

Conditional-relatives in Senufo (Gur) and Manding (Mande): The encoding of generalizing relative clauses in West African languages¹

Klaudia Dombrowsky-Hahn University Bayreuth

Summary

Different West African languages of the Gur and Mande families have a type of relative clauses additionally marked as conditionals. They function as generalizing relatives and occur often in proverbs. The paper proposes an analysis of these constructions in the Senufo languages Syer (Burkina Faso) and Supyire (Mali) and in the Manding variety Bambara (Mali). It discusses for each language first the formal aspects of the most typical relative clauses modifying a definite referent, then those of hypothetical and course of events conditionals. This aims at showing the cumulative marking of both the relative and the conditional in the third type, the conditional-relative clauses. In the last section I give an account of the generalizing function of the conditional-relatives arguing that the cumulation of formal means reflects the cumulation of functions. Thus, the encoding of an event in a conditional clause marks it as hypothetical, removing from it any property characteristic of a concrete instance of the event type. This abstraction from a concrete instance is most evident in course of event conditionals, which show a factual 'whenever' relationship between the event in the conditional clause and that in the main clause. A relative clause has the function to modify and restrict clausally the referent of a type of entity. The generalizing function of a conditional-relative clause is brought about by the fact that the restricting event is hypothetical and hence abstracted from a real event.

Résumé

Plusieurs langues ouest africaines appartenant aux familles gur (voltaïque) et mandé possèdent un type de proposition relative en plus marquée comme conditionnelle. Elles fonctionnent comme relatives généralisantes et apparaissent souvent dans les proverbes. Cette contribution propose une analyse de ces constructions dans deux langues senufo: 1) en syer, parlé au Burkina Faso, et 2) en supyire, parlé au Mali, ainsi que dans une langue mande, à savoir le parler bambara du Mali. Pour chaque langue je décris d'abord les aspects formels des propositions relatives modifiant un référent défini, ensuite celles des conditionnelles hypothétiques et des conditionnelles exprimant le cours des événements. L'objectif est de démontrer que les conditionnelles-relatives cumulent le marquage des relatives et des conditionnelles. La dernière section est destinée à la discussion de la fonction généralisante des conditionnelles-relatives. Je conclus que la cumulation des fonctions correspond à la cumulation des moyens formels. Ainsi, l'encodage d'un événement dans une conditionnelle le caractérise comme hypothétique, supprimant les propriétés caractéristiques d'un événement concret. Cette abstraction du concret est le mieux représentée dans les conditionnelles de cours d'événement, qui montrent elles-mêmes une relation généralisante factuelle entre l'évènement exprimé dans la conditionnelle et celui exprimé dans la proposition principale. Une proposition relative a la fonction de modifier et de limiter le référent d'une entité. La fonction généralisante des conditionnelles-relatives résulte du fait que l'évènement limitant le référent est hypothétique et donc abstrait d'un évènement réel.

Résumé (Bambara)

Kúmasen sógolonnen súguya dó bé sòro fàrafinna tìlebinyanfan kánw ná, mîn kúmasenbolo fólo yé kúmasenbolo mànkutulama yé ; à yé kúmasenbolo sáratilama yé fána. à bé báara ké í n'à fó kúmasenbolo

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mànkutulama mîn bế fếnw bákurubafo. kúmasen nìnnu bế yế ntàlenw ná. nìn báara ìn bế jàtemine kófo, mîn bế hákilijakabo kế nìn fốcogow lá kán sàba dè lá: 1) syèrkan, mîn bế fố Burukina, 2) sùpyirekan, mîn bế fố Mali lá; òlu fila bếe yế sếnefokanw yế, àni bámanankan, ní ò yế màndenkan đố yế. ní yế kán kélen bếe tà fốlo, kà kúmasenbolo kérenkerennen sífo: kúmasenbolo mànkutulama mínnu bế tốgo mànkutu kà dàn sìgi ò lá, àni kúmasenbolo sáratilama mínnu bế làhalaya sínsinnenw fố, àni làhalaya mínnu bế ków táabolo kófo. báara ìn ká lápini yế k'à jìra kó kúmasenbolo tàamasiyen fîla fàralen bế kúmasenbolo kélen kóno. í n'à fố bámanankan ná, ní (wálima mána) àni mîn màbennidanew bế yế kúmasenbolo kélen ìn kóno. báara ìn bế kùnce ní kórofo yế, mîn bế pếsin kúmasen sógolonnen ìn táabolo mà, ní ò yế kà tốgo mànkutu bákurubafo. kúma kùnce lá, n̂ b'à fố kó táabolow fàranogonkan àni nàsira kérenkerennenw fàranogonkan bế tàli kế pốgon ná.²

1. Introduction

- <1> A number of West African languages have a type of relative clauses that show properties of both a relative and a conditional clause and that suggest a generalizing interpretation. The paper proposes a study of these so called conditional-relative clauses (CRCs) in the Gur languages Syer and Supyire and the Mande language Bambara. All of them have the obvious double marking in common, although the formal means used in the individual languages to mark relative and conditional clauses differ respectively. Simple relative clauses for instance differ with respect to the origin of the device marking a NP as relativized and with respect to the degree of subordination, some showing a hypotactic, others a more paratactic construction. What is common to the relative clauses in general in all discussed languages is the relation between the relative clause and the main clause in the resulting complex sentences: all the three languages are of the correlative type of relative clauses characterized by the presence of a NP that is anaphorically related to it in the main clause. The conditional clauses differ with respect to their characteristic marking. The Senufo languages use principally an auxiliary, whereas Bambara has the choice between a conjunction introducing the conditional clause and a conditional auxiliary.
- The aim of this paper is to shed more light on this type of construction in the northeastern Senufo language Syer (Burkina Faso), for it has not been included in the recent grammar of this language (Dombrowsky-Hahn 2015). Further, showing that equivalent constructions exist in languages of the same region, even crosscutting language families, I provide evidence that the combination of features of relative and of conditional clauses to express a generalized clausal restriction of event participants is an areal phenomenon in West Africa. It seems to be a preferred strategy for generalizing relatives in languages which do not use representative-instance quantifiers equivalent to English any X, anything, anyone or whatever, whoever, etc. in this function.

I propose to study the structure of the conditional-relative as a special type of relative clauses by taking the form of each of the typical clauses it is based on as a starting point – the relative and the conditional. Subsequently the conditional-relative is presented. Assuming that similarities in form parallel those in function, this is followed by a discussion of the functions of the different constructions.

