Kisikongo (Bantu, H16a) present-future isomorphism

A diachronic conspiracy between semantics and phonology

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The North-Angolan Bantu language Kisikongo has a present tense (*Ø-R-ang-a;* R = root) that is morphologically more marked than the future tense (*Ø-R-a*). We reconstruct how this typologically uncommon tense-marking feature came about by drawing on both historical and comparative evidence. Our diachronic corpus covers four centuries that can be subdivided in three periods, viz. (1) mid-17th, (2) late-19th/early-20th, and (3) late-20th/early-21st centuries. The comparative data stem from several present-day languages of the "Kikongo Language Cluster." We show that mid-17th century Kisikongo had three distinct constructions: *Ø-R-a* (with present progressive, habitual and generic meaning), *Ø-R-ang-a* (with present habitual meaning), and *ku-R-a* (with future meaning). By the end of the 19th century the last construction is no longer attested, and both present and future time reference are expressed by a segmentally identical construction, namely *Ø-R-a*. We argue that two seemingly independent but possibly interacting diachronic evolutions conspired towards such present-future isomorphism: (1) the semantic extension of an original present-tense construction from present to future leading to polysemy, and (2) the loss of the future prefix *ku-*, as part of a broader phenomenon of prefix reduction, inducing homonymy. To resolve the ambiguity, the *Ø-R-ang-a* construction evolved into the main present-tense construction.

Keywords: Bantu, Kikongo Language Cluster, Kisikongo, historical corpus linguistics, tense-aspect, present-future isomorphism

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1. Introduction

In many Bantu languages, a lack of overt tense/aspect (TA) morphology in the dedicated prefix slot of the verb, combined with the so-called "neutral" final vowel *-a*, is typically one way of expressing present tense (Nurse 2008: 117–120). This is also the case in many varieties belonging to the Kikongo Language Cluster (KLC) (Dom & Bostoen 2015: 172–173), a genealogically related group of language varieties spoken in an area that stretches from southern Gabon to northern Angola and from the Atlantic coast to the Bandundu province in Congo-Kinshasa (see the map in Appendix). The KLC constitutes a distinct clade within a higher-level Bantu subgroup known as West-Coastal or West-Western Bantu (de Schryver et al. 2015; Grollemund et al. 2015). The vocabulary-based phylogenetic classification of the KLC by de Schryver et al. (2015) shows that the 40-odd Kikongo varieties can internally be further divided into four subgroups: North, East, West and South Kikongo, all of which surround a linguistic convergence zone labeled Central Kikongo.

The aim of this article is to describe and reconstruct the diachrony of an innovation in the present- and future-tense paradigm that is shared by four Kikongo varieties, namely Kisikongo, Kisolongo, Kizombo and Kindibu. Unlike most other varieties of the KLC, these four Kikongo varieties use a morphologically unmarked TA construction *Ø-R-a* for future time reference (Dom & Bostoen 2015: 193–194). Present tense is expressed mainly by means of a TA construction with the suffix *-ang*, i.e. *Ø-R-ang-a*. This construction can be used in episodic, generic and habitual expressions (see Section 2.1 for definitions of these categories). However, in other Kikongo varieties the *Ø-R-ang-a* construction is restricted to habituality and genericity only (Dom & Bostoen 2015: 173–174). The *Ø-R-ang-a* and *Ø-R-a* constructions are illustrated in Examples (1) and (2), respectively, with fieldwork data from Kisolongo as spoken in the Democratic Republic of the Congo.

(1) The *Ø-R-ang-a* construction in Kisolongo
   a. Episodic (progressive)
      Nkyáma ***besálánga?***
      nkyama *be-**Ø**-sal-**ang-a***
      what SP_2-PRS-do-IPFV-PRS[1]
      'What are they doing?'
   b. Generic
      Asólóngo ***bedyánga*** *mbóm'e?*
      a-solongo *be-**Ø**-di-**ang-a*** *N-boma e*
      2-Solongo SP_2-PRS-eat-IPFV-PRS 9-snake Q
      'Do the Solongo eat snake?'

c. Habitual
***Tukélánga** bééne.*
*tu-**Ø**-kel-**ang**-**a** bééne*
SP_{1PL}-PRS-quarrel-IPFV-PRS often
'We often quarrel'. (KongoKing 2012, fieldwork by S. Dom)

(2) The *Ø-R-a* construction in Kisolongo
Future
*Oyáwu mbízi **bedyá**.*
*oyawu N-bizi be-**Ø**-di-**a***
$PRON_2$ 9-meat SP_2-FUT-eat-FUT
'They will eat (the) meat'. (KongoKing 2012, fieldwork by S. Dom)

In this article we will mainly focus on Kisikongo, which is spoken in and around the city of Mbanza Kongo (Angola), the former capital of the ancient Kongo kingdom. This is because Kisikongo has an exceptionally rich historical documentation status, beginning as early as the mid-17th century.[2] Alongside grammatical descriptions written in the mid-17th, late-19th, and late-20th centuries, a digitized diachronic corpus exists which consists of texts from the mid-17th, late-19th, early-20th, and early-21st centuries.[3] Kisikongo is therefore a unique language for the field of Bantu diachronic linguistics, in that grammatical changes can be observed empirically on the basis of data from three distinct time periods. The present study draws from both language descriptions and corpus texts, in order to investigate the development of the Kisikongo present- and future-tense paradigm. In addition to the historical Kisikongo data, comparative data from several other Kikongo varieties such as Kindibu (Central Kikongo), Kintandu (East Kikongo), Kisolongo, Kizombo, Dihungu and Kitsotso (South Kikongo) will be discussed.

Section 3.1 shows how three distinct TA constructions are attested in mid-17th-century Kisikongo: (i) *Ø-R-a*, with present progressive and generic meaning, (ii) *Ø-R-ang-a* attested with present habitual meaning, and (iii) *ku-R-a* used for future time reference. In Section 3.2 we show that by the end of the 19th century the present- and future-tense paradigms were changing. In the late-19th and early-20th century, the *ku-R-a* construction is no longer attested and future

1. The verbal ending *-a* is typically analyzed as a functionally neutral final vowel in Bantu linguistics, and thus commonly glossed as FV 'final vowel'. However, we take a constructionist approach to Bantu TA morphology analyzing the prefix-suffix combination as a single, morphologically complex, construction which is reflected in our glossing of *-a*.

2. The only other Bantu language whose historical documentation equals the time depth of that of Kisikongo is Kimbundu, also spoken in Angola (Doke 1935).

3. For a more detailed overview of the 17th-century documentation, see Bostoen & de Schryver (2015: 140).

time reference is expressed by means of a construction without a TA prefix, namely *Ø-R-a*. Moreover, while an *Ø-R-a* construction is still used in this period for present progressive and generic aspect, the *Ø-R-ang-a* construction is now also attested with both habitual, generic and episodic meaning. In the third time period (Section 3.3), an *Ø-R-a* construction expressing present tense is only found with two irregular verb roots and some auxiliaries. In Section 3.4, a short overview of the three historical stages is provided as well as a brief discussion on the tone pattern of the *Ø-R-a* construction(s) in present-day Kisikongo.

The main question, then, is whether the mid-17th century *Ø-R-a* (present tense) or *ku-R-a* (future tense) construction is the source of the later *Ø-R-a* used for future time reference. In other words, it needs to be established whether this isomorphism is the outcome of the semantic broadening/shift from present to future (in case *Ø-R-a* would be the source) or rather reflects (segmental) homonymy due to the phonological reduction of the older future construction, viz. *ku-R-a* > *Ø-R-a*. Given that the documentation provides only momentary snapshots of Kisikongo language history, we cannot empirically study the gradual development of these changes. Therefore, Section 4 presents two possible explanations for the observed facts. In Section 5 we conclude by discussing that the two historical scenarios presented in Section 4 should not be seen as mutually exclusive, and we consider the possibility that the processes of change from both hypotheses occurred and worked together.

2. Definitions and methodology

This section briefly introduces the main concepts and categories used in this study (2.1), and describes the methodology (2.2).

2.1 Concepts and definitions

The historical innovations discussed in this article pertain to the TA paradigm, and more specifically to the present- and future-tense paradigms. In our analysis, we distinguish between a number of aspectual categories which are specifically relevant for the semantic changes of the forms under investigation in the present-tense paradigms. The categories in question are *episodic* (predicates, sentences or aspect), *progressive*, *habitual* and *generic* aspect. The term *episodic* refers to sentences or predicates that express specific eventualities – dynamic events and stage-level, i.e. bounded, states (e.g., *be asleep*, *be scared*, *feel sick*) – as opposed to general states-of-affairs which refer to characterizing properties of their referents. *Progressive aspect*, defined as "[conveying] the idea that an event is progress-

ing dynamically over a time frame opened up by an utterance" (Mair 2012: 804), typically construes an episodic sentence. *Habitual aspect* refers to an eventuality that is habitually performed by one or more specific individuals. *Generic aspect* expresses a characterizing property of a non-specific, i.e. generic, referent. Habitual and generic aspect are thus closely related to each other in that they construe gnomic sentences, yet a defining difference between a habitual and generic sentence is the specific vs. generic status of the referent (e.g., *That dog barks all the time* vs. *Dogs bark*). For more detailed discussions of these concepts, see Bertinetto & Lenci (2012), Carlson (2012) and references therein.

2.2 Methodology

2.2.1 *Data sources*

The two main types of written sources used for data are grammatical descriptions and corpora. The oldest documents from the 17th century on Kisikongo – also the oldest written records on and in a Bantu language – are an interlinear Portuguese-Kisikongo catechism (Cardoso 1624), a manuscript of a Latin-Spanish-Kisikongo dictionary (Van Gheel 1652, cf. also De Kind et al. 2012), and a Kisikongo grammar written in Latin (Brusciotto à Vetralla 1659). Both the catechism and the grammar provide valuable information for the purpose of this study: the latter succinctly discusses the forms of the future and present tenses (Brusciotto à Vetralla 1659: 48–50), and the former is an extraordinary corpus that allows for a detailed assessment of the form and usage of the future and present tenses. The grammar by Brusciotto à Vetralla (1659) was translated into English by Guinness (1882a). An annotated critical re-edition of the 1624 catechism was prepared by Bontinck & Ndembe Nsasi (1978), with an additional version of the Kisikongo text in modern spelling, a French translation, and a modern version of the original Portuguese text. We have mainly used these re-editions for both sources, although we rechecked all obtained data against the originals.

The available documentation on Kisikongo as spoken around the turn of the 20th century consists of a combined dictionary and grammar from the late-19th century (Bentley 1887, 1895), a translation of the New Testament (Bentley & Nlemvo 1895) as well as a revised edition (Anonymous 1926), a translation by Lewis (1929) of John Bunyan's (1678) English novel *The Pilgrim's Progress from*

this World, to That which is to Come,[4] and a hymn book (Various 1917). All texts except the hymn book have been included in the diachronic Kisikongo corpus.[5]

For late-20th- and early-21st-century Kisikongo, which we will refer to as "Modern" Kisikongo, the documentation consists of one grammatical description (Ndonga Mfuwa 1995) and a corpus of online-accessible publications by the Watch Tower Bible and Tract Society; that is, six monthly issues of the journal *Eyingidilu* 'Watchtower' and two books. An overview of all texts included in the diachronic corpus is given in Table 1 with the number of types (total number of different words) and tokens (total number of words).

Table 1. Overview of the diachronic Kisikongo corpus

Title	Year	Document type	Tokens	Types
Doutrina christaã	1624	Catechism	14,620	2,793
Ekangu diampa	1895	New Testament	162,508	17,307
Luwawanu luampa	1926	New Testament	144,392	17,297
Ngyend' a mundutianzila	1929	Story	40,575	6,175
Eyingidilu ('Watchtower'): Six monthly issues from February to October	2011	Religious magazines	88,551	7,775
Mbumba ya zingu kia nzo ya nkiese ('The secret of family happiness')	2012	Religious lifestyle	61,393	6,042
Fimpanga e sono lumbu yawonso ('Examining the Scriptures daily')	2013	Religious lifestyle	48,230	5,619

As for the grammatical descriptions, we not only consulted those sections on the TA constructions that are relevant to this study but rather looked at all linguistic examples provided to get as rich an overview and dataset from these documents as possible.

As a caveat, we wish to highlight that the data studied here do not always represent natural and/or spoken language. The historical documents were written in the context of European exploration and colonisation, and it has to be further determined whether the authors' intention was descriptive or prescriptive in nature. Moreover, most Kikongo corpus texts are religious materials published by

4. The English version used for this study is an online reprint of the original work (Bunyan 2013 [1678]).

5. The hymn book is not included because it constitutes a collection of many different songs translated from foreign languages into Kisikongo. There is thus no complete, one-to-one parallel version of this work in another language which could allow us to interpret the data relatively easily.

foreign organizations. We have carried out our linguistic analyses in the awareness of the inherent limitations that such data have.

2.2.2 *Corpus queries*

Different corpus query methods have been used depending on whether the corpus text was tagged for relevant information or not, and whether the relevant TA construction has overt morphology. The only text in the diachronic Kisikongo corpus that is tagged for TA is the Portuguese-Kisikongo catechism (Cardoso 1624). Given its unique status as the oldest source on a Bantu language, the searchability of the text has been optimized for corpus research. Every finite verb has been tagged for TA morphology in a word-processor version of the catechism. Examples could then be extracted straight from that document into a database.

From the second time period onwards, the two relevant TA forms are the *Ø-R-ang-a* and *Ø-R-a* constructions. Data for the former construction was queried automatically with the software WordSmith Tools (Scott 1996–2018). The *Ø-R-a* construction has no overt distinctive morphology which can be used in a search term. Therefore, sentences with present and future time reference were queried in a parallel English corpus. This was done manually for present tense and automatically – using WordSmith Tools – for future tense by searching for the English Future auxiliaries *shall* and *will* in a subset of the corpus. For the automated query, a randomized sample was extracted of 100 attestations from the subcorpus of the New Testaments, and one randomized sample of 50 attestations from the present-day Kisikongo corpus. Because several sentences in the randomized sample contained more than one verb inflected with the relevant TA construction, the total number of future-tense attestations is 118 for the second time period and 68 for the third time period.

3. Grammars vs. corpus data: A diachronic assessment of the Kisikongo Present and Future constructions

This part consists of three subsections based on the three time periods into which the documentation has been divided. The first section deals with mid-17th-century Kisikongo, the second looks at the late-19th and early-20th centuries, and the third section is on late-20th- and early-21st-century Kisikongo. In each subsection, we first present the forms and functions of the present and future tenses as provided by the author of the grammar from that period, and subsequently discuss the data from the collection of examples from the grammars and the diachronic corpus.

3.1 Mid-17th-century Kisikongo

Simple present Ø-R-a[6]

In his Kisikongo grammar, Brusciotto à Vetralla (1659: 48–49) states that present tense is denoted by an *a-R-a* construction, which he illustrates with the verbs *kuzitissa* 'to love' and *kulonga* 'to teach', as seen in (3).

(3) a. *y-**a**-zitiss-**a*** '*ego amo*, I love'
*ü-**a**-zitiss-**a*** '*tu amas,* you love'
*a-**a**-zitiss-**a*** '*ille amat,* he loves'
b. *y-**a**-long-**a*** '*ego doceo,* I teach'
*ü-**a**-long-**a*** '*tu doces,* you teach'
*a-**a**-long-**a*** '*ille docet,* he teaches'
(Brusciotto à Vetralla 1659: 48–49; Guinness 1882a: 53–54)

This construction is also found in the mid-17th century corpus, illustrated in (4).

(4) *Onguêye quiâquiûma **cualuluquila** mobo mampondi?*[7]
*ongeye kia ki-uma ku-**a**-luluk-il-**a** mo bo ma N-pondi*
PRON$_{2SG}$ CONN$_7$ 7-thing NEG.SP$_{2SG}$-PRS-call-APPL-PRS PRON$_6$ 14 CONN$_6$ 9-killing
'Why don't you call them (*masuumu* 'sins') mortal?'
(Cardoso 1624: 59; Bontinck & Ndembe Nsasi 1978: 162–163)

However, it is rather intriguing that, when looking forward in time, there is no attestation of an *a-R-a* construction used for present tense in the data of the subsequent documented time periods. It must be stated that, at present, our understanding of the semantics, distribution and history of this construction is incomplete and that more research is needed.

Moreover, two other but segmentally identical constructions are attested in Cardoso's (1624) catechism which can occur in sentences with present time reference. These are the dissociative past completive *a-R-a*, which can be used to refer

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6. As one reviewer pointed out, our construction labels, i.e. simple present, present imperfective and future, do not neatly reflect the uses of each construction. For example, the present imperfective *Ø-R-ang-a* is attested only with habitual meaning in the 17th-century data, whereas in the same period the simple present *Ø-R-a* covers multiple other imperfective categories such as progressive and generic aspect. However, we do use these labels to make it easier for the reader to track the different constructions throughout the article, and by extension throughout time. Moreover, as the meaning and use of the constructions change over time, it is impossible to provide function-based names that fully hold for the three time periods.

7. In the first line of the examples, the sentences are represented as they are written in the original work. In the gloss lines we present our own interlinear analysis where we write the morphemes in a more standard manner.

to a present state as in (5) (for a detailed analysis of this TA construction, see Dom et al. 2018), and the subjunctive *a-R-a*, as shown in (6).

(5) *Aue Maria,* ***üafulucua*** *oucundi, (…)* ***yaucua*** *embongo, yaquiuûmu quiâcu, (…).*
*Ave Maria u-**a**-fuluk-u-**a*** *o-u-kundi* *i-**a**-uk-u-**a***
Ave Maria SP_{2SG}-DPC-overflow-PASS-DPC AUG-14-grace SP_{9}-DPC-bless-PASS-DPC
o-N-bongo *ya* *ki-vuumu ki-aku*
AUG-9-fruit $CONN_{9}$ 7-womb 7-$POSS_{2SG}$
'Ave Maria, you are full of grace, (…) blessed is the fruit of your womb, (…).'
(Cardoso 1624: 19; Bontinck & Ndembe Nsasi 1978: 90–91)

(6) *(…) cutuambulaco* ***tuabua*** *munâ lueleco, (…).*
ku-tu-ambul-a *ko* *tu-**a**-bu-**a*** *muna lu-eleko*
NEG.SP_{2SG}-OP_{1PL}-let-FV NEG SP_{1PL}-SBJV-fall-SBJV LOC_{18} 11-temptation
'(…) don't let us fall in temptation, (…)'
(Cardoso 1624: 13; Bontinck & Ndembe Nsasi 1978: 80–81)

The *Ø-R-a* construction, commonly used for present tense in present-day Kikongo varieties (Dom & Bostoen 2015: 172–173) and throughout Bantu (Nurse 2008: 118), is not discussed in Brusciotto à Vetralla's (1659) description of mid-17th-century Kisikongo.[8] However, the *Ø-R-a* construction is regularly attested in various contexts in Cardoso's (1624) catechism. Example (7) illustrates the simple present construction being used in a stage-direction sentence (Binnick 1991: 248), which describes the action(s) that have to be performed by the priest at a certain point during the ceremony.

(7) *Baüaba* ***vtûma*** *odongui alêque ole (…).*
*bauaba u-**Ø**-tuum-**a*** *o-Ø-dongi* *a-leeke* *a-ole*
now SP_{1}-PRS-order-PRS AUG-9-teacher 2-youngster 2-two
'Now the teacher orders two youngsters (to …)'
(Cardoso 1624: 5; Bontinck & Ndembe Nsasi 1978: 64–65)

It also appears with progressive meaning, as in (8). This example comes from a part in the catechism where the priest questions the student about the act of making the

8. The simple present *Ø-R-a* construction might be identified in a small number of examples scattered throughout the grammar, although not straightforwardly so. In the example *Neútambula ezinbongo* 'I receive fruits' (Brusciotto à Vetralla 1659: 7) the verb *tambula* 'receive' clearly does not take an *a-R-a* construction, but seems to have a subject prefix *ne-* (possibly an older form of the present-day SP_{1SG} *N-*) and an unknown prefix *u-*. On page 61 the verb root *in* 'be (with)' is discussed, as in *ina riúúlu* 'I have a book' or *ina múzala* 'I'm hungry (literally: 'I have hunger'). However, this is a defective verb stem only used in the present tense conjugation, i.e., *i-Ø-in-a* in both examples, with the verb *kal* 'be (with)' being used for past and future tenses.

sign of the cross. During the questioning, the priest gives the student the following order.

(8) *Vfonga* ***oubanga***?
u-song-a[9] *o* *u-**Ø**-bang-**a***
SP_{2SG}-show-SBJV PRON$_6$ SP_{2SG}-PRS-do-PRS
'Show what you're doing?'
(Cardoso 1624: 8; Bontinck & Ndembe Nsasi 1978: 68–69)

The *Ø-R-a* construction is also used in generic expressions as illustrated in (9), which is an example from the same part of the catechism as the sentence in (8). The first person plural subject is generic in that it does not refer only to the priest and the student, but to Christians in general.

(9) *Munquianfûcu,* ***tuicanduîla***?
mu nki a *N-suuku tu-**Ø**-ikandwil-**a***
18 Q CONN 9-reason SP_{1PL}-PRS-make_sign_of_cross-PRS
'For what reason do we make the sign of the cross?'
(Cardoso 1624: 9; Bontinck & Ndembe Nsasi 1978: 70–71)

The corpus data thus evince that an *Ø-R-a* construction existed in mid-17th-century Kisikongo and was used in various present-tense contexts, even though the sole grammatical description of the language at that time does not mention it. Moreover, if a second present construction did exist, namely *a-R-a*, neither its origins nor its semantic character and difference with respect to the *Ø-R-a* construction are clear.

Present imperfective Ø-R-ang-a

The verbal suffix *-ang* is only mentioned once in the grammar of Brusciotto à Vetralla (1659), in Chapter 17 '*De formatione verborum mandatiuorum, & negatiuorum*' ('On the formation of verbs mandative and negative'). In a subsection on the formation of "reciprocally communicative" verbs, it is stated that the addition of the "particle" *nga* makes the reciprocal verb *cubhobhesiana* [*ku-vovesian-a* '15-speak-RECP-FV'] frequentative, i.e., *cubobhesiananga* 'loqui multoties' (to speak often) (Brusciotto à Vetralla 1659: 46; Guinness 1882a: 51–52).

The number of attestations of the suffix *-ang* in the catechism is also small. It appears only seven times throughout the entire text in five different TA(M)

9. Note that the imperative here has segmentally the same surface form as the present tense construction on the second verb. A difference in tone pattern most likely distinguished both constructions from each other. Other related modal categories for which a morphologically unmarked construction is used are the hortative and optative.

constructions. Each of these constructions is used in a sentence in which the event denoted by the verb is a habit, either overtly specified by means of temporal adverbials or implied through social conventions. The present imperfective *Ø-R-ang-a* construction is attested three times, as shown in Examples (10) and (11). The example in (10) is a line of the student on what one has to do to show devotion towards a certain sacrament.

(10) *(…)* ***vquingulanga****yo quilumbu yaquilumbu (…); (…)* ***utambalanga****yo cumbu zazingui munâ muuu (…).*
*u-**Ø**-kingul-**ang**-**a*** *yo* *ki-lumbu ya* *ki-lumbu*
SP_{2SG}-PRS-visit-IPFV-PRS $PRON_9$ 7-day CONN 7-day
*u-**Ø**-tambul-**ang**-**a*** *yo* *Ø-kumbu za-zi-ingi* *muna mu-vu*
SP_{2SG}-PRS-receive-IPFV-PRS $PRON_9$ 10-time $CONN_{10}$-10-many DEM_{18} 3-year
'(…) you visit it every day (…); (…) you receive it multiple times a year (…)'
(Cardoso 1624: 68; Bontinck & Ndembe Nsasi 1978: 178–179)

The sentence in (11), which is the priest speaking, comes from a discussion on the Salve Regina. The context is such that the sentence does not have a single-event reading, but the priest advices the student to pray the Salve Regina regularly as a Christian.

(11) *(…) quieleca onguêye icutumini omêno* ***vbanganga*** *ô, (…).*
kieleka *o-ngeye* *i-Ø-ku-tum-idi* *o-meno*
really $AUG\text{-}PRON_{2SG}$ SP_{1SG}-CPC-OP_{2SG}-recommend-CPC $AUG\text{-}PRON_{1SG}$
*u-**Ø**-bang-**ang**-**a*** *oyo*
SP_{2SG}-PRS-do-IPFV-PRS DEM_9
'(…), really I recommend you do it, (…)'
(Cardoso 1624: 24; Bontinck & Ndembe Nsasi 1978: 100–101)

In none of the attestations is the *Ø-R-ang-a* construction used for progressive aspect.

Future ku-R-a

In both Brusciotto à Vetralla's grammar and Cardoso's catechism a future construction with the form *ku-R-a* is attested. In Brusciotto à Vetralla (1659) the realization of the prefix *ku-* varies between its full form in the first person singular and a reduced form containing only the consonant in all other persons, as shown in the conjugational paradigm in (12a).[10] However, further in the description the

10. Three other verbal prefixes with the same form exist in Kisikongo and many other Kikongo varieties. One is the second person singular object prefix (OP_{2SG} *ku-*). The second is used only in combination with an object prefix and immediately precedes it and is called 'expletive' (EXPL

full prefix form is given throughout the paradigm for the same verb *kuzitissa* 'to love' (Brusciotto à Vetralla 1659: 63), or with the verb *kwikala* 'to be' as illustrated in (12b) (Brusciotto à Vetralla 1659: 57).

(12) a. *n-**cu**-zitiss-**a*** 'I will love'
*u/o-**c**-zitiss-**a*** 'you will love'
*o-**c**-zitiss-**a*** 's/he will love'
*tu-**c**-zitiss-**a*** 'we will love'
*nu-**c**-zitiss-**a*** 'you will love'
*e-**c**-zitiss-**a*** 'they will love'
(Brusciotto à Vetralla 1659: 49–50; Guinness 1882a: 55)

b. *n-**cu**-ical-**a*** 'I will be'
*o-**cu**-ical-**a*** 'you will be'
*o-**cu**-ical-**a*** 's/he will be'
*tu-**cu**-ical-**a*** 'we will be'
*nu-**cu**-ical-**a*** 'you will be'
*e-**cu**-ical-**a*** 'they will be'
(Brusciotto à Vetralla 1659: 57; Guinness 1882a: 64)

In Cardoso's (1624) catechism the future construction is only attested with the full prefix *ku-*, as shown in (13). The example in (13a) is the reply of the student to the priest's counsel to serve God to the best of their abilities, so that they will be among the chosen ones on judgment day. Example (13b) is part of a reply given by the student in a conversation on the Apostle's Creed, saying that s/he does not know the Church's interpretation of the mysteries discussed in the Creed, but that religious scholars hold such information.

(13) a. *Quieleca **tucubanga**ô Enganga (…).*
*kieleka tu-**ku**-bang-**a** yo e-N-ganga*
yes SP_{1PL}-FUT-do-FUT $PRON_9$ AUG-9-Father
'Yes we will do that, Father, (…)'
(Cardoso 1624: 40; Bontinck & Ndembe Nsasi 1978: 130–131)

b. (…) *atangui (…) **ecuzâa** cucuuutulaüaüôte.*
*a-tangi e-**ku**-zaa-**a** ku-ku-vutul-a ua u-oote*
2-scholar SP_2-FUT-know-FUT 15-OP_{2SG}-answer-FV $CONN_{14}$ 14-goodness
'(…) scholars (…) who will know to answer you well'.
(Cardoso 1624: 30; Bontinck & Ndembe Nsasi 1978: 112–113)

ku-). The third prefix with this form is the reflexive (REFL *ku-*), which has a complementary distribution with the reflexive prefix *yi-*/*di-*.

Summary

In this section three 17th-century Kisikongo TA constructions have been discussed: (i) *Ø-R-a*, (ii) *Ø-R-ang-a*, and (iii) *ku-R-a*. The first construction, although absent in Brusciotto à Vetralla's (1659) grammar, has been shown to occur in at least three sentence types in the catechism (Cardoso 1624), namely stage directions, progressives and generics. Secondly, the *Ø-R-ang-a* construction occurs only a few times in the corpus, and thus its use cannot be described in detail. Nevertheless, in the small dataset the construction is used in sentences which describe habitual eventualities. Finally, the construction *ku-R-a* is found in both the grammatical description and the corpus.

3.2 Late-19th- and early-20th-century Kisikongo

Simple present Ø-R-a

Bentley (1887: 648–649) discusses three constructions that have present time reference: (i) the indefinite, "which simply denotes the time of the action", (ii) the perfect, "which indicates that the action was accomplished and complete", and (iii) the continuous, "which speaks of the action as prolonged or continued whether still imperfect or perfect". Bentley's present indefinite constitutes what is called here the simple present *Ø-R-a* construction. Although the description of the semantics of this construction by Bentley (1887: 648–649) is rather vague, there are many examples in his grammar from which one can obtain a good idea of the uses of the simple present *Ø-R-a* in late-19th-century Kisikongo. In the following paragraphs, we discuss some of the sentence types in which the simple present construction is attested with examples from both Bentley's grammatical description and the corpus.

The first type are episodic expressions, which describe specific eventualities and refer either to dynamic events or stage-level, i.e. temporary, states (Carlson 2012: 830). The simple present *Ø-R-a* construction is used to indicate that the eventuality occurs at topic time, which can be either the moment of speech as in (14), or another time established in context as in (15).

(14) a. *Nkovolo andi* ***keyela.***
*Ṇ-kovolo andi ke-**Ø**-yel-**a***
3-cough POSS$_1$ SP$_1$-PRS-be_sick-PRS
'He is suffering from a cough.' (Bentley 1887: 209)

b. *Kadi diadi elongi* ***mvava.***
*kadi diadi e-Ø-longi Ṇ-**Ø**-vav-**a***
CONJ DEM$_5$ AUG-5-counsel SP$_{1SG}$-PRS-seek-PRS
'For I'm seeking such counsel.' (Lewis 1929: 14)

(15) *Ngwidi o muntu* ***oyatana****.*
N-Ø-w-idi *o-mu-ntu* *o-**Ø**-yatan-**a***
SP_{1SG}-CPC-hear-CPC AUG-1-person SP_1-PRS-scream-PRS
'I heard someone scream'. (Bentley 1887: 187)

Secondly, the simple present construction is also attested in generic expressions, as shown in (16).

(16) a. *Asolongo (…)* ***betunga*** *e nzo nzau e mpila moxi.*
a-solongo *be-**Ø**-tung-**a*** *e-N-zo* *nz-au* *e-N-pila*
2-Solongo SP_2-PRS-build-PRS AUG-10-house PP_{10}-$POSS_2$ AUG-9-manner
mosi
one
'The Asolongo (…) build their houses in the same manner'.
(Bentley 1887: 708)

b. *(…) e nuni z'ezulu (…) ke* ***zikuna*** *ko, (…).*
e-Ø-nuni *za* *e-Ø-zulu* *ke* *zi-**Ø**-kun-**a*** *ko*
AUG-10-bird $CONN_{10}$ AUG-5-heaven NEG SP_{10}-PRS-plant-PRS NEG
'(…) the birds of the air (…) sow not, (…)'
(Matthew 6:26; Bentley & Nlemvo 1895: 15)

Lastly, the simple present *Ø-R-a* is used with a number of auxiliaries, such as the modal auxiliary *lenda* 'can' in (17), and with the verb root *(i)n* 'be (with)' shown in (18).

(17) a. ***Tulenda*** *kio nata.*
*tu-**Ø**-lend-**a*** *kio* *Ø-nat-a*
SP_{1PL}-PRS-can-PRS $PRON_7$ 15-carry-FV
'We can carry it'. (Bentley 1887: 693)

b. *Mpova-zitu, on'* ***olenda*** *kusadisa (…).*
Mpova-zitu ona *o-**Ø**-lend-**a*** *Ø-ku-sal-is-a*
Civility REL_1 SP_1-PRS-can-PRS 15-OP_{2SG}-do-CAUS-FV
'[whose name is] Civility, who can help you (…)' (Lewis 1929: 16)

(18) a. *E lekwa* ***kina*** *e kekete.*
e-Ø-lekwa *ki-**Ø**-in-**a*** *e-Ø-kekete*
AUG-7-thing SP_7-PRS-be-PRS AUG-7-hardness
'The thing is crisp'. (Bentley 1887: 295)

b. *Nuyangalela ina* ***nuna*** *yau: (…).*
nu-yangalel-a *ina* *nu-**Ø**-n-**a*** *yau*
SP_{2PL}-be(come)_happy-SBJV REL_9 SP_{2PL}-PRS-be-PRS $PRON_9$
'Be happy with the things you have: (…)'
(Hebrews 13:5; Bentley & Nlemvo 1895: 434)

Thus, data from both Bentley's (1887) grammatical description and the diachronic corpus provide evidence for the attestation and diverse usages of the simple present *Ø-R-a* construction in Kisikongo as written around the turn of the 20th century.

Present imperfective Ø-R-ang-a

Bentley (1887: 644–645) labels the TA suffix *-ang* as the "continuative form," which "imparts the idea that the action is or was being continued at the time mentioned." As Bentley's description suggests, the morpheme occurs in TA constructions denoting all three temporal distinctions, i.e., past, present and future. However, we focus here specifically on the present imperfective *Ø-R-ang-a* construction, which Bentley (1887: 649) calls the present indefinite continuous. His description is strongly based on the grammatical analysis of the English language at that time. This is evident from (i) the fact that the sole semantic property given for the present imperfective is its progressive and continuous meanings; (ii) comparative statements such as "[it] has the same force as the termination *-ing* in English" (Bentley 1887: 644), and (iii) the fact that not a single mention is made of the construction's present habitual meaning, which is an aspectual category without grammatical coding in English. Nevertheless, throughout the grammar many examples of the construction can be found illustrating it is used in episodic, generic and habitual expressions (see the (a) examples in (19)–(21) and (22)–(24)). All of these uses have also been attested in the Kisikongo corpus for this time period.

Thus, despite the fact that habituality is not included in the semantic description of the suffix *-ang* in Bentley (1887), examples illustrating the habitual meaning of the present imperfective construction are attested both in the grammar and the corpus. This is shown in Examples (19) and (20). In (19), the repetition of the habitual event is overtly specified by the adverbial of frequency, whereas this is not the case in (20).

(19) a. *Lumbu yawonso* ***kekwizanga*** *aka.*
*Ø-lumbu ya-onso ke-**Ø**-kwiz-**ang**-**a** aka*
7-day CONN-every SP_1-PRS-come-IPFV-PRS always
'He comes every day'. (Bentley 1887: 709)

b. *(…) oyu* ***kevavanga*** *ko (…) o kel' e yimeng' e lumbu ya lumbu, (…).*
*oyu ke-**Ø**-vav-**ang**-**a** ko o-Ø-kel-a e-i-menga*
REL_1 NEG.SP_1-PRS-need-IPFV-PRS NEG AUG-15-pour_out-FV AUG-8-sacrifice
e-Ø-lumbu ya Ø-lumbu
AUG-7-day CONN 7-day
'(…) [a high priest][11] who needeth not daily (…) to offer up sacrifice, (…)'
(Hebrews 7:27; Bentley & Nlemvo 1895: 423)

(20) a. *Vana zandu dieto* ***tusumbanga*** *zo.*
*vana Ø-zandu di-eto tu-Ø-sumb-**ang-a** zo*
REL_{16} 5-market 5-$POSS_{1PL}$ SP_{1PL}-PRS-buy-IPFV-PRS $PRON_{10}$
'We buy them at our market'. (Bentley 1887: 610)

b. *Okala vo kadi, ondion'* ***ovelelesanga*** *(…).*
*okala vo kadi o-ndiona o-Ø-velel-es-**ang-a***
CONJ AUG-REL_1 SP_1-PRS-be(come)_pure-CAUS-IPFV-PRS
'For [both] he that makes holy (…)'
(Hebrews 2:11; Bentley & Nlemvo 1895: 416)

The construction is furthermore attested in generic expressions (21). This use was not found in the mid-17th century for the present imperfective, but was attested only with the simple present *Ø-R-a* construction (see Example (9) in Section 3.1).

(21) a. *Muna nxi eyina o wantu* ***bekwendanga*** *e kimpene.*
*muna N-si eyina o-Ø-antu be-Ø-kwend-**ang-a***
REL_{18} 9-country DEM_9 AUG-2-person SP_2-PRS-15.go-IPFV-PRS
e-ki-mpene
AUG-7-nakedness
'In that country the people go naked'. (Bentley 1887: 603)

b. *(…) konso nti ambote, mbongo ambote* ***uyimanga;***
konso N̩-ti a-N̩-bote N-bongo a-N̩-bote
every 3-tree CONN-3-goodness 9-fruit CONN-3-goodness
*u-Ø-yim-**ang-a***
SP_3-PRS-bear-IPFV-PRS
'(…) every good tree bears good fruit'.
(Matthew 7:17; Bentley & Nlemvo 1895: 17)

The *Ø-R-ang-a* construction is furthermore attested in episodic expressions, denoting that the eventuality is on-going at topic time. In this function, the present imperfective occurs with dynamic (22a) and stage-level stative (22b) verbs, as well as with emotive predicates (22c).

11. As one reviewer noted, without context, the subject noun phrase 'a priest' can be interpreted as either a generic or a specific referent. In this particular case, however, one is referring specifically to Jesus.

(22) Episodic use of *Ø-R-ang-a*

a. with dynamic predicate
Adieyi ***nutokanisinang****'o nkento?*
*adieyi nu-**Ø**-tokanis-il-**ang-a*** *o-N̩-kento*
why SP_{2PL}-PRS-annoy-APPL-IPFV-PRS AUG-1-woman
'Why trouble ye this woman?' (Matthew 26:10; Bentley & Nlemvo 1895: 59)

b. with stage-level stative predicate
Ovo yayi i nkal' aku, adieyi ***odingalelanga*** *e?*
*ovo yayi i N-kala aku adieyi o-**Ø**-dingalel-**ang-a*** *e*
if DEM_9 COP 9-condition $POSS_{2SG}$ why SP_{2SG}-PRS-stand_still-IPFV-PRS Q
'If this is your condition, why are you standing still?' (Lewis 1929: 7)

c. with emotive predicate
Wete monanga *muna ndebwa walebwa wakungikama.*
*u-ete N-**Ø**-mon-**ang-a** muna N-debwa*
14-happiness SP_{1SG}-PRS-see-IPFV-PRS REL_{18} 9-be_persuaded
u-a-leb-u-a u-a-ku-N̩-yikam-a
SP_{2SG}-DPC-persuade-PASS-DPC SP_{2SG}-SBJV-EXPL-OP_{1SG}-accompany-SBJV
'I am glad you are persuaded to go along with me.' (Lewis 1929: 9)

The topic time can be the moment of speech as in the examples in (22), a longer period of time coincidental with the moment of speech as in (23), or a moment dissociated from the moment of speech, which is established in context, as in (24).

(23) a. *Tukamena kiakadila e nsona, vava* ***nkalanga****.*
tukamena ki-a-kal-il-a e-N̩-sona vava
since SP_7-DPC-be-APPL-DPC AUG-3-nsona DEM_{16}
*N-**Ø**-kal-**ang-a***
SP_{1SG}-PRS-live-IPFV-PRS
'I have been living here since *nsona* (weekday name)'. (Bentley 1887: 194)

b. *Adieyi* ***nutelamenanga*** *vo o mwini amvimba, (…).*
*adieyi nu-**Ø**-telamen-**ang-a** vo o-mu-ini amvimba*
what SP_{2PL}-PRS-stand_up-IPFV-PRS CONJ AUG-3-day complete
'Why stand ye here all the day, (…)'
(Matthew 20:6; Bentley & Nlemvo 1895: 44)

(24) a. *Muntu* ***olundumukanga*** *oviokele e nzo ame.*
*mu-ntu o-**Ø**-lundumuk-**ang-a** o-Ø-vyok-idi e-N-zo ame*
1-person SP_1-PRS-run-IPFV-PRS SP_1-CPC-pass-CPC AUG-9-house $POSS_{1SG}$
'A man running has passed my house'. (Bentley 1887: 707)

b. *Nutoma tala ke nukumvakwil' o nkalu ndiona* ***ovovanga.***
nu-tom-a Ø-tala ke nu-Ø-ku-Ṉ-vakul-il-a
SP_{2PL}-do_well-SBJV 15-look NEG SP_{2PL}-FUT-EXPL-OP_1-give-APPL-FUT
*o-N-kalu ndiona o-**Ø-vov-ang-a***
AUG-9-refusal REL_1 SP_1-PRS-speak-IPFV-PRS
'See that ye refuse not him that speaketh.' (Lewis 1929: 17–18)

Future Ø-R-a

In 19th- to 20th-century Kisikongo a number of constructions are used for future time reference – including both simple, single-verb and complex verbal constructions involving auxiliaries or free preverbal morphemes – but not the future *ku-R-a* construction attested in 17th-century Kisikongo. The most frequently attested in the corpus, however, is the prefix-less future *Ø-R-a* construction.[12] According to Bentley (1887: 649), "[the] Indicative mood in Kongo has no future tense. Whenever future time is spoken of, the time or circumstance of the action is distinctly mentioned, and the action is represented as being then present," alluding to the fact that, at least segmentally, this future construction is identical to the simple present *Ø-R-a*.[13] The examples in (25) from both grammar and corpus illustrate the use of the future *Ø-R-a* construction.

(25) a. *O mbaji nkele mieto* ***tukala*** *miau.*
*o-mbaji Ṉ-kele mi-eto tu-**Ø-kal-a** myawu*
AUG-tomorrow 4-gun 4-$POSS_{1PL}$ SP_{1PL}-FUT-be-FUT $PRON_4$
'Tomorrow we shall have our guns.' (Bentley 1887: 286)

b. *Kadi, se tadi, e lumbu* ***ikwiza,*** *ina* ***bevova*** *vo, (…).*
*kadi se tadi e-Ø-lumbu i-**Ø-kwiz-a** ina be-**Ø-vov-a** vo*
CONJ behold AUG-8-day SP_8-FUT-come-FUT REL_8 SP_2-FUT-say-FUT that
'For, behold, the days will come, in which they shall say, (…)'
(Luke 23:29; Bentley & Nlemvo 1895: 169)

12. By "prefix-less" we mean specifically the lack of a TA prefix. Other verbal morphemes, such as the subject and object prefixes, do still occur in this construction.

13. Because Bentley (1887) neither discusses tone patterns nor writes tone on Kisikongo examples, we cannot determine whether the constructions had identical or different tone patterns.

Summary

In this section three 19th- to 20th-century Kisikongo TA constructions have been discussed: present *Ø-R-a*, present imperfective *Ø-R-ang-a* and future *Ø-R-a*. Compared to the mid-17th century (see Section 3.1), the present imperfective *Ø-R-ang-a* construction is now attested in a wider range of sentence types, including habituals, generics, and episodic expressions. The multiple aspectual meanings it conveys overlap entirely with those of the simple present *Ø-R-a*. As for the future tense, the mid-17th-century future *ku-R-a* construction is no longer attested, and future time reference is now denoted by multiple constructions of which the future *Ø-R-a* is by far the most frequently attested in the corpus.

3.3 Late-20th- and early-21st-century Kisikongo

Simple present Ø-R-a

In present-day Kisikongo the simple present *Ø-R-a* construction has almost completely disappeared, being used only with (i) the verb *yeel* 'be sick', (ii) the verb root *(i)n* 'be (with)', and (iii) a small number of auxiliary verbs. This is illustrated in Examples (26)–(30).

(26) *yeel* 'be sick'
[O Yesaya wa nguza wayika e ntangwa ina vo] "O ntungi kevova ko vo, ***Yela nyela****"*.[14]
o-Ṇ-tungi *ke-Ø-vov-a* *ko* *vo* *Ø-yeel-a*
AUG-3-resident NEG.SP$_1$-FUT-say-FUT NEG that 15-be_sick-FV
*Ṇ-**Ø**-yeel-**a***
SP$_{1SG}$-PRS-be_sick-PRS
'[The prophet Isaiah pointed forward to the time when] "no resident will say: I am sick"'.
(Mbumba ya zingu kia nzo ya kiese; Watch Tower Bible and Tract Society 2012: 126–127)

(27) *(i)n* 'be (with)'
[Mun'elongi diadi, tuvovela vonza tatu. (…).] Kiezole, muna nitu eto ***kina****.*
ki-ezole muna Ṇ-itu *eto* *ki-**Ø**-in-**a***
7-two in 3-body POSS$_{1PL}$ SP$_7$-PRS-be-PRS
'[In this article, we will discuss three negative influences. (…).] The second [is] an internal one' (Lit.: 'The second is in our body').
(Eyingidilu 15 July 2011, p. 10)

14. A special predicate-centered focus construction is used here, i.e., the "fronted infinitive construction" (De Kind et al. 2015).

(28) *toma* 'do well, often' (lexical meaning)
*Nkia ngindu zatekama **zitoma** longwanga kuna sikola?*
*nkia N-gindu zi-a-tekam-a zi-**Ø**-tom-**a***
Q 10-thought SP_{10}-DPC-be(come)_distorted.POS-DPC SP_{10}-PRS-do_often-PRS
Ø-long-u-ang-a kuna Ø-sikola
15-teach-PASS-IPFV-FV at 9-school
'What distorted views are often taught in schools?'
(Mbumba ya zingu kia nzo ya kiese; Watch Tower Bible and Tract Society 2012: 94)

(29) *luta* 'pass, go beyond/by/past, surpass' (lexical meaning)
*O Yave ng'**oluta** yangalela muna tukau ye yimenga, [ke mu wila nding'a Yave ko e?]*
*o-Ø-Yave nga o-**Ø**-lut-**a** Ø-yangalel-a muna tu-kau ye*
AUG-1-Yave Q SP_1-PRS-pass-PRS 15-be(come)_happy-FV in 11-offer and
yi-menga
8-blood
'Does Jehovah have much delight in offerings and sacrifices, [but not in (people) obeying the voice of Jehovah?]' (Eyingidilu 15 February 2011, p. 23)

(30) *lenda* 'can'
*Konso muntu una ye fu **ilenda** fungisa o nkw'andi makasi.*
*ki-onso mu-ntu u-Ø-n-a ye Ø-fu i-**Ø**-lend-**a***
7-each 1-person SP_1-PRS-be-PRS with 8-flaw SP_8-PRS-can-PRS
Ø-fung-is-a o-N-kwa andi ma-kasi
15-be(come)_angry-CAUS-FV AUG-1-partner $POSS_1$ 6-anger
'Each one has flaws [that] can irritate one's partner'.
(Fimpanga e sono lumbu yawonso; Watch Tower Bible and Tract Society 2013: 12)

Although Ndonga Mfuwa (1995: 358) states that *yeela* 'be sick' occurs with the simple present *Ø-R-a*, which is indeed found in the corpus as shown in (26), the present imperfective *Ø-R-ang-a* can also be used to express the state of being ill. This is illustrated in Example (31), which is the title of a chapter on how to deal with a sick family member.

(31) *Vava o mwisi nzo **keyelanga**.*
v*ava o-mu-isi N-zo ke-**Ø**-yel-**ang**-**a***
when AUG-1-inhabitant 9-house SP_1-PRS-be_sick-IPFV-PRS
'When a member of the household is sick'.
(Mbumba ya zingu kia nzo ya kiese; Watch Tower Bible and Tract Society 2012: 116)

Present imperfective Ø-R-ang-a

It has been shown that in late-19th- and early-20th-century Kisikongo the present imperfective construction was used in multiple sentence types. These were the same types in which the present *Ø-R-a* was commonly found, namely habitual, generic and episodic expressions. In present-day Kisikongo, however, due to the decline of the simple present the present imperfective *Ø-R-ang-a* has become the main present-tense construction.

In his grammar, Ndonga Mfuwa (1995: 383–386) describes an aspectual suffix *-ngV*, which occurs in combination with various other TA morphemes, expressing a number of meanings such as *le révolu* (the author's term referring to a completed and irreversible situation), progressivity and habituality. Because the description assumes a morphological approach to the TA system of Kisikongo instead of a constructional approach, the present imperfective *Ø-R-ang-a* construction as such is not discussed in the grammatical description. However, the corpus examples in (32) show that in present-day Kisikongo the present imperfective *Ø-R-ang-a* is found in the same sentence types as it was in Kisikongo from the turn of the 20th century.

(32) a. Habitual
Ntangwa zawonso ***mvovananga*** *yau.*
n-tangwa za-onso *N-**Ø**-vov-an-**ang-a*** *yau*
10-time CONN$_{10}$-every SP$_{1SG}$-PRS-talk-RECP-IPFV-PRS PRON$_2$
'Every time I talk to them.'
(Mbumba ya zingu kia nzo ya kiese; Watch Tower Bible and Tract Society 2012: 108)

b. Generic
O unu Akristu ke ***bevananga*** *yimenga ko (…).*
o-unu *A-kristu* *ke* *be-**Ø**-van-**ang-a*** *yi-menga* *ko*
AUG-today 2-Christian NEG SP$_2$-PRS-give-IPFV-PRS 8-sacrifice NEG
'Christians today do not make the sacrifices (…)'
(Fimpanga e sono lumbu yawonso; Watch Tower Bible and Tract Society 2013: 65)

c. Episodic
Nuyuvulanga kana nkia mambu ***belongokanga****, (…).*
nu-yuvul-ang-a *kana nkia ma-ambu* *be-**Ø**-longok-**ang-a***
SP$_{2PL}$-ask-IPFV-SBJV REL$_7$ Q 6-matter SP$_2$-PRS-learn.SEP.INTR-IPFV-PRS
'Ask what they (*wan'eno* 'your children') are learning, (…)'
(Mbumba ya zingu kia nzo ya kiese; Watch Tower Bible and Tract Society 2012: 95)

Future Ø-R-a

Ndonga Mfuwa (1995: 359–360) distinguishes three future constructions: the simple future (*futur simple*) *Ø-R-a*, the imminent future (*futur imminent*) *sè Ø-R-a* and the near future (*futur proche*) *sè a-R-a*. In addition, he also describes two future-tense auxiliaries, namely *aza* (used in a remote future construction) and *singa* (which the author calls *projectif*) (Ndonga Mfuwa 1995: 402–404).

The future *Ø-R-a* was first attested in the late-19th century (cf. Section 3.2), and is still the most commonly attested future-tense construction in the present-day Kisikongo corpus. In the randomized sample of 68 future-time-reference contexts, *Ø-R-a* occurs 49 times. Examples from Ndonga Mfuwa's grammar and the corpus are provided in (33).

(33) a. *Kya lúmíngu* ***n'túnga*** *énzo.*
*kya Ø-lumingu N̩-**Ø**-tung-**a** e-N-zo*
CONN$_7$ 7-Sunday SP$_{1SG}$-FUT-build-FUT AUG-9-house
'On Sunday I will build the house'. (Ndonga Mfuwa 1995: 359)

b. *(…)* ***dikusadisa*** *kuna sentu, vava* ***osompa****.*
*di-**Ø**-ku-sal-is-**a** kuna Ø-sentu vava o-**Ø**-somp-**a***
SP$_5$-FUT-OP$_{2SG}$-do-CAUS-FUT DEM$_{17}$ 9-future DEM$_{16}$ SP$_{2SG}$-FUT-marry-FUT
'(…) it will be helpful for you in the future, when you will marry'.
(Mbumba ya zingu kia nzo ya kiese; Watch Tower Bible and Tract Society 2012: 18)

As for the other future-tense constructions discussed by Ndonga Mfuwa (1995: 359, 360), only the auxiliary construction with *singa* is attested in the corpus, as in (34). It occurs much less frequently in the corpus than the future *Ø-R-a* construction, having only five attestations out of 68 in the randomized sample of future-time-reference contexts.

(34) *O nsilu wau* ***usinga lungana*** *muna nz'ampa eyi ifinamene.*
*o-N̩-silu wau u-**singa** Ø-lungan-a muna N-za a-N̩-pa*
AUG-3-promise DEM$_3$ SP$_3$-FUT 15-be_fulfilled-FV DEM$_{18}$ 9-world CONN-3-new
eyi i-Ø-finam-idi
DEM$_9$ SP$_9$-CPC-approach.POS-CPC
'That promise will be fulfilled in the approaching new world'.
(Mbumba ya zingu kia nzo ya kiese; Watch Tower Bible and Tract Society 2012: 127)

While a grammatical morpheme *se* is attested in the corpus, it is not found as part of a dedicated future-tense construction. The function of the particle as found in the present-day Kisikongo corpus is more accurately captured by the characterization given in Bentley (1887: 416), who writes that "[it] calls attention to a change

of circumstances; some other state having previously existed, *now* something else has ensued or will ensue" (italics in original). Therefore, it typically occurs with verbs whose lexical meaning refers to a change-of-state, as shown in (35). Note that its position in the sentence is not fixed. It can occur immediately before the conjugated verb, as in (35a), or before a noun phrase, as in (35b). Moreover, as the example in (35a) illustrates, it can be used with non-future TA constructions such as the locative infinitive construction (*mu INF ina*) which has present progressive meaning (De Kind et al. 2015: 131–135).

(35) a. *E zingu kia nzo mu soba **se** kina.*
*e-Ø-zingu kia N-zo mu Ø-sob-a **se** ki-Ø-in-a*
AUG-7-family CONN_7 9-house 18 15-change-FV COS SP_7-PRS-be-PRS
'The family is changing'.
(Mbumba ya zingu kia nzo ya kiese; Watch Tower Bible and Tract Society 2012: 7)

b. *(…) Kintinu kia Nzambi (…) kitula ntoto **se** paradiso.*
*ki-N̩-tinu kia N-zambi Ø-kitul-a N̩-toto **se** Ø-paradiso*
7-3-king CONN_7 9-God 15-transform-FV 3-earth COS 9-paradise
'(…) God's Kingdom (…) [will] transform the earth into a paradise'.
(Eyingidilu, 15 August 2011, p. 2)

Summary

In this section it was shown that, in present-day Kisikongo, the present imperfective *Ø-R-ang-a* is used for present tense in general, whereas the simple present *Ø-R-a* construction is restricted to a small number of verbs, most of which are auxiliaries. Compared to Kisikongo at the turn of the 20th century (see Section 3.2), where both constructions had overlapping uses, the present-tense paradigm in present-day Kisikongo has thus been simplified to one main construction. For future time reference, the prefix-less *Ø-R-a* construction is the most frequently attested in the corpus data, although other constructions – such as the auxiliary construction *-singa INF* – are also used.

3.4 Overview and discussion

In Sections 3.1 to 3.3 we have discussed the use of four Kisikongo TA constructions in three time periods, spanning some 400 years, on the basis of grammatical descriptions and corpus data. The simple present *Ø-R-a* construction is attested throughout the diachronic documentation. It functioned as an important present-tense construction from the mid-17th century to at least the early-20th century. It was used in two major present-tense sentence types, i.e. episodic and generic expressions. In the third and last period, i.e., the late-20th and early-21st centuries,

the simple present is no longer used as productively as in previous times. It occurs only with the verb stems *in* 'be' and *yeel* 'be sick' and some auxiliaries.

In theory, these few verbs can be used to compare the tone patterns of the simple present and future *Ø-R-a*. Although Ndonga Mfuwa (1995) does note tone, he provides no examples of the simple present *Ø-R-a*. Out of the ten examples of the future *Ø-R-a* construction that are found in the grammatical description, there are nine instances where the vowel of the verb root is marked with a high tone. Eight of these nine high-toned future-tense verbs are disyllabic with either a short or long root vowel, as in (36a). One of these nine is a trisyllabic verb where the root is extended with a derivational suffix. As illustrated in (36b), the derivational suffix also carries a high tone. From this small dataset, one might infer that the tone pattern of the future construction is characterized by a high tone on the root vowel which undergoes rightward spread to the next syllable or any other syllable that is not word-final. This hypothesis is of course in need of further corroboration.

(36) a. disyllabic: CV́CV or CV́:NCV
   i. ***okóta*** 'you will enter' (p. 219)
   ii. ***otú:nga*** 'you will build' (p. 219)
   b. trisyllabic: CV́CV́CV
   osónéka 'you will write' (p. 460)

However, the tone pattern in one example differs from that of these nine in that a high tone is noted on the subject prefix and not on the first syllable of the verb root. This is shown in (37).

(37) *Nzen(a)* ***ókwiza****ko dyanu kelámbilanga.*
*N̩-zenza o-**Ø**-kwiz-**a** ko dyanu ke-Ø-lamb-il-ang-a*
1-stranger SP_1-FUT-come-FUT LOC_{17} CONJ SP_1-PRS-cook-APPL-IPFV-PRS
'A visitor will come to visit [him] there, hence he is cooking'.
(Ndonga Mfuwa 1995: 469)

Through personal communication with Ndonga Mfuwa, we have nevertheless found that the simple present construction with the verb *yeela* 'be sick' does have the same tone pattern as that of the future construction, namely a high tone on the first syllable of the verb root, as in (38).

(38) *Yeela* ***beyéél****a.*
*Ø-yeel-a be-**Ø**-yeel-**a***
15-be_sick-FV SP_2-FUT-be_sick-FUT
   i. 'They are sick'.
   ii. 'They will get sick'. (Ndonga Mfuwa, p.c.)

We have checked the possibility of using both the simple present and future *Ø-R-a* with the auxiliary verbs with Ndonga Mfuwa and another male Kisikongo language consultant who currently lives in Luanda. However, they were reluctant to accept the future *Ø-R-a* with these auxiliaries and prefer to use alternative future constructions, most often the *se a-R-a* construction.

The currently available data is too limited for a detailed tone analysis. However, the simple present and future constructions seem to have identical tone patterns. This could be because the two constructions are actually historically one and the same, which would be an additional argument for the polysemy hypothesis presented below in Section 4.1. Analogical leveling of distinct tone patterns between the simple present *Ø-R-a* and the future *Ø-R-a* constructions might be a different explanation, which would fit the homonymy hypothesis as discussed in Section 4.2. This could have taken place either at an early stage, in which case the tone pattern of the newly developed future construction was remodeled after the older simple present construction due to the segmental similarity, or at a later stage, in which case the simple present construction had become severely restricted in usage and its tone pattern was remodeled after the then productive future construction. As a third possibility, it might have been that the original future *ku-R-a* and simple present *Ø-R-a* constructions had identical tone patterns, as is common in Bantu (Marlo 2013; Odden and Bickmore 2014). The tone pattern of the former would then have remained unchanged despite the possible loss of the prefix *ku-*.

The second construction which we tracked through time is the present imperfective *Ø-R-ang-a*. In the 17th-century documentation the construction is only attested in habitual expressions. However, from the late-19th century onwards the construction is also found in episodic, generic and habitual expressions. Thus, at the turn of the 20th century the simple present and present imperfective seem to have been used to convey largely the same aspectual meanings, apart from habituality. In present-day Kisikongo this is no longer the case, as the simple present has become unproductive and the present imperfective *Ø-R-ang-a* is now the main construction used for present tense in general, expressing all imperfective values.

Finally, two single-verb future constructions are attested in different periods of time. In mid-17th-century Kisikongo, future time reference was conveyed by means of a *ku-R-a* construction. However, this construction is not found in the grammatical description of late-19th-century Kisikongo, nor is it attested in the early-20th-century Kisikongo corpus. Rather, in the last two time periods, a prefix-less *Ø-R-a* construction is attested for future time reference.

Table 2 gives a schematic overview of the four main constructions of the present- and future-tense paradigms for the three time periods in Kisikongo.

Table 2. Overview of four Kisikongo TA constructions and their attested usages over the course of three time periods

		Mid-17th c.	Late-19th and early-20th c.	Late-20th and early-21st c.
Present	*Episodic*	*Ø-R-a*	*Ø-R-a* AND *Ø-R-ang-a*	*Ø-R-ang-a*
	Generic	*Ø-R-a*	*Ø-R-a* AND *Ø-R-ang-a*	*Ø-R-ang-a*
	Habitual	*Ø-R-ang-a*	*Ø-R-ang-a*	*Ø-R-ang-a*
Future		*ku-R-a*	*Ø-R-a*	*Ø-R-a*

The main question now is which construction can be identified as the source of the future *Ø-R-a* as first attested in late-19th-century Kisikongo. The simple present *Ø-R-a* is a likely candidate. Two arguments in favor of this scenario are: (i) the simple present and future constructions have the same segmental morphology; (ii) future constructions have been reported to originate from older present constructions in several unrelated language families (Haspelmath 1998). The second possibility is that the prefix-less future construction is historically related to its functional predecessor from the mid-17th century, namely *ku-R-a*. Due to the unavailability of historical data for much of the late-17th, 18th and 19th centuries, however, the evolution of the future *Ø-R-a* cannot be studied on the basis of empirical evidence. Therefore, we will work out both scenarios in Section 4 and discuss the likelihood of each.

4. Reconstructing paradigmatic change

In this section we discuss and assess the two scenarios which might explain the paradigmatic change which occurred mainly between the mid-17th and late-19th centuries. In the first scenario, the simple present *Ø-R-a* evolved into a dedicated future construction through the expansion of its temporal meaning (present > present + future > future). We will call this scenario the "polysemy hypothesis." In the second scenario, the original future construction *ku-R-a* is assumed to have undergone a formal change which resulted in the prefix-less future *Ø-R-a* construction in the late-19th and early-20th centuries. In that second time period, then, the simple present *Ø-R-a* and the future *Ø-R-a* were segmentally identical but historically unrelated. This scenario is called the "homonymy hypothesis."

4.1 The polysemy hypothesis

In this scenario, the first "micro"-change assumed is that the simple present *Ø-R-a* came to be used for future time reference alongside the other available future-tense constructions, such as the future *ku-R-a*. In time, the simple present became the dominant future-tense construction resulting ultimately in the loss of the older *ku-R-a* construction. This assumed change created an ambiguous paradigm with both present and future tense expressed by the same construction, namely *Ø-R-a*. The semantic expansion of the present imperfective *Ø-R-ang-a* from habitual to general present tense can then be explained as a development in order to resolve that ambiguity. In a first stage, the present imperfective would have come to be used with gradually increasing frequency for the same functions as the simple present, in addition to its original habitual meaning. This is observed in late-19th- and early-20th-century Kisikongo (see Section 3.2). From thereon, the present imperfective became the main present-tense construction and the older simple present was reinterpreted as the future *Ø-R-a*. Traces of the simple present in present-day Kisikongo can still be found with a number of auxiliaries and the verb stem *yeela* 'be sick'.

The polysemy hypothesis is rather straightforward and plausible from a cognitive and typological perspective. Present-tense constructions are often used for future time reference in languages of the world, and this is also found in present-day Kikongo varieties. For example, the East Kikongo variety Kintandu has a dedicated future-tense construction *si Ø-R-a*, illustrated in (39a). However, the Kintandu language consultant which uttered the sentence in (39a) used the simple present *Ø-R-a* for the same time reference in (39b).

(39) Kintandu

a. *Wunú mu kookilá mwamba **sí tudyá**.*
*wunu mu kookila mwamba **si** tu-**Ø**-di-**a***
today in evening moambe FUT SP_{1PL}-FUT-eat-FUT
'This evening we will eat moambe.'

b. *Nkí **túdyá** kookilá?*
*nki tu-**Ø**-di-**a** kookila*
what SP_{1PL}-PRS-eat-PRS evening
'What will we eat this evening?' (KongoKing 2015, fieldwork by S. Dom)

In Haspelmath (1998) a similar scenario is offered as an explanation for a number of languages where the present-tense construction is morpho-phonologically "heavier" than the future-tense construction, as is the case in Kisikongo, or where future-tense constructions have a future/habitual polysemy. In Haspelmath's diachronic hypothesis, a language starts out with a TA paradigm in which future

tense is not expressed by means of a dedicated construction. Instead, the present-tense construction is commonly used for future time reference. The pivotal change is characterized by a restriction of the temporal semantics of the present-tense construction to future time reference. This shift occurs as the result of the grammaticalization of a progressive construction into a general present-tense construction, a development extensively discussed in Bybee et al. (1994: 140–149).

The polysemy hypothesis outlined at the beginning of this section is comparable but not identical to Haspelmath's scenario. Thanks to the historical data, we know that mid-17th-century Kisikongo did have a dedicated future-tense construction different from the simple present *Ø-R-a*. Moreover, given that the simple present *Ø-R-a* is not attested with future time reference in the mid-17th century documentation, this scenario assumes either that the construction developed future-tense semantics after the mid-17th century, or that it already was polysemous at that time but was simply not used with that meaning in the limited number of texts now available. The second difference pertains to the new present-tense construction. In the case studies discussed in Haspelmath (1998), periphrastic progressives grammaticalize into the general present-tense construction, whereas in Kisikongo it is the present imperfective *Ø-R-ang-a*, a single-verb TA form and a dedicated habitual construction.

The main problem of this scenario is that it assumes the rather drastic change of the future *ku-R-a* being lost completely in Kisikongo over the course of two centuries due to a new, competing future-tense construction, namely the simple present *Ø-R-a*. One would expect that when a newer construction takes over the function(s) of an already existing construction, the older form is retained with specialized uses or still occurs with a small set of irregular verbs. This is for example the case with the simple present *Ø-R-a* in present-day Kisikongo, and is also proposed by Haspelmath (1998) to account for some semantic irregularities in the similar cases he discusses. However, no traces of the older future *ku-R-a* construction are found in the late-19th- and early-20th-century documentation.

4.2 The homonymy hypothesis

The assumption in the homonymy hypothesis is that the mid-17th-century future *ku-R-a* construction has become the prefix-less future *Ø-R-a* construction attested from the late-19th century onwards. The pivotal change leading from *ku-R-a* to *Ø-R-a* would then be a loss of the TA prefix *ku-*. This loss can be accounted for through another morphological change which happened within the same time period, i.e., in-between the mid-17th and late-19th centuries, namely prefix reduction.

Prefix reduction is a change in which prefixes undergo morphophonological attrition, possibly leading to complete loss. As described in detail by Bostoen & de Schryver (2015), in a number of Kikongo varieties prefix syncope has occurred specifically in nominal prefixes of the noun-class system. One of the nominal prefixes which has been targeted by prefix reduction is that of noun class 15, *ku-*. This nominal prefix attaches to verb roots to form deverbal nouns, which are commonly analyzed as infinitives. As reported by Bostoen & de Schryver (2015: 166–168), this infinitive construction is still attested in mid-17th century Kisikongo, e.g., *cudia* [*ku-di-a*] 'eat' (Van Gheel 1652). However, by the late-19th century the class 15 prefix *ku-* had completely disappeared and a now prefix-less infinitive construction is attested which consists of just the root and the default final vowel *-a*, e.g., *dia* [*di-a*] 'eat' (Bentley 1887). We can thus formalize the specific change of prefix syncope of the deverbal nominal prefix *ku-* in the infinitive construction as [*ku-R-a*] > [*R-a*].

There is not only an obvious formal similarity between the noun-class prefix *ku-* and the prefix of the future *ku-R-a* construction, but it is furthermore quite likely that the latter is historically related to the deverbal nominal prefix. Although no empirical evidence is available to substantiate this, the mid-17th-century future *ku-R-a* construction is possibly the outcome of a grammaticalization process of an auxiliary (AUX) construction with an infinitive in complement position, i.e., [*SP-AUX ku-R-a*] > [*SP-ku-R-a*]. The loss of the TA prefix *ku-* could be related to the loss of the infinitival prefix *ku-* as an analogical change of prefix syncope.

Additional cross-linguistic data strongly corroborate the connection between the two morphophonological changes (i.e. the loss of nominal vs. verbal morphology). Only a handful of other Kikongo varieties share the prefix-less future construction with Kisikongo. These are Kindibu (spoken to the north of Kisikongo; see the map in Appendix), Kisolongo (to its west) and Kizombo (to its east). In these three Kikongo varieties, prefix syncope also affected the infinitive construction which thus also has the form *R-a* (Bostoen & de Schryver 2015: 163). The co-occurrence of the future *Ø-R-a* and infinitive *R-a* constructions is furthermore attested in three late-19th-century grammars on South-Kikongo varieties which were reportedly spoken along the part of the present-day Congolese-Angolan border that cross-cuts the KLC. Table 3 gives an overview of all Kikongo varieties in which the future *Ø-R-a* and the infinitive *R-a* are attested, with Examples (40)–(42) illustrating the future construction in three of these varieties.

Table 3. Overview of varieties (and sources) with both cognate Future *-Ø-R-a* constructions and prefix syncope of the noun class 15 prefix *ku-*

Kikongo variety	Source
Late-19th-century Kikongo as spoken in the Cataract region	Guinness (1882b)
Late-19th-century Kikongo as spoken in the vicinity of Boma	Craven & Barfield (1883)
Late-19th-century Kikongo as spoken in the area south of the mouth of the Congo river	Visseq (1889)
Kisolongo	Tavares (1915) KongoKing 2012, fieldwork by S. Dom
Kindibu	Coene (1960)
Kizombo	Del Fabbro and Petterlini (1977) Carter and Makoondekwa (1987) Mpanzu (1994)

(40) Late-19th-century Kikongo as spoken in the vicinity of Boma
O mbăzimeni yandi kwandi ***tuvútuka*** *kuna Pălabala.*
*o-mbazimeni yandi kwandi tu-**Ø**-vutuk-**a** kuna N-palabala*
AUG-tomorrow FOC FOC SP_{1PL}-FUT-return-FUT DEM_{17} 9-Palabala
'Tomorrow we shall really return to Palaballa.' (Craven & Barfield 1883: 209)

(41) Late-19th-century Kikongo as spoken in the area south of the mouth of the Congo river
Loumbou ki'e ia ***o kouiza****.*
*Ø-lumbu ki-eya o-**Ø**-kwiz-**a***
7-day 7-four SP_{1}-FUT-come-FUT
'He will come Thursday'. (Visseq 1889: 52)

(42) Kisolongo
a. Early-20th century (Angolan variety)
Nki a ntangua ***tutelama*** *kuetu e?*
*nkia N-tangua tu-**Ø**-telam-**a** kwetu e*
Q 9-time SP_{1PL}-FUT-stand_up.POS-FUT FOC Q
'At what time will we leave?' (Tavares 1915: 135)
b. 21st century (Congolese variety)
Mwana ***uzeng****'okooko mu kaayi.*
*mu-ana u-**Ø**-zeng-**a** o-ku-oko mu N-kaayi.*
1-child SP_{1}-FUT-cut-FUT AUG-15-hand 18 9-knife
'The child will cut his/her hand with the knife'.
(Elicited sentence in French: '*L'enfant se coupera les doigts avec le couteau*.') (KongoKing 2012, fieldwork by S. Dom)

Let us now consider two additional South-Kikongo varieties, Dihungu and Kitsootso, which are spoken to the south of Kisikongo (see the map in Appendix). In these two varieties, prefix syncope did not target the deverbal nominal prefix *ku-* of the noun class 15 (Bostoen & de Schryver 2015: 163). In addition, both have been described as having a future *ku-R-a* construction, as shown in Examples (43) and (44).

(43) Dihungu
Tsutsu ***akuhondila*** *yo mbe:di yai.*
*Ø-tsutsu a-**ku**-hond-il-**a** ya o-N-bedi yayi*
9-chicken SP_2-FUT-kill-APPL-FUT with AUG-9-knife DEM_9
'The chicken will be killed with this knife'.
(Lit.: 'The chicken, they will kill it with this knife'.) (Atkins 1954: 162)

(44) Kitsootso
Mbazí ***yíkúyútuka.***
*mbazi yi-**ku**-yutuk-**a***
tomorrow SP_{1SG}-FUT-return-FUT
'I will return tomorrow'. (Baka 1992: 91)

Table 4 offers an overview of the distribution of the two future constructions, *ku-R-a* vs. *Ø-R-a*, and the distribution of prefix syncope in the targeted noun classes in South Kikongo varieties. The relevant columns are highlighted in grey, demonstrating the co-occurrence of, on the one hand, the future *Ø-R-a* construction and the prefix-less infinitival construction *R-a* and, on the other hand, the future *ku-R-a* construction and the infinitival construction *ku-R-a*.

Table 4. Overview of Future constructions and distribution of prefix syncope in South Kikongo varieties

Future	Variety	$NCP_{1/3}$	NCP_4	NCP_7	NCP_8	NCP_{15}	Source
Ø-R-a	Kisikongo	✓	✓	✓	✓	✓	Ndonga Mfuwa (1995)
	Kisolongo	✓	✓	✓	✗	✓	Tavares (1915), KongoKing fieldwork 2012
	Kizombo	✓	✓	✓	✓	✓	Carter (1970)
-ku-R-a	Kitsootso	✓ / ✗	✓ / ✗	✗	✗	✗	Baka (1992)
	Dihungu	✓	✗	✗	✗	✗	Atkins (1954)

The symbol '✓' indicates that the noun class prefix in that variety underwent syncope, '✗' means that the prefix did not change. In case of conflicting data, '✓ / ✗' is given. Table adapted from Bostoen & de Schryver (2015: 163).

Assuming that the prefix of the future *ku-R-a* construction was lost, an ambiguity similar to that discussed in the polysemy hypothesis would exist, although now between the prefix-less future and simple present *Ø-R-a* constructions. The functional and semantic expansion of the present imperfective *Ø-R-ang-a* can then be analyzed in this homonymy scenario as well as a strategy that would resolve the newly created ambiguity of one form, *Ø-R-a*, with two different temporal meanings, namely present and future.

5. Conclusions

In this article, we have reconstructed the evolution of a part of the present and future tense marking paradigm in Kisikongo between the mid-17th century and today. Thanks to the corpus-based analysis of historical language data from both texts and grammars, we could establish that by the end of the 19th century, Kisikongo had reduced three of its mid-17th century present/future constructions to only two. According to sources from the mid-17th century, Kisikongo still distinguished at that stage between the simple present *Ø-R-a*, present imperfective *Ø-R-ang-a*, and future *ku-R-a* constructions. In Kisikongo sources from the late-19th and early-20th centuries, however, the future *ku-R-a* construction is no longer attested, while a null-marked construction similar to mid-17th century simple present *Ø-R-a*, is used for both present and future time reference. The *Ø-R-ang-a* construction continued to convey the present imperfective. By the end of the 20th century, however, the present/future isomorphism attested one century before no longer was. Nowadays, *Ø-R-a* is only used to refer to future time events, while *Ø-R-ang-a* has become the main present-tense construction. As a consequence, present-day Kisikongo has a future-tense construction that is morphologically lighter than its present-tense construction, a situation that is rather uncommon in the world's languages. This typologically unusual feature is of rather recent origin, as exactly the opposite was still true in the mid-17th century, i.e., a null-marked present-tense construction vs. a prefix-marked future-tense construction.

By examining comparative synchronic data from other languages belonging to the Kikongo Language Cluster, we furthermore assessed two possible historical scenarios to account for the rise of a null-marked future construction by the end of the 19th century. We have shown that both the mid-17th-century simple present *Ø-R-a* and the future *ku-R-a* are plausible source constructions for the future *Ø-R-a* attested from the late-19th century onwards. The simple present *Ø-R-a* may have given rise to the future *Ø-R-a* through the universally common semantic extension from present to future inducing common present/future polysemy. On the other hand, the future *ku-R-a* may have evolved into future *Ø-R-a* due to

the loss of the *ku-* prefix as part of a broader pattern of historical morphological change within the Kikongo Language Cluster, i.e., prefix reduction. Along with Kisikongo, several other closely related South Kikongo languages lost the prefix *ku-* not only in the future-tense construction, but also in the corresponding infinitive construction, from which the future construction might have once grammaticalized. This strong correlation makes the homonymy scenario as plausible as the polysemy scenario. In this case, the present-future homonymy would have emerged as the consequence of a phonological merger between simple present *Ø-R-a* and the future *ku-R-a*.

To conclude, we wish to argue that the present-future homonymy observed in late-19th-century Kisikongo might actually be the outcome of a "diachronic conspiracy" between semantics and phonology. We use the concept of 'diachronic conspiracy' to refer to the independent concurrence of different historical evolutions towards an identical outcome, very much like, for instance, Vincent (1978: 425) with regard to the varied sources of Italian geminate consonants or Thomason & Kaufman (1988: 23–24) regarding the group of changes that led to a pattern in which all syllables in Proto-Slavic ended in a vowel. Given the plausibility of both scenarios, it seems highly likely that two independent diachronic evolutions conspired towards such present-future isomorphism in Kisikongo by the end of the 19th century: the universally common semantic extension from present to future leading to polysemy and the loss of the *ku-* future prefix – as part of a broader phenomenon of prefix reduction – inducing homonymy. The change from future *ku-R-a* to *Ø-R-a*, in analogy to the infinitive construction from *ku-R-a* to *R-a*, indeed resulted in formal similarity between the older simple present and new future. From there on, the Kisikongo TA paradigm had two identical forms for two different tenses. However, because present-tense forms are often used for future time reference, this homonymy was probably not perceived as a significant cognitive clash and did not immediately lead to a dramatic shift or reorganization of the TA paradigm. Because the Kisikongo simple present was possibly also used for future time reference, it was much easier to converge the semantics of the two homonymous constructions. It is only at a later stage, i.e., towards the end of the 20th century, that the present imperfective *Ø-R-ang-a* construction evolved into the main present-tense construction and the *Ø-R-a* construction lost its present-tense reference to remain with only future semantics.

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Abbreviations

1, 2, 3, …	class number
Ø	zero morph
APPL	applicative
AUG	augment
AUX	auxiliary
CAUS	causative
CONJ	conjunction
$CONN_X$	connective
COP	copula
COS	change-of-state
CPC	contemporal past completive
DEM_X	demonstrative
DPC	dissociative past completive
EXPL	expletive
FOC	focus
FUT	future
FV	neutral final vowel
INF	infinitive
IPFV	imperfective
KLC	Kikongo Language Cluster
LOC_X	locative
N	homorganic nasal
Ṇ	syllabic homorganic nasal
NEG	negative
NCP	noun class prefix
OP_X	object prefix
PASS	passive
PL	plural
POS	positional
$POSS_X$	possessive
PP_X	pronominal prefix
$PRON_X$	pronoun
PRS	present
Q	question particle
R	root
RECP	reciprocal
REFL	reflexive
REL_X	relative
SBJV	subjunctive
SEP.INTR	separative intransitive
SG	singular
SP_X	subject prefix
TA(M)	tense/aspect (/mood)
X	of class or person X

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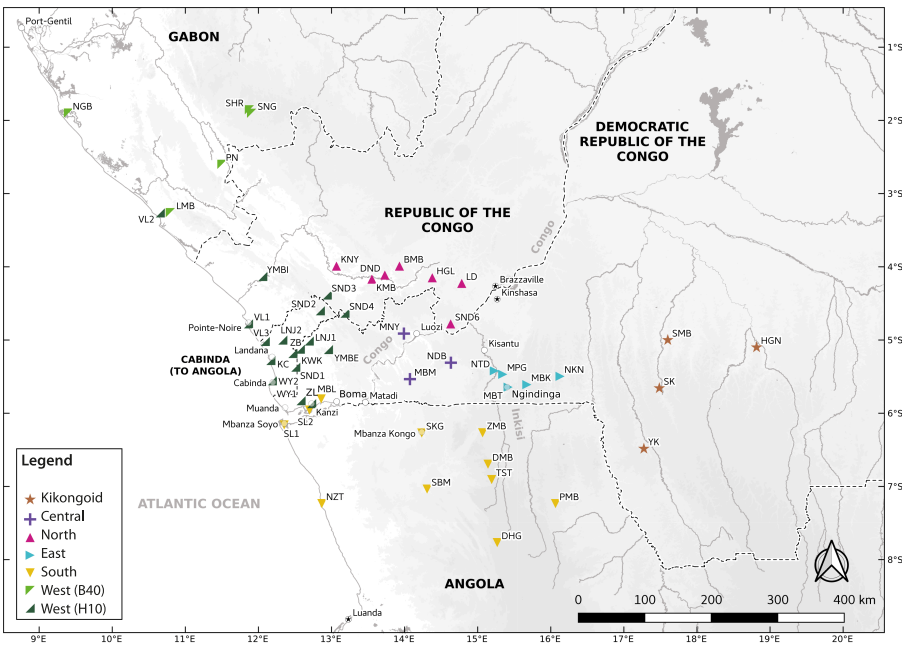
Appendix. Map of the Kikongo Language Cluster

[with, mentioned in this article, DHG = Dihungu, NDB = Kindibu, NTD = Kintandu, SKG = Kisikongo, SL1 = Kisolongo (Angolan variety), SL2 = Kisolongo (Congolese variety), TST = Kitsootso, ZMB = Kizombo]



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