjoint verb form does not help in determining the type of clause in which they appear. However, the story context from which the sentence in (13a) was extracted makes it clear that **dhińdha** is to be interpreted as a conjoint verb form (implying focus on the postverbal element). But, taken out-of-the-blue, the same sequence could be interpreted as an NP consisting of a head noun modified by a relative clause, as in (13b).

(13) Cuwabo (Bantu P34)

(13a) CJ **Jíbo dhińdhá mbára.**  
**jíbo dhi-ní-dh-a** **mu-bára**  
 CL10a.song SM.CL10-IPFV-come-FV.CJ CL18-CL9a.sea  
 ‘The songs come from the beach.’

<sup>8</sup> In the traditional terminology of Bantu linguistics, ‘augment’ designates the reflexes of a morphological element reconstructed in Proto-Bantu as an optional H-toned prefix preceding the obligatory class prefix of nouns. In some Bantu languages (including Cuwabo), the reflex of the augment is an initial H tone present in the citation form of nouns but deleted in certain conditions.

<sup>9</sup> The Cuwabo examples in this paper are given with two transcriptions. The first tier gives a phonetic transcription, and underlying representations are given on the second tier. A particularly prominent phonological process is High-Tone doubling, whereby an underlying H is copied onto the next mora to the right. Note that when the mora receiving the doubled H is in phrase-penult position, a falling pitch is usually heard. For phonetic concern, this fall is marked in the first tier by a circumflex accent on top of the segment.

- (13b) REL **jíbo dhińdhá mbára**  
**jíbo** [dhi-ní-dh-a **mu-bára**]<sub>RCL</sub>  
 CL10a.song CL10-IPFV-come-FV.REL CL18-CL9a.sea  
 ‘the songs which come from the beach’

## 5.2. Subject relatives

The relativization of the subject NP is illustrated by the examples (12b) and (13b) above. Assuming that the internal structure of Cuwabo relative clauses is not different from that of independent clauses, the structure of a *noun – relative clause* construction such as that in (13b) could be schematized as indicated in (14): the subject of the relative clause, being co-referent with the head noun which precedes it, is not expressed as an NP in pre-verbal position, and manifests itself via agreement only.

- (14) Cuwabo (Bantu P34)

**múyaná ońgúlíha nígágádda ...**

‘the woman who is selling dry cassava...’

<b>mú-yaná<sub>i</sub></b>	[Ø <sub>i</sub>	<b>o<sub>i</sub>-ní-gul-íh-a</b>	<b>ní-gagádda</b> ] <sub>REL</sub>
CL1-woman		SM.CL1-IPFV-buy-CAUS- FV.REL	CL5-dry.cassava
<i>head noun</i>	<i>relativized subject</i>	<i>subject agreement-verb</i>	<i>other terms of the relative clause</i>

However, this analysis cannot be maintained, since the agreement relationship it implies is not respected when the head of the relative clause is a personal pronoun denoting a speech act participant (SAP), i.e. first and second person singular and first and second person plural. When any of these four personal pronouns is the head of a relative clause, the verb systematically agrees in class 1 **o-**, as indicated in Table 3 (compare the initial agreement prefix of relative verb forms with the subject marker of independent verb forms), and further illustrated in (15). This observation is crucial for a typological characterization of Cuwabo relativization (cf. Section 6 below).

**Table 3** Relative agreement pattern with SAP’s

Persons	Personal pronoun	initial agr. pref. in rel. clauses		SM in independent clauses
1SG	míyo	<b>o-ńlóga</b>	‘I who say’	<b>ddi-</b>
2SG	wéyo	<b>o-ńlóga</b>	‘you who say’	<b>o-</b>
3SG (cl.1)	íyééne	<b>o-ńlóga</b>	‘he who says’	<b>o-</b>
1PL	íyo	<b>o-ńlóga</b>	‘we who say’	<b>ni-</b>
2PL	nyúwo	<b>o-ńlóga</b>	‘you who say’	<b>mu-</b>
3PL (cl.2)	áwééne	<b>a-ńlóga</b>	‘they who say’	<b>a-</b>

(15) Cuwabo (Bantu P34)

**Nootéene íy’ óómívíéerí vatakûl’ aápa, (nivíré voósálún’ aápa).**

**ni-oté=ene íyo [o-ní-viveéri va-tákulu ápa]<sub>RCL</sub>**  
 1PL-all=INT 1PL.PRO CL1-IPFV-live.REL CL16-9a.house CL16.DEM.I

‘All of us who live in this house, (let’s go on this thread).’

In (15), the agreement marker in **o-ńívíéerí** is not the expected subject marker of the first person plural **ni-**, but the class 1 prefix **o-**. Class 1 agreement (i.e. human singular agreement) is however consistent with the fact that SAP’s are human beings. More unexpected is the fact that plural SAP’s (**íyo** ‘we’ and **nyúwo** ‘you (pl)’) do not trigger class 2 agreement on the verb, as the plural of class 1. Mark Van de Velde (pers.com.) suggests that this might be a default choice in a situation of ‘enforced agreement’ of the type he discusses in Van de Velde 2006. We have no better explanation to put forward.

In headless subject relatives, the initial agreement marker of the verb form expresses *human vs. non-human* and *singular vs. plural* distinctions. When the relative clause refers to human beings, this prefix can only be class 1 **o-** (singular) or class 2 **a-** (plural). When the relative clause refers to non-human entities, it can be class 9 **e-** (singular), as in (16), or class 10 **dhi-** (plural), which is consistent with the class membership of the nouns for ‘human being’ (1/2) and ‘thing’ (9/10). Thus in (16), ‘what will go out’ can be explained as ‘[the thing] which will go out’.

(16) Cuwabo (Bantu P34)

**Eńfún’ óóbúddúwaamó mwaári mwa ńpúle wóy’ óoddódd’ eejú wéene.**

**[e-ní-fun-a ó-buddúw-a=mo mwaári mwa ńpule]<sub>RCL</sub>**  
 CL9-IPFV-want-FV.REL CL15-go\_out-FV=CL18.LOC CL18.into CL18.in CL18.DEM.III

**wéyo o-ddódd-e éjo wéene**

2SG.PRO SM2SG-snatch-SBJ CL9.DEM.II INT

‘What will go out from inside, you should snatch it.’

### 5.3. Non-subject relatives

In non-subject relatives, as illustrated in example (13), the initial subject obligatorily moves to post-verbal position, and loses the control of verb agreement. In some other Bantu languages that have subject inversion in relative clauses, as illustrated by examples (6) (Swahili) and (7) (Shona) above, the initial subject in post-verbal position still controls the subject agreement slot in the verb form in the same way as pre-verbal subjects in canonical independent clauses. By contrast, in the non-subject relatives of Cuwabo, the agreement prefix of the verb does not express agreement with the initial subject, but with the head noun.

(17) Cuwabo (Bantu P34)

(17a) **bírińkw' iısı dhiddigúlélle wéyo**

**bírińku ési [dhi-ddi-gúl-el-ile wéyo]<sub>RCL</sub>**

CL10a.earring CL10.DEM.I CL10-OM1SG-buy-APPL-PFV.REL 2SG.PRO

'these earrings you bought me'

(17b) **mákúr' áagúllé múyaná**

**má-kurá [a-gúl-ilé mú-yaná]<sub>RCL</sub>**

CL6-oil CL6-buy-PFV.REL CL1-woman

'the oil that the woman bought'

(17c) **élóbw' eeńlógá múkwe**

**é-lobo [e-ní-log-a mú-kwe]<sub>RCL</sub>**

CL9-thing CL9-IPFV-tell-FV.REL CL1-friend

'the thing the friend is telling'

(17d) **ór' éerurúmúwile Nikúrábedha**

**óra [e-rurúmuw-ile Nikúrabedha]<sub>RCL</sub>**

CL9a.hour CL9-wake.up-PFV.REL CL1a.Dugong

'the moment at which Mr. Dugong woke up'

In (17a), the initial subject, which would be expressed as a 2nd person subject marker prefixed to the verb in the corresponding independent clause, is expressed as a free pronoun in postverbal position, and the verb form includes no indication of 2nd person. Interestingly, in this configuration, it may happen that the pronoun representing the initial subject cliticizes to the verb, as in (18).

(18) Cuwabo (Bantu P34)

(18a) **mwádhága waámúlogúímí**

**mwádhaga [o-á-mu-log-á=imi]<sub>RCL</sub>**

CL1.wife.POSS1SG CL1-PST-OM.CL1-speak-FV.REL=1SG.PRO

'the wife I talked about'

(18b) **óbá yaapíléeyé**

**óba [e-a-p-íle=iye]<sub>RCL</sub>**

CL9a.fish CL9-PST-kill-PFV.REL=3SG.PRO

'the fish he had caught'

(18c) **omúndd' oók' óóńlógínyú**

**o-mú-ndda óko [ó-ni-log-á=inyu]<sub>RCL</sub>**

CL17-CL3-field CL17.DEM.II CL17-IPFV-say-FV.REL=2PL.PRO

'in this plantation you are referring to'



Table 4 lists these bound personal pronouns exclusively (but still optionally) used in non-subject relatives (column 2), and compares them with the free personal pronouns (column 3) and the possessive pronouns (column 4). The resemblances are only partial, and they are distributed in such a way that no straightforward generalization emerges about possible morphological relationships between the three paradigms.

**Table 4** Comparison between bound and free personal pronouns, and possessives

person	bound pers. pronouns	free pers. pronouns	possessive
1SG	=imi	míyo	-aga
2SG	=iwe	wéyo	-awo
3SG	=iye	íyééne	-aye
1PL	=ihu	íyo	-ihu
2PL	=inyu	nyúwo	-inyu
3PL	=ani	áwééne	-awa

An important observation about object relatives is that the object shows evidence of having the same syntactic relationship with the verb as in plain assertive clauses. Crucially, it is indexed in the verb form exactly in the same conditions as in independent clauses. In Cuwabo, class 1 and class 2 objects are obligatorily indexed by means of object markers immediately preceding the verb root, whereas objects belonging to other classes cannot be indexed. In object relativization, as can be seen in (18a), objects belonging to class 1 or class 2 are indexed in the same way by the corresponding object markers.

In addition to the object relatives exemplified above, manner relatives and locative relatives are other varieties of non-subject relatives. Both are mainly found as adverbial clauses (but not exclusively, cf. (20b), where a locative relative fulfills the object function in the matrix clause), and are most commonly headless. The headless manner relatives are introduced by the complementizer **nínga** ‘as’, and the agreement prefix of the verb is usually class 9 (as in (19)) or 10 (probably in reference to class 9/10 words like **yeéddêlo** or **ekálêlo** which both mean ‘behavior’). In headless locative relatives, the agreement prefix of the verb expresses one of the three locative classes, 16, 17 and 18, as shown in (20).

(19) Cuwabo (Bantu P34)

**Ddiṁfúná ddikálé ṅng’ aáligíímí vatákúlúvênyu.**

**ddi-ní-fun-a**

**ddi-kál-e**

**nínga**

**[e-á-ligí=imi**

SM1SG-IPFV.CJ-want-FV

SM1SG-be-SBJ

as

CL9-PST.IPFV-be.HAB.REL=1SG.PRO

**va-tákulu**

**vá-enyu]**<sub>RCL</sub>

CL16-CL9a.house

CL16-POSS2PL

‘I want to be the way I used to be in your house.’

(20) Cuwabo (Bantu P34)

(20a) **Vańgómédhíimí ddińgôma.**

[**va-ní-gom-édh-a=imi**]<sub>RCL</sub>      **ddi-hí-gom-a**  
 CL16-IPFV-stop-APPL-FV.REL=1SG.PRO    SM1SG-PFV.DJ-stop-FV  
 ‘Where I stop, I stop!’

(20b) **Waádhówíyé<sup>10</sup> kańzíwaawo.**

[**o-á-dhow-á=iye**]<sub>RCL</sub>      **ka-ní-ziw-a=wo**  
 CL17-PST-IPFV-go-FV.REL=3SG.PRO    NEG.SM1-IPFV-know-FV=LOC17  
 ‘She did not know where she was going.’

(20c) **Muńvírá míyó múnóddááganyedha.**

[**mu-ní-vir-á      míyo**]<sub>RCL</sub>    **mú-ni-o-ddí-aganyedh-a**  
 CL18-IPFV-go-FV.REL    1SG.PRO    SM2PL-IPFV.DJ-CL15-OM1SG-suspect-FV  
 ‘Wherever I go by, you suspect me.’

Beyond spatial meaning, locative relatives are also a very productive way to express temporal meaning, especially in class 18, as exemplified in (21). The context allows deciding between a locative or temporal reading.

(21) Cuwabo (Bantu P34)

**Mmwerélelévó kurúmaánjé, [...]**

[**mu-mwerél-el-é=vo      kurúmaanje**]<sub>RCL</sub>  
 CL18-land-APPL-PFV.REL=LOC16    CL1a.bee.sp  
 ‘When the bee landed, [...]’

## 6. Discussion

### 6.1. Cuwabo relatives and the typology of relativization

When we started working on Cuwabo relatives, the first hypothesis we explored was that the relative verb forms of Cuwabo are balanced verb forms whose initial agreement slot expresses subject agreement, and the agreement with the head noun observed in non-subject relatives is only apparent. This hypothesis implies that non-subject relativization involves a mechanism of demotion of the lexical subject and covert promotion of the relativized NP to subject role. It was suggested by the quasi-homonymy between relative verb forms and the conjoint verb forms found in independent clauses. However, two observations already mentioned above obliged us to abandon this explanation.

The first one is that, in relative clauses modifying a 1st or 2nd person pronoun, the verb form does not express 1st or 2nd person agreement, but class 1 (human singular) agreement –

<sup>10</sup> The final H tone on **waádhówíyé** is not morphological, and is best analysed as a boundary tone marking continuity between the two clauses.

cf. example (15). This can hardly be reconciled with the hypothesis that the agreement prefix of the Cuwabo relative verb forms expresses subject agreement.

The second observation contradicting the hypothesis that the relative verb forms of Cuwabo express subject agreement, and that Cuwabo relativization obligatorily involves covert promotion of the relativized NP to subject role, is even more decisive. It concerns the obligatory indexation of class 1 or 2 objects, which operates in relative clauses in the same way as in independent clauses, excluding thus the possibility of analyzing the object as covertly promoted to subject in object relativization.

Consequently, the only analysis consistent with the description of Cuwabo relativization presented in section 5 is that, in spite of the apparent similarity between independent and relative verb forms:

- the relative verb forms of Cuwabo are participles, since the relative clauses of Cuwabo are deranked dependent clauses that include the same object and oblique grammatical relations as the corresponding independent clauses, but do not include the grammatical relation ‘subject’;<sup>11</sup>
- the agreement prefix occupying the same position in relative verb forms as the prefix expressing subject agreement in independent verb forms does not express subject agreement, but agreement of a noun modifier (the participial relative clause) with its head;
- in relative clauses, the argument expressed as the subject of the corresponding independent verb forms fulfills a specific grammatical function, characterized by (a) immediate post-verbal position, (b) lack of any marking in the case of ordinary NP’s, and (c) use of a special set of enclitic pronouns (cf. Section 5.3, Table 4).

This latter point is worth being emphasized, since in participial relative clauses involving changes in the encoding of the subject argument, it is much more common cross-linguistically that the initial subject is encoded in the same way as adnominal possessors, and the data provided by Nsuka-Nkutsi suggest that this generalization also applies to Bantu.

Another interesting aspect of Cuwabo relativization is that, as illustrated in Section 5, Cuwabo uses the same verb forms to relativize subjects, objects, and a variety of oblique roles. Once it has been established that the relative clauses of Cuwabo are deranked dependent clauses, the logical conclusion is that the relative verb forms of Cuwabo are contextually oriented participles, a type of verb form commonly found in some parts of Eurasia, but rarely mentioned so far in descriptions of Sub-Saharan languages.

## 6.2. Cuwabo relatives and ‘anti-agreement’

In languages in which verbs in plain assertive clauses agree with their subject, reduced subject-verb agreement or lack of subject-verb agreement in other types of constructions (subordinate clauses in the first place, but sometimes also interrogative clauses, cleft constructions, etc.) is an essential element of the traditional notion of non-finite verb form –

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<sup>11</sup> In order to prevent possible misunderstandings, we want to make it clear that this formulation must not be understood as implying deletion of the subject argument from argument structure, but only a change in the syntactic role of the NP that represents it (much in the same way as in the case of subjects demoted to obliques in passive constructions).

cf. Nikolaeva (2007) for a recent and typologically oriented discussion of finiteness. Since Ouhalla (1993), this phenomenon has been analyzed by generativists under the name of ‘anti-agreement’, as the manifestation of constraints on  $\bar{A}$ -movement (i.e. movement of noun phrases from the position in which they are base-generated, in which they are assigned a semantic role, to a non-argumental position).

In his survey of the generative literature on anti-agreement, Baier (2016) distinguishes three major styles of analysis for anti-agreement effects, to which he adds four other types of approaches that do not fall neatly into one of the major categories. He notes that each of these accounts of anti-agreement is problematic in some respects, and insists that there is no ‘mainstream’ analysis of anti-agreement, and that it is not even clear if anti-agreement is a unitary phenomenon.

As regards Bantu languages, a generative analysis of the lack of person agreement in relative clauses and other constructions has been proposed for Lubukusu (Dierks 2009, 2010), Nande (Schneider-Zioga 2000, 2007), Abo (Burns 2013), and Bemba (Henderson 2007, 2009, 2013; Cheng 2006). The configurations they analyze are basically similar to that found in Cuwabo, and it is unlikely that the Cuwabo data analyzed in this paper from the point of view of relativization typology would add anything to the theoretical discussion between the various proposals about constraints on  $\bar{A}$ -movement discussed in the anti-agreement literature. Conversely, the discussion between the various generative analyses of anti-agreement has no incidence on our analysis of Cuwabo relative verb forms as contextually oriented participles.

### 6.3. A historical explanation

As regards a possible diachronic scenario accounting for the emergence of the Cuwabo type of relativization strategy in Bantu languages, we find Van de Velde’s (2018) hypothesis quite convincing. Starting from a construction in which the relative clause is characterized by subject inversion (and consequently is systematically verb-initial), he proposes a scenario consisting of the following three steps:

- (1) a relativizer of demonstrative origin agreeing with the head noun in gender-number (but not in person!) is inserted between the head noun and the relative clause;
- (2) the relativizer cliticizes on the relative verb;
- (3) the ‘relativizer – subject marker’ sequence undergoes a reduction process in which (probably due to prosodic factors) what subsists of the original sequence is the so-called ‘pronominal prefix’ of the demonstrative grammaticalized as a proclitic relativizer.

Given the resemblance between the paradigm of the ‘pronominal prefixes’ and that of the subject markers (or ‘verbal prefixes’), which are identical in all classes except for class 1, it may not be immediately obvious that the result of this reduction process is distinct from the paradigm of subject markers found in other types of verb forms. This is in particular the case in Cuwabo. In such cases, the main evidence supporting the scenario put forward by Van de Velde (2018) is the lack of person agreement that, in the source construction, characterizes the first element of the sequence ‘relativizer – subject marker’, as in the Tswana example (22).

(22) Tswana (Bantu S31; Tswana Bible, Psalms 22:24)

<b>lòná</b>	<b>†bá</b>	<b>†ló-bóífà-ń</b>	<b>mó-rènà</b>
2PL	CL2.RLK	SM.2PL-fear- RLK	CL1-lord
‘you who fear the Lord’			

We fully agree with Van de Velde’s conclusion that this explanation has several advantages that make it particularly convincing. In particular, it only involves widely attested types of changes, none of which is goal-oriented or claimed to be functionally motivated. The peculiarities of Bantu morphology are responsible for the fact that a sequence of changes that have nothing exceptional results in a somewhat unusual situation, in which relativization involves deranked verb forms (participles) that do not include any specific marker, and whose morphological specificity is not immediately apparent.

## 7. Conclusions

In this paper, we have shown that, in spite of the fact that Cuwabo has no special relative morphology, and uses relative verb forms very similar to the conjoint verb forms found in independent clauses, the relative clauses of Cuwabo are deranked dependent clauses whose internal structure differs from that of regular independent clause in the treatment of the subject. Although at first sight, the initial agreement prefix of the Cuwabo relative verb forms does not seem to be different from the subject agreement prefix of independent verb forms, it cannot be analyzed as expressing subject agreement, since (a) in subject relatives modifying a 1st or 2nd pronoun, it does not express 1st or 2nd person agreement, as would be expected from a true subject agreement prefix, and (b) in object relatives, analyzing the initial agreement prefix as expressing subject agreement would imply a covert mechanism of promotion of the relativized object NP to subject function, which is contradicted by the fact that the relative verb forms express object agreement in the same way as the corresponding independent verb forms. Consequently, the relative verb forms of Cuwabo are participles, with three interesting particularities:

- they include no morphological element that could be isolated as a participial formative, and their only clear morphological characteristic is the restricted range of values expressed by their initial agreement prefix, in comparison with the subject agreement prefix of independent verb forms;
- in Shagal’s (2017) terminology, they exhibit full contextual orientation;
- in the participial relative clauses of Cuwabo, contrary to neighboring Makhuwa (van der Wal 2010), the initial subject is assigned a specific grammatical function whose marking does not straightforwardly coincide with that of adnominal possessors.

The data provided by Nsuka-Nkutsi (1982) suggest that a broadly similar analysis is probably possible for at least part of the Bantu languages in which, in non-subject relatives, the initial agreement prefix of verb forms does not express agreement with the initial subject, but with the head noun. Before trying to draw firm conclusions on this point, a systematic checking of the properties that play a crucial role in our analysis would be in order, but in any case, the

historical explanation put forward by Van de Velde (2018) provides a fully satisfactory explanation of the situation we have analyzed in Cuwabo.

## Abbreviations

**1SG** 1st Person Singular **2SG** 2nd Person Singular **2PL** 2nd Person Plural **3SG** 3rd Person Singular **3PL** 3rd Person Plural **ACT** Active **APPL** Applicative **CAUS** Causative **CL** Noun Class **CJ** Conjoint **CPL** completive **DEF** Definite **DEM** Demonstrative **DJ** Disjoint **ERG** Ergative **EXT** Extension<sup>12</sup> **F** Feminine **FUT** Future **FV** Final Vowel **GEN** Genitive **H1D** First H Deletion **H** High (tone) **INS** Instrumental **INT** Intensive **IPFV** Imperfective **LAT** Lative **LOC** Locative **N** Neuter **NEG** Negative **NOM** Nominative **NP** Noun Phrase **OM** Object Marker **PASS** Passive **PFV** Perfective **POSS** Possessive **PRO** Pronoun **PROG** Progressive **PRS** Present **PST** Past **PTCP** participle **RCL** Relative Clause **REL** Relative **RLK** Relative Linker / Relativizer **SAP** Speech act participant **SG** Singular **SM** Subject Marker **TAM** Tense Aspect Mood

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<sup>12</sup> In descriptions of Kalmyk, ‘extension’ is the term traditionally used for an unstable consonant in the nominative form of some nouns which disappears in oblique cases.

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