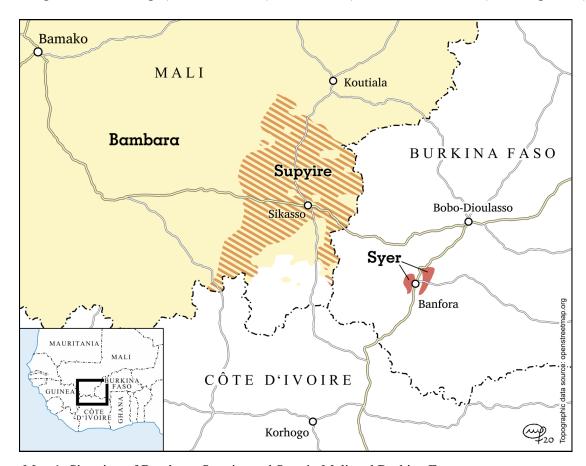
<3> The paper is structured as follows. A section is consecrated to a language or dialect cluster respectively: Syer, Supyire, Bambara. Every section contains respectively a short typological introduction (resuming the larger group of Senufo); a presentation of the most typical relative clause, which is the RC modifying a definite NP, then a description of the hypothetical (and realis) conditional clause and finally, the conditional-relative clause. In a concluding section I

I am much indebted to Salabary Doumbia and Valentin Vydrin for their help in writing this Bambara summary. While basic vocabulary for grammar lessons in primary schools is available thanks to the

summary. While basic vocabulary for grammar lessons in primary schools is available thanks to the cooperative work by Diallo et al. (2006), many terms (e.g. *relative clause*, *conditional clause*) have not been established yet in Bambara. Therefore, I take up Valentin Vydrin's suggestions for these terms hoping to provoke the necessary discussion.

try to explain how the linguistic means occurring in the CRC bring about the generalizing interpretation of this type of relative clause.

<4> The analysis of the concerned sentences in the northeastern Senufo language Syer is based on data collected by myself during several research stays in the village of Ténguéréla between 2007 and 2012.³ For the other languages I cite published or submitted data and analyses. Thus, I refer to Carlson (1994, 1997) on Supyire (northwestern Senufo; Mali,), to Dumestre (2003) and Vydrin (2019) on Bambara (Manding; Mande; Mali). However, the construction is also attested in other, related languages, as found in Creissels & Sambou (2013) on Mandinka (Manding; Gambia, Senegal) and Creissels (2009a, 2009b) on Malinké of Kita (Manding; Mali).



Map 1: Situation of Bambara, Supyire and Syer in Mali and Burkina Faso

2. Senufo

2.1. Typological characterization of Senufo languages

<5> In Senufo languages, syntactic relations are determined by word order, which is S (Aux) (O) V (X). X stands for obliques and peripheral participants, most frequently marked by means of adpositions. Most adpositions are postpositions as in (1), but there are also prepositions some of which are combined to a postposition respectively, resulting in a kind of extended exponent.⁴

(1) Syer. Word order determined by linear sequencing.

co ní gbần cùru la kĩ woman REM pot5 wash 1sgns PP S Aux O V X

'The woman washed the pot for me'.

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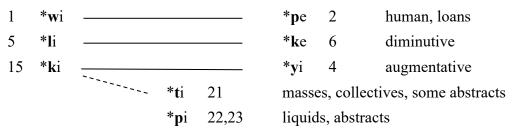
⁴ In Syer, I know of the existence of only one extended exponent, while there are several in Supyire.

TAM values are encoded in three ways: first, one of two distinct verb forms - a perfective or an imperfective one - the latter of which is derived from the former; second, an auxiliary, and third, serial verb constructions (Carlson 1994, chap. 9). Several auxiliaries can be combined to a more complex tense-aspect value. In Syer, an auxiliary is not always present; instead, the tone on the subject pronoun and the tonal shape of the verb are decisive of some TAM values. For instance, the subject pronoun is L for the remote past, so that when the subject co 'woman' in (1) is substituted with the corresponding pronoun, this pronoun gets a L tone: ù ní gbắn cùru la kĩ 'she washed the pot for me'. In spite of the importance of the subject pronoun as tone bearing element, only some TAM values require the resumption of the nominal subject with a pronoun (2).

- (2) Syer. Word order determined by linear sequencing.
 co wú nàà lí cùrù-n
 woman PR1 PROG PR5 wash-IPFV
 'The woman used to wash / washes it regularly'.
- Clauses can have a verbal or a nonverbal predicate. The latter is a locative phrase, a nominal (3) or an ideophone. In the abbreviations in the text excerpts the subject and the predicate of clauses with nonverbal predicates are subsumed under the cover term copula subject (CS) and copula complement (CC); the linking element is glossed COP.
 - (3) Syer. Clause with a nonverbal predicate. [la! ninlɔ]cs mɛ́ [wɔ̀dĕ-fwɔ̀]cc 1sgns uncle cop money-owner 'My uncle is a rich man.'

Senufo languages have an elaborated gender system. Carlson (2012) reconstructs eight noun classes for proto-Senufo; the actual languages show between six and nine noun classes forming three to six genders according to the particular language. For instance Supyire (North-west Senufo) has eight noun classes (Carlson 1994, chap. 3); the Nyenere variety of Tyebari (Central Senufo) has seven (Rongier 2002), Kar (North-east Senufo) has six, while Syer (North-east Senufo) has nine, showing a supplementary class which is semantically associated with trees and bushes (cf. Dombrowsky-Hahn 2015, chap. 4).

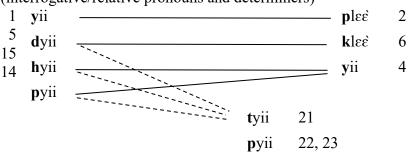
(4) Reconstructed proto-Senufo noun class system (using reconstructed pronouns to represent classes) (Carlson 2012)



<7> Schema 4 shows the proto-Senufo system reconstructed by Carlson (2012). The numbers in this schema and in the glosses in this paper correspond to those used in Miehe et al. (2007) and Miehe et al. (2012) for the comparison of inflectional classes of nouns across Gur languages. The lines represent the linking of a singular with the corresponding plural class; classes *ti and *pi represent mass nouns, collectives, abstracts and liquids which do not usually partake in singular-plural pairings; the broken line stands for a supplementary association of some singular nouns of class *ki with the number value 'collective' as a special plural. Noun suffixes, pro-

nouns and determiners which agree with the respective nouns bear a consonant characteristic for the respective noun class (in bold in tables 4 and 5) or a consonant closely related to it.

(5) Syer. Illustration of the agreement targets (interrogative/relative pronouns and determiners)



The languages belonging to the Senufo branch of the Gur language family share a lexical basis and many grammatical features. Nevertheless, they differ with respect to other peculiarities of the grammar. For instance, with regard to the noun phrase, there is an important difference in the marking of definiteness. In Supyire it is encoded by means of definite suffixes that replace the basic nominal suffixes, however showing traces of the latter; in Syer definiteness is signalled (optionally) by articles preceding the nouns.⁵ Similarly, the conditional-relative dealt with in this paper and the clause types it is based on show important differences in detail, justifying a separate account of the constructions in Supyire and in Syer.

2.2. Syer

Syer is a language spoken by about 25.000 speakers in southwestern Burkina Faso, in and around the town of Banfora. Known under the official name of Karaboro, it has several endonyms which reflect the name of the people who speak it and the place of settlement of these people. The data presented here have been recorded in **téèkùlu** 'Ténguéréla', where the variety **téèpèr** is spoken by the **téèpèr**. Other speakers prefer however for the language the superordinate term **ʃyèr**, of which **téèpèr** is the most conservative variety. Syer is also known as Western Karaboro, which is part of the Karaboro subbranch of Senufo. A recent grammar of Syer (Dombrowsky-Hahn 2015) has not taken into account complex constructions, but Dombrowsky-Hahn (2018) describes the main types of relative clauses attested in the language. The description in the following section confines to the most typical relative clauses (RCs), the conditional clauses and the CRCs showing the cumulated properties of the two other constructions.

2.2.1. Typical relative clauses in Syer

A RC modifies or restricts the referent of a nominal constituent of another clause, the so-called main clause (MC). Usually, only the MC is apt to figure as a simple independent clause, whereas the aptitude of a RC to occur as a simple clause depends on the degree of subordination of the RC, a point that will be addressed below. Only restrictive RCs are attested in Senufo languages.

Instances of the opposition of a neutral form of the noun and its definite counterpart in Supyire: **yaaga** 'thing', **yaagé** 'the thing'; in Syer **kla** 'thing', **ki kla** 'the thing'. However, in Syer the interpretation of the simple noun is ambiguous between indefinite and definite, and explicit marking of definiteness by means of the article is not obligatory.

Tone in Syer and Supyire is marked on every vowel as follows: the acute accent is used to mark High tone, grave accent to mark Low tone. Absence of a tone on a vowel corresponds to Mid tone. Contour tones on short vowels are marked as a combination of register tones: a haček stands for a LH (ã), a circumflex for a HL (â), the grave accent + hyphen for Low-Mid (a), and on long vowels by L on the first vowel and Ø on the second (àa).

The most frequently occurring RCs in Syer modify or restrict identifiable referents. The RC precedes the main clause (MC) and contains the head it modifies or a pronoun substituting a head. The RC does not directly assume a syntactic function in the MC which is rather indicated in it by means of a NP co-referentially related with the RC.

(6) Syer. Typical RC modifying an object; rel. determiner suffixed to nominal root [[n\u00e4-ty\u00e4\u00e4]_0 p\u00e4 ni n\u00e4\u00e4 \emptysin_{RC},
war-REL21 they REM PROG IP-make-IPFV
'The war they were engaged in,

[[tigè nda], [ti]_{GEN} ju ni m-bugò]_{MC}
D.DEM21 DEIC.IDEN21 PR21 head REM IP-be.big
that's it, its motives (its head) were important.' Freely: 'The war they were engaged in, had important motives.' (Secoke 0465 18:23)

- <10> In the RC in (6), the relative morpheme **-tyìí** is suffixed to **nã**-, the stem of the head **nãn** 'war' with which it agrees in gender and number, exempt from the nominal suffix **-n**. The Syer relative morphemes are equivalent to the interrogative morphemes 'which' as illustrated in the question (7). The complete paradigm is given in (5) above.
 - (7) Syer. Interrogative clause; interrogative morpheme suffixed to the nominal root nằ-tyìi ntr pì ni nàà m-pyì-n?
 war-INTER21 IDEN21 they REM PROG IP-make-IPFV
 'Which war were they engaged in?'

Both the relative and the interrogative morphemes occur in free or bound form. As a free morpheme, they follow a full noun (8a) or replace it (8c, 15); as bound morphemes, they are suffixed to a stem. For instance, in (8b), the interrogative / relative nominal suffix is attached immediately to the stem, the basic nominal suffix -l of the full noun **wugel** does not occur. For other examples of nouns and noun stems, see Dombrowsky-Hahn (2015, chapters 2 and 4, and 2018).

- (8) Syer. Interrogative / relative morpheme as free and bound determiner, and as pronoun
 - a) wugel dyii 'which hole; the hole that'
 - b) wuge-dyii 'which hole; the hole that'
 - c) dyii 'which one; the one that'
- <11> The uses of the interrogative determiner in its free and bound form is illustrated in (9), of it functioning as relative morpheme in (10), the free relative determiner further in the attested example (11), the bound one in (6). The distribution of the free and the bound forms are not entirely clear, but see Dombrowsky-Hahn (2018) for a hypothesis.
 - (9) Syer. Interrogative clause; bound and free forms of interrogative morpheme nwugo Ø wugel wuge-dyii ~ wugel dyii ni? snake15 PRF hide hole-INTER5 hole5 INTER5 in 'In which hole has the snake hidden?'

This question shows a kind of fronting of the (asked for) focused item + an identification morpheme. It is a sort of cleft-like construction. In the RCs the final high tone on the relative morpheme has a similar function as the identification morpheme and is occasionally also found in questions.

(10) Syer. Relative clause; bound and free forms of relative determiner [ŋwùgɔ̂ Ø wùgɛ̂l [wuge-dyii ~ wugel dyii nì]obl]rc, snake15 PRF hide hole-INTER5 hole5 INTER5 in 'The hole in which the snake has hidden,

[$n\tilde{\epsilon}w$ $m\acute{\epsilon}$ [li ni]_{CC}]_{MC} rat COP PR5 PP there is a rat in it' (Freely: 'There is a rat in the hole in which the snake has hidden.')

(11) Syer. Relative determiner (free form) in the RC [[yí ŋwnɛ̈y ʃr̄ŋ yíí]₀ wù na Ø ŋgbɔ̃]_{RC},

DEF4 stories4 two4 REL4 PR1 HEST IP?-tell

'The two stories that she told yesterday,

[mɛ laa Ø tò lè [yi nì]_{OBL}]_{MC}? 2SG interior PRF fall Q PR4 PP do you remember them? (Secoke 1963 35:39)

- <12> Due to the strong association of some genders with semantic categories, for instance humans with gender 1/2, artifacts with gender 15 / 4 / 21, activities, problems, affairs or topics with gender 5/6,8 the interrogative/relative morpheme is used as a pronoun when the type of entity can be inferred from the linguistic or extra-linguistic context. Example (12) illustrates the interrogative pronoun of class 5 referring to a topic, and example (13) the relative pronoun of class 2 referring to human beings.
 - (12) Syer. Interrogative pronoun (cl. 5) referring to a topic wo ! mɛ kɛ yà nì dyii n̂?⁹

 1PL FUT go again with INTER5 with 'With what do we continue (lit.: we will go on with which [topic])?' (Secoke 0611 24:05)
 - (13)Syer. Relative pronoun (cl. 2) referring to human beings [[ple\[e]s [pì]_{SRES} n-lì 'nnὲ wò klù ní nnε]_{RC} 'n REL2 PR2 here 1PL village here **REM** IP-go.out in S Aux V X 'Those who originated from our village here,

[pigè]_s ní n-nìgè ...

D.DEM2 REM IP-be.many they were many (Siwahii 0670 31:39,49)

<13> There are two strategies available for the relativization of noun phrases in verbal clauses. In the first one, the in situ strategy, the constituents keep their unmarked order. It is the most frequent strategy attested for obliques (14), but is rather exceptional for objects.

⁸ For more information on the form and semantics of the noun classes and genders in Syer see Dombrowsky-Hahn (2015, chap. 4).

⁹ **nì ... ni**, or its abbreviated form **nì ... nì** is a discontinuous adposition with comitative/instrument meaning.

(14)Syer. In situ strategy, relativized oblique, suffixed relative determiner [nìgà dốg ná bi kĩ [nì vò-tvii $n\hat{i}$, OBL RClanguage-REL21 God HOD them present with with S O V OBL Aux 'So, the language God presented them with,

 $\begin{array}{ccccc} \hbox{\tt [[tig\`e} & \grave{n}]_{\text{\scriptsize 0}} & bi & m\text{-p\`ar-ni}]_{\text{\tiny MC.}} \\ \hbox{\scriptsize D.DEM21} & \hbox{\scriptsize IDEN21} & they & \hbox{\scriptsize IP-talk-IPFV} \\ \hbox{\scriptsize O} & S & V \end{array}$

it is this one they speak > They speak the language that God gave them.' (Madu 0643 22:44)

<14> The second one is the fronting strategy; it comprises the displacement of an object to clause-initial position, leaving a gap in its usual slot, indicated by Ø in the RC of (11). The fronting is a focusing mechanism that can be formulated as follows: S (Aux) O V -> O S (Aux) V. The extraction of the relativized object entails marking of the out-of-focus part of the clause as intransitive. This happens by means of an intransitive prefix, which is always present in intransitive clauses marked for certain TAM values (i.e. remote, hodiernal, hesternal past, general imperfective). (15) illustrates the in situ strategy of an interrogative clause, (16) the fronting strategy.

Fronting is one of several possible mechanisms to focus a constituent. A fronted constituent can be additionally marked with a simple or deictic identifier (7, 16). Alternatively, when a relativized item is fronted, the accompanying relative morpheme is marked with a H tone (11). Focusing is possible in situ as well, for instance by means of the focus marker **wò** in (15).

- (15)Syer. Content question, interrogative pronoun in situ pyì-n? yè ni nàà dyii wò 2PL REM PROG INTER5 DP do-IPFV S V **AUX** 0 'What were you doing?' (Siwahii 0028a 00:42,6)
- (16)Syer. Content question, interrogative pronoun fronted dvii nàà m-pyì-n? nì yè ni Ø INTER5 IDEN5 2PLIP-do-IPFV REM **PROG** S **AUX** 'What were you doing?' (elicited to Siwahii 0028a 00:42,6)
- <15> Fronting of obliques is possible, albeit rare. The fronting of an oblique does not involve preposition stranding nor pied piping in Syer. For subjects, only the fronting procedure is available. Since the subject is anyhow clause-initial in an unmarked clause it is not displaced. It is rather resumed by a simple pronoun which agrees with the head in gender and number. In (13), the simple pronoun **pi** of class 2 resumes the relative pronoun **pleè**.

Constituents in clauses with nonverbal predicates cannot be fronted. For instance the locative predicate **li nì** in (10), designated as copula complement (CC) keeps its usual position following the copula.¹⁰

<26> Since the described RC in Syer corresponds to an independent simple interrogative clause, the entire complex sentence resembles a paratactic construction. Without a clear sign of subordination, the RC equivalent to a simple interrogative clause precedes the MC which equals an

Fronting of constituents is common in main clauses of complex sentences as well, provided they have a verbal predicate.

independent declarative clause.¹¹ In fact, the first clause can be qualified as RC only because of the relation that exists between it and a NP in the main clause that is coreferential with it, and because the whole functions as an intonational unit. Even if sometimes a very short suspensive pause can be perceived after the RC, there is neither an absolute pause, nor an utterance final lowering of pitch. These two features are present at the end of an independent clause.

<16> In Comrie & Kuteva's typology (2013b), a RC showing an element "which would not be present in the corresponding simple declarative sentence" equivalent to an interrogative pronoun is excluded from what they name the paratactic strategy. They reserve this category only to constructions in which RC and MC can function as independent declarative clauses. Within the authors' typology based on relativizing strategies Syer RCs can rather be classified as a correlative RC. In this type, the RC modifies a NP that is a constituent in another clause (the MC), but it does not assume directly a syntactic role in it. Rather the MC contains an anaphoric NP that is coreferential with the RC and that indicates its syntactic role in the MC.

2.2.2. Conditional clauses in Syer

<17> It is impossible to give an exhausting classification of conditional clauses for the languages discussed in the frame of the present contribution. Therefore, the description will be restricted to content conditionals, 12 which are solely relevant for the conditional-relative constructions as the topic of this paper. The hypothetical conditionals (HC) and the course of events conditionals (CEC) are the most frequent content conditionals. They share the formal aspects in each language respectively. In this section the characteristics of Syer conditionals are presented.

(17) Syer. Hypothetical conditional

[n me jí]_{COND} [gi ! me la gbu]_{MC}

1SGS COND enter PR15 FUT 1SGNS kill

'If I enter, it (ref.: the thing in the water) will kill me.' (Madu 048 18:15,3)

<18> In a hypothetical conditional construction, the apodosis follows the protasis, sometimes separated from it by a suspensive pause. There is no conditional conjunction; conditional marking is rather achieved through the combination of a L tone on the pronominal subject (17) (other NPs maintain their respective tune, as in (21)), the conditional auxiliary **mε** (glossed COND) and a HL tune.¹³ The distribution of the HL tune is determined by two factors, first the presence or absence of an object following the auxiliary, and second, the tonal class of the verb. In an intransitive clause, when no object separates the auxiliary from the verb, the auxiliary is realized M and the verb shows HL, except when the verb belongs to the class of L verbs. The L tone is maintained on these verbs, and the H of the HL auxiliary moves to the auxiliary on its left. The realization of the conditional in intransitive clauses for all three tonal classes of verbs is illustrated in (18).

In Dombrowsky-Hahn (2018) I discuss the tendency toward a more grammaticalized construction in those cases where a relativized item is marked with the definite article, for the interrogative morpheme usually does not cooccur with the article in an interrogative clause. Nevertheless, only a small portion of the attested constructions shows this marking.

¹² In Sweetser's (1990) semantically based typology, content conditionals are opposed to the epistemic and speech-act conditionals.

I assume that the conditional auxiliary is related to the existential copula mê, used to connect diverse nonverbal predicates to the subject. The HL is charasteristic of both the copula (cf. Dombrowsky-Hahn 2015, chap. 9) and the conditional. However, in the conditional the tone is dislocated to the right, a phenomenon that I am not yet able to explain.

According to Traugott (1985), existential copulas are a possible source of conditional markers attested in different (African) languages, among others in Swahili **ikiwa** 'it being so > if'. However, for Syer it is difficult to imagine a concrete scenario of a development from a copula normally occurring only in clauses with nonverbal predicates to a conditional auxiliary admitting exclusively verbal predicates.

Syer, TAM and conditional marking for three tonal classes of verbs tonal class of verb M HLL 'enter' 'get up' yírì tò 'fall' ji ù me yírì 'if s/he ù mé tò 'if s/he falls' conditional ù me jî 'if s/he enters' gets up'

The distinction between M and HL verb classes is neutralized in the conditional, but in the L class of verbs, which is the most stable one, the verb maintains its L tone. When an oblique follows a verb of the M or the HL class, the verb is realized H instead of HL. For instance the verb $\mathbf{kl\hat{o}}$, which is realized HL when it stands in utterance final position is realized H in nonfinal position in (19). Sometimes, the H realization is found also when the suspensive pause between the protasis and the apodosis is almost absent as in (17), stressing so the intonational unity of the complex sentence.

- (19) Syer. Conditional: H realization when the verb (HL class) is not clause-final mè me kló nì la ni. ...

 2SG COND stay with 1SGNS with 'If you stay with me ...'
- <19> In a transitive clause, when an object precedes the verb, the distribution is more complex. It depends on the tone of the object. For instance, with a nominal object bearing an initial L tone (sãsugu in (15)) the characteristic HL is reduced to H, associated to the auxiliary. The tonal realization of the verb then depends on the tone of the object NP (cp. Dombrowsky-Hahn 2015, chap. 3, section 3.5.3).
 - Syer. Ambiguous interpretation: realis CEC and hypothetical HC (20)mέ såsugu wêr, wôdě nầầ. mὲ mε !me 2sg cond corn cultivate you FUT money see 'If you cultivate corn you (will) get money.' 'If one cultivates corn one gets money.' (Misc 0270 2011.02.25)
- <20> Content conditionals can be distinguished according to the speaker's attitude towards the likely-hood of the realization of the event, ranging from factual at the one end to counterfactual conditionals (in the past) at the other, passing through less likely or unlikely conditionals. HCs are potentially real or unreal, whereas CECs are considered to be real. (17) is an example of a hypothetical conditional, in which "the consequent is somehow predicted to follow from satisfying the 'condition' expressed in the antecedent" (Athanasiadou & Dirven 1997:62). In such cases a non-factual hypothetical situation is expressed in the antecedent and therefore also in the consequent.

In a course of events conditional two events co-occur, and the one is dependent on the other. They express a factual 'whenever' relationship. According to Athanasiadou & Dirven (1997: 71 ff), the CEC and the HC differ with respect to the speaker's commitment to the realization of the situation: in a CEC the speaker makes a commitment as to the actual, frequent or general realization of the two situations, whereas in the HC the speaker distances her-/himself from any commitment to real occurrence but considers potential realities. In both cases the conditional marking creates a hypothetical world, but CECs differ from HCs among others by the use of 'higher-order entities' (Langacker 1997), such as for instance **ndye** 'person' in (21). Tense-aspect categories in the main clause contribute to a factual interpretation, too. Thus, the imper-

fective in (21) is interpreted as a habitual and consequently the entire sentence describes a generally observed situation.¹⁴

(21) Syer. Course of events ('whenever') conditional ndye me lé me nàani, person COND stop you next.to 'If someone comes to stand next to you,

ú si η-klè-n u kε yà s/he NEG IP-look.for-IPFV s/he.SUBJ go.away again s/he doesn't want to leave again' (Misc 0093)

2.2.3. Conditional-relative clauses in Syer

- <21> CRCs are constructions that cumulate relative and conditional marking. An example is the elicited sentence (22). The relative pronoun in the RC and the simple pronoun coreferential with it in the MC are the elements characterizing a relative, and the conditional auxiliary and the HL tune on the verb the conditional clause.
 - (22) Syer. CRC, relativized subject [[yii]_s me wêr]_{CRC}, [[ú]_s me kt]_{MC} REL1 COND cultivate PR1.HAB you present 'Whoever / anyone who cultivates, offers you gifts.'

Natural data from texts are usually more complex. Thus, in (23), the relative is separated from the main clause by the additional clause 'the young is with her'. It expresses another condition, however without showing conditional marking.

(23) Syer. CRC, relativized subject, no following resumptive pronoun

If you see a frightened fisherman fleeing in his boat, it is the following:

[[yii]_s mé ʃyè]_{CRC} plòge mé wu ye, [[wu]_s

REL1 COND give.birth young COP PR1 with PR1

'Anyone (ref. hippo-mare) that has given birth (to a young), (if) the foal is with her,

yé wu nàà nấn pyì-n nì yê ñ.]_{MC} defeat she.SUBJ PROG war make-IPFV with 2PL with (she) can start fighting with you.' Freely: 'A(ny) hippo-mare that has given birth can start fighting with you, if her young is with her.' (Madu 0207 07:47,85)

<22> This type of clause shares two features with referential definite relatives: first, the marking with a relative morpheme (yii in (22) and (23)), which determines or replaces a head, signaling that the so modified or restricted NP is a constituent in a following main clause. Second, the presence of a NP in the MC that is coreferential with the RC and which indicates its syntactic function in the MC. Insofar, the CRC is a correlative construction like the RC. The CRC shares with the conditional clause its marking by means of the conditional auxiliary mε and the tune characteristic of the conditional¹⁵ (cf. 2.2.2). This conditional marking makes the CRC an unequivocally subordinated clause, whereas the referential RC resembles an independent interrogative clause. While two strategies are possible in the referential definite RCs (at least for objects and

The ambiguous interpretation of (20) as HC or CEC is pragmatically conditioned: it derives from the use of 2SG pronoun $m\varepsilon$ as a well defined conversation partner and as an equivalent of the impersonal 'one'.

11

In the intransitive clause in (22) the M verb **wer** is realized HL and the auxiliary is M, in (23) the verb belongs to the class of L verbs, which are realized L, whereas the H passes on to the auxiliary.

obliques), only the in situ strategy is available in the CRCs (and in the conditional). No displacement of constituents is possible; accordingly the fronting strategy does not apply. That is, the subject in (22) and (23) cannot be resumed by a simple pronoun respectively, nor can the object in (24) be fronted.

Syer. CRC, relativized object, canonical position before the verb¹⁶ (24)[fàwɔ̂-yii]_o nằằ lùgò làn]_{CRC} dirt-REL1 waste22,23 you COND see water in DEF22,23 S Aux 0 V S

'Any dirt you may see in the water, it is the waste

pìgè mpì pì káá pyì [ki ʃî] $_{cc}$] $_{MC}$. D.DEM22,23 IDEN22,23 PR22,23 it(go) be PR15 sort that became like this.' (Madu 0619 21:43,9)

<23> The examples in (25) through (27) illustrate a) a referential definite RC in the perfect aspect (**Ø** auxiliary), making use of the in situ strategy; b) same as a) but using the fronting strategy; c) a CRC and d) the unavailable fronting strategy within this type of relatives.

(25) Relativization of S; in situ and fronting strategies in RC + CRC; M tone verb

RC, S relativized, in situ *yii wer 'the one who cultivated' impossible RC, S relativized, fronting víí ù wer 'the one who cultivated' b) CRC, S relativized 'whoever cultivates' yii me wêr *yii ù me wêr CRC, S relativized, fronting 'whoever cultivates' d) impossible

(26) Relativization of S; in situ and fronting strategies in RC + CRC; L tone verb

RC, S relativized, in situ *yii ſyè 'the one who has given impossible birth' RC, S relativized, fronting b) yíí ù ſyè 'the one who has given birth' CRC, S relativized 'anyone who has given c) yii mé ſyè birth' CRC, S relativized, fronting *yii ù mé ſyè 'anyone who has given d) impossible birth'

(27) Relativization of O; in situ and fronting strategies in RC + CRC

a)	RC, O relativized, in situ	mὲ fàwɔ̀-yii ɲầ̀ầ̀ lùgɔ̀ lầŋ	'the dirt you saw in the water'
b)	RC, O relativized, fronting	fàwò-yíí mê nầầ lùgò	'the dirt you saw in the
U)	KC, O felativized, fronting		•
,	CDC C 1 d 1	lâŋ	water'
c)	CRC, O relativized	mè mé fàwò-yii nầầ	'any dirt you see in the
		lùgò lâŋ	water'
d)	CRC, O relativized, fronting	*fàwɔ̀-yíí mὲ mє́ pằằ	'any dirt you see in the
	impossible	lùgò lầŋ	water'

In this sentence, there is no true coreferential NP in the MC. **ki** Jî 'like this' is rather an adverbial phrase exemplifying a less explicit representation of the RC in the MC. For different degrees of explicitness of the coreferential NP see Dombrowsky-Hahn (2018).

The CRC shares with both the relative and the conditional its intonational unity with the main clause, especially the absence of a final lowering and a suspensive pause at the frontier between the CRC and the MC.

2.2.4. Summary: the constructions in Syer

- <24> In this section I have discussed three constructions: the RC, the conditional and the CRC, the last of which brings together the characteristic features of the two previous constructions. The RC in Syer is a correlative construction; that is, the RC does not constitute directly a nominal constituent in the MC; it is rather represented in it by means of a coreferential NP. The relativized noun is marked or replaced by a relative morpheme which originates in the interrogative morpheme 'which' agreeing in gender and number with the antecedent. On a purely structural level, the complex sentence is a paratactic construction, for both the RC and the MC (exempt the characteristic intonation making them a coherent unit) can occur as independent interrogative and declarative clauses respectively. Nevertheless, in the current typology, the Syer RC is not considered to belong to the paratactic type which requires both the RC and the MC clauses to be apt to figure as independent declarative clauses. Two strategies are possible in typical RCs: the in situ and the fronting strategy. The latter serves to particularly focus on the relativized item
- <25> Syer conditionals are not introduced by a conjunction; they are marked by means of an auxiliary, which is a subordinator at the same time. Unable to figure as an independent clause, the conditional clause is unequivocally subordinated. Due to the presence of the conditional auxiliary, the CRC is subordinated, too. The CRC is, like the RC, a correlative construction. However, unlike RCs, CRCs only admit the in situ strategy.

2.3. Supyire

<26> Supyire is a language of the northwestern subgroup of Senufo, spoken in southern Mali. Minute information on Supyire relatives is found in Carlson's (1994) grammar, and differences between relatives in the northeastern Senufo (to which Syer belongs) and northwestern Senufo are put together in Carlson (1997). The following discussion is based on these documents.

2.3.1. Typical relative clauses in Supyire

<27> Closely related, the northwestern Senufo language Supyire and its northeastern relative Syer share many features, but they also show dissimilarities. Those concerning relative clauses will be discussed in the following. The commonalities are the order RC – MC and the choice between the in situ and the fronting strategies. The fronting strategy, which is more common, includes the resumption of a relativized subject by a simple pronoun (28) and the dislocation of a relativized object (29) to clause-initial position. Like in Syer, a gap is left in the object's usual position (signaled as **Ø** in 29).

(28) Supyire. RC with relativized subject, fronting strategy, optional marking with DEM [yaagé¹⁷ (ŋké)]_s [k']_{sres} a ù bò ké]_{rc} thing.DEF15 REL15¹⁸ PR15 PRF PR1 kill RM '(Lit.: The thing that killed him,

The gender marking is adapted to the one used for Syer in the above sections. It differs from Carlson's as follows: his G1S and G1P are classes 1/2, G2S and G2P classes 15/4, G3S and G3P classes 5/6, G4 class 21 and G5 class 22,23.

At this point I change the glossing to be consistent with the one used for the other languages: Carlson uses DEM for the relative morpheme (determiner or pronoun) reflecting its origin and REL for the suffix probably borrowed from Bambara. I gloss the former REL and the latter SUF. The clause final relative marker is glossed RM.

```
[mu a [kùrù] cé]<sub>MC</sub>
you PRF D.DEM15 know
'you know it.) You know the thing that killed him.' (Carlson 1997:32, ex. 25a.)
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(29)Supyire. RC with relativized object, fronting strategy [[myàhíí]₀ u a Ø cèè gé]_{RC}, song.DEF6 PR1 PRF sing RMS V Aux 'The songs which she sang,

> [[ci]_{cs} náhá mìì fúnŋí í]_{MC} PR6 be.here my inside in they are here inside me.' Freely: 'I remember the songs which she sang.' (Carlson 1994:492)

- <28> Like in Syer, the MC in Supyire includes a NP coreferential with the RC (the discourse demonstrative **kuru** in (28) and in (30), the simple pronoun **ci** in (29)). Although both Syer and Supyire relatives belong to the correlative type in Kuteva & Comrie's (2005) and Comrie & Kuteva's (2013a, 2013b) typology, they differ with respect to the degree of subordination. As shown above, the typical Syer RC is part of a paratactic construction, whereas the Supyire RC bears traces of nominalization, and hence is in a more hypotactic relation to the MC (Carlson 1997:32). The sign of nominalization in Supyire RCs is the invariant clause-final particle **ké**. The form of this morpheme resembles the nominal suffix of nouns belonging to the singular class 15 (Carlson's gender 2 singular), -gV and its definite counterpart -ge or -ke. This parallel between the clause-final marker and a nominal suffix is interpreted by Carlson as a sign of former nominalization and hence subordination of the RC. The nominalization hypothesis is corroborated by data from the central Senufo language Senari (Cebaara) where the corresponding clause-final morpheme is lè, showing the consonant l (cf. section 2.1) characteristic of the noun class 5 (Carlson's gender 3 singular). The author therefore assumes that originally the final marker might have been variable, showing agreement with the head.
- <29> The nominalization of a clause is considered as the process by which a finite verbal clause is converted into a noun phrase. Usually, in the course of this process the verb becomes a head noun, the tense-aspect-modal morphology is lost, and subject or object acquires genitive case-marking, among others (Givón 2001:24). None of these adjustments is presently observable in Supyire (or Cebaara), considered by Givón (2001:29) to be an extreme finite (non-embedding) language. Nevertheless, the clause-final particle in Supyire relatives is never present in an independent clause and can be interpreted as a signal of subordination. Thus, the classification as correlative construction says nothing about the degree of subordination in the arrangement of the relative and main clauses, and both the paratactic construction in Syer and the more hypotactic construction in Supyire can be qualified as correlatives. That correlative relative clauses can be paratactic or hypotactic constructions has been shown also for different branches of Mande languages (Creissels 2009a, Nikitina 2012).
- <30> A major difference between Syer and Supyire is the marking of the head of a RC. While in Supyire the clause-final particle **ké** is obligatory in all RCs, the marking of the head NP as relativized is optional. This marking consists of a morpheme agreeing in gender and number

As discussed above, the terminology may be confusing. Most Syer relatives are a sequence of an independent interrogative and an independent declarative clause (hence a paratactic construction), unified by

pendent interrogative and an independent declarative clause (hence a paratactic construction), unified by the characteristic intonation and the coreferential NP in the MC. Although the typology by Kuteva & Comrie (2005) and Comrie & Kuteva (2013a, 2013b) includes a paratactic type of relative, the Syer constructions which use an interrogative morpheme as an element marking the relativized constituent cannot be so classified, because the precondition that both clauses be declarative clauses is not met.

with the head. In (28) its optional presence is indicated in brackets; in (29) the option is not indicated. The relative determiner corresponds to the deictic demonstrative; however, unlike the relative determiner, the demonstrative precedes the noun (i.e. ŋké yaagé 'this thing', but yaagé ŋké 'the thing that'). In clauses with an unmentioned head, the same morphemes function as relative pronouns.

In the in situ version of the RC, the relative determiner is obligatory, and it is often extended by the suffix **-mu**. Like in the neighbor language Minyanka spoken in Mali (Dombrowsky-Hahn 1998), the form of this suffix concurrent with the maintenance of the canonical word order (or application of the in situ strategy) result from contact with Bambara, the lingua franca used in the region (Carlson 1997:33, and below). In Bambara, the word order is extremely strict, and in relative clauses the relative morpheme **mîn** [mĩ]~ **mûn** [mũ] (which is the source of the Supyire suffix **-mu**) follows the head or replaces it.

(30) Supyire. RC modifying an object, in situ strategy, obligatory marking with demonstrative-relative morpheme and the borrowed suffix **-mu**

[ali nínjáà jínàna à [yaagé nìké-mù]o kàlìfă even today jinn.DEF1 PRF thing.DEF15 REL15-SUF entrust 'Even today the jinn which thing entrusted to him, it is there.'

ú ná ge]_{RC}, [[kuru]_{CS} na wá aní]_{MC} PR1 PP RM D.DEM15 PROG be.there there Freely: 'Even today the thing which the jinn entrusted to him is there'. (Carlson 1994:498-499)

2.3.2. Conditional clauses in Supyire

- <31> Content conditionals show the conditional auxiliary **ká** (or its allomorph **ahá**) in the protasis, and future tense in the apodosis. This is illustrated in (23).
 - (31) Supyire. Hypothetical conditional [mu ahá mìì bó]_{COND}, [mu tacwóŋi sí ŋkwû]_{MC} you COND me kill your fiancée.DEF1 FUT FP-die 'If you kill me, your fiancée will die.' (Carlson 1994:571, extract of ex. 55)

2.3.3. Conditional-relative clauses in Supyire

- <32> Carlson (1994:507-509) deals with the conditional-relative clause in chapter 13 on relative clauses in a section entitled "conditional-relative clauses", and, in chapter 15 on conditionals, he mentions them under the heading "other uses of the conditional" (1994:580). He notes that the "whoever' meaning" is obtained by using the conditional auxiliary in a relative clause with a nonreferential relativized NP. (32) shows such a sentence with a relativized subject, (33) with a relativized object.
 - (32) Supyire. CRC, relativized subject [[nàni ŋgé-mù]_S ká m-pá ge]_{CRC}, man.DEF1 REL1-SUF COND IP-come RM 'Whichever man comes,

[wyéréŋi kan [ura à]_{OBL}]_{MC} money.DEF1 give D.DEM1 to give him the money.' (Carlson 1994:580)

<33> The account of the relative clauses on the one hand and of conditional clauses on the other hand shows that the conditional-relative clauses ((32) and (33)) combine features of the two previous

constructions. They share the auxiliary with the conditional and the marking of the head NP by means of the demonstrative-relative determiner and the clause final relative marker **ge** with the relative. Furthermore, the main clause comprises a NP co-referentially related with the CRC (**ura** in (32) and (33)).

However, the CRC differs from the RC by the impossibility to dislocate the relativized item to the left; i.e. the fronting strategy does not apply with the CRC. Correspondingly, the relativized NP is always marked by means of the extended relative determiner REL+SUF (Carlson 1994:507). The obligatory use of this determiner and the resemblance of this construction to similar sentences in Bambara (Manding, see below) suggest here again a certain influence of the lingua franca on the Senufo language. However, as shown in section 2.2, a very similar construction exists in Syer without any borrowed form. Syer seems generally to have undergone much less influence by the Dyula variety of the Manding cluster used as lingua franca in southwestern Burkina Faso, so that it is difficult to judge whether we are dealing with an instance of metatypy here as well, or whether it is a phenomenon of larger areal distribution.

(33) Supyire. CRC, relativized object

[[ura]_s asì \dot{n} -tòrò]_{MC} D.DEM1 HAB.SEQ IP-pass

it would die.' Freely: 'Whatever child she got would die.' (Carlson 1994:508)

2.3.4. Summary: the constructions in Supyire

<34> RCs in Supyire are correlative constructions. Both strategies, the in situ and the fronting strategy are allowed in typical RCs. All RCs are obligatorily marked with the immutable clause-final marker ke or ge, which is interpreted as a trace of nominalization of the clause and which functions as subordinator. There is also a relative determiner marking a head as relativized and showing agreement with it. It follows the definite form of the head when used as determiner; the same form replaces the head when used as pronoun. The forms of the relative determiner correspond to deictic demonstratives, but their position with respect to the head differs, for the deictic demonstratives usually precede the head. Relative determiners are optional when the relativized item is fronted to the initial position of a RC. But when the in situ strategy is used, they are obligatory and, additionally, they show a suffix -mu added to the demonstrative element.

Conditional clauses are encoded by means of a conditional auxiliary. The same auxiliary is found in CRCs, which show at the same time features that characterize RCs. Allowing only the in situ strategy, relativized items in CRCs obligatorily bear the extended REL+SUF marker.

3. Manding

<35> Similar conditional-relative clauses have been described for Malinké of Kita (màningakan, southeastern Mali) by Creissels (2009a, 2009b), for Mandinka (mandinkakáŋo (Gambia, Senegal)) by Creissels & Sambou (2013), and recently for Bambara (bámanankan, Mali) by Vydrin (2019). All these are varieties of the Manding dialect cluster belonging to the family of Mande languages. Although a discussion of the constructions would be worthwhile for all three languages, the limited space allows me considering only one of them. Therefore, I restrict the following presentation to Bambara²⁰, focusing, after a short typological introduction, on typical relative clauses, typical conditionals and conditional-relative clauses.

There is no standardized notation system for tone in Bambara. In the present contribution, I use the conventions established by Dumestre in most of his publications (cf. 1979, 2003, which however differs from

3.1. Bambara illustrating Manding

3.1.1. Typological characterization

<36> Senufo and Mande languages share the word order S Aux (O) V (X). In Bambara, the auxiliary is a constitutive and obligatory part of an independent clause, which fuses a TAM value with either affirmative or negative polarity²¹. An exception is the perfective value in intransitive affirmative clauses for which the auxiliary is replaced by the inflectional morpheme -ra (or its allomorphs -la, -na) suffixed to the verb. This results in the schematic representation S V-ra for intransitive affirmative clauses in the perfective aspect. The difference can be seen comparing an intransitive affirmative clause in the imperfective (34) and in the perfective aspect (35).

In Bambara (and Manding in general), the verb does not show agreement with the subject or the object. Syntactic relations are determined by word order, which is much more strict than in Syer and Supyire (or Senufo in general). So, no dislocation of a constituent is possible in Bambara, for instance as a focusing strategy.

- <37> Next to clauses with verbal predicates, Manding varieties dispose of several types of clauses with nonverbal predicates.
 - (34) Bambara. Intransitive affirmative clause, imperfective aspect

dén bé kási child IPFV.AFF cry S AUX V 'The child is crying \sim cries.'

(35) Bambara. Intransitive affirmative clause, perfective aspect

dén kási-ra child cry-PFV.AFF S V-ra 'The child cried.'

<38> A main difference vis-à-vis Senufo or Gur in general is the absence of a gender system in Mande. There is a unique nominal marker in Bambara, called the definite marker or definite modality by Dumestre (2003:137) and 'definite' article by Vydrin (2019:33), but 'specific article' in the *Corpus bambara de reference*.²² It has the form of a floating Low tone (noted ') causing a downstep of a following H, except for a few words in which it is rather perceived as part of the tonal contour of the word. Among the few words there is the relative morpheme mîn (Vydrin 2019). No thorough study of the role of the article for the marking of referentiality and definiteness in Bambara being available up to now, the author only adds that it occurrs more frequently than the definite article in French, and refers to Creissels' (2009b) description of Kita Malinke where its use is very similar to that in Bambara. In both varieties it is the absence of the article that is marked, not its presence. Resuming and interpreting the most important of

the notation in 2011), noting only the first tone of a word. Unfortunately, the L article is not or not consistently noted in most texts (for instance in the Bambara Reference Corpus, the article is noted when it is manifest in the contour tone of a word such as **mîn**, but it is not noted when it is floating).

In this section, I mark the article only to illustrate its description; I do not add it where it is not marked in the source. The lack of notation of the floating L article is regrettable for many reasons, among others because it inhibits a fine-grained study of the nominal properties of referentiality and definiteness in Bambara.

This statement is simplified and overgeneralized, for the Manding varieties have also other means, for instance an extended exponent of a hortative modality used in blessings. In Bambara it comprises the auxiliary má and the verbal suffix -ra. as in ála má síra nògoya-ra, lit.: 'May God facilitate the way' used to wish somebody a good trip.

²² http://cormand.huma-num.fr/gloses.html

Creissels' findings, it is possible to say that the article is present in the citation form of nouns and other generic contexts (for instance objects in affirmative clauses), and with nouns that have a referential-definite and a referential indefinite²³ interpretation. It is absent with non-referential NPs among others in such negative clauses as **mùso té** 'This is not a woman'.

<39> In Bambara, there is a unique plural morpheme -u (written in the orthography as -w, i.e. mùso `woman'; mùsoù 'women') suffixed to the lexeme. In a noun phrase, the plural morpheme is added to the last element, for instance in a NP comprising a noun + an attribute, such as for instance an adjective, the plural is suffixed to the adjective which follows the noun (mùso nùman` 'a nice woman'; mùso nùmanù 'nice women').

The tonal article is associated to the plural suffix -u, resulting in [ù] (w in the orthography) (as in mùso pùmanw 'nice women'). There is also the more recently developed 'definite' article in 24 (40), originating in the deictic demonstrative nin but whose distribution/function and delimitation vis-à-vis the tonal definite/specific article is not yet understood.

3.1.2. Typical relative clauses in Bambara

<40> The typical relative clause in Bambara²⁵ precedes the MC. The relativized item is followed by the tonal article in form of a floating low and marked by the relative morpheme mîn.²⁶ As shown by Creissels (2009a:46), mîn originates from a demonstrative morpheme, whose demonstrative function got lost in Bambara but that has been maintained in Koyaga of Mankono (Ivory Coast), another Manding variety. In this variety it fulfills both the demonstrative and the relativizing functions. The same form is used as determiner and, when the head remains unmentioned, as pronoun. It varies only with respect to number, the plural being mínnù or múnnù. Like in Senufo, the RC and the MC constitute a correlative construction. This means that the MC shows a NP coreferential with the RC, frequently in form of the (discourse) demonstrative (D.DEM) pronoun ò (36), or another pronoun, or the repetition of the head determined by the discourse demonstrative morpheme (37).

(36) Bambara. RC modifying an object; coreferential NP in MC = ò
[à táa-ra [dén fàsa mîn]o fili kúngo
3SG go-PFV.AFF child emanciated REL discard wilderness
'The emaciated child that she threw away in the wilderness,

[jínε-w nà-na kà lámara rɔ́]_{RC} [6]_o tà]_{MC} ò djinn-PL D.DEM come-PFV.AFF take INF D.DEM raise djinns came and took it and raised it.' (Freely: Djinns came and took the emaciated child that she had thrown away in the wilderness, and cared for her.' (simplified extract of text **dén fàsafili**, in Dumestre (1989:49))

²⁴ In the *Corpus bambara de référence*, it is called "le nouvel article défini", http://cormand.huma-num.fr/gloses.html

I adopt here Vydrin's writing of **mîn**, pl. **mínnù**. The circonflex representing a HL contour tone signals that that the relative morpheme (which is H) is like the head itself followed by the tonal article, a floating L.

Thus, it occurs in a noun phrase with the indefinite determiner dó as in wáati ` dó 'a certain time, some time, another time'

In Bambara (and in the other Manding varieties) there are also other types of RCs; among others the RC modifying an indefinite NP. In this case, the RC follows the MC, which contains the head NP. This is one of the rare contexts where a NP is not accompanied by the tonal article, except if it contains the indefinite modifier d5, for in this case the preceding noun shows it. Another type is a RC that has the function of a complement clause of a verb of cognition etc. occurring in the initial MC. However, the RC modifying definite referents is not only the most frequently occurring one. It is also the one that, from a structural and functional point of view, resembles most the construction that is the main topic of this paper.

(37) Bambara. RC modifying an oblique; coreferential NP in MC = $\hat{\boldsymbol{o}}$ + repeated head [npògotigi-w táa-ra [síra mîn fɛ]obl]rc, girl-PL go-PFV.AFF way REL PP 'The way on which the girls went, they cut leaves and left them on this way.'

fúra kári k' à ſù yé bìla ſὸ síra kàn]_{OBL}]_{MC} 3_{PL} PFV.AFF leaf cut 3sg leave D.DEM INF way Freely: 'The girls cut leaves and left them on the road that they took'. (Bailleul, Vydrin & Dumestre 1992:1, npògotigiw ní bílisiw)

3.1.3. Conditional clauses in Bambara

- <41> There are two different conditional constructions in Bambara distinguished formally: first, a construction displaying the conjunction ní 'if', and second, a clause showing the auxiliary mána.²⁷ Clauses introduced by the conjunction ní occur most often initially; in rare cases the order is inverted, so that they follow the MC (Dumestre 2003:380). The conjunction ní can be considered as a subordinator; a clause it introduces cannot function as independent clause. On the contrary, the MC corresponds without any change to an independent clause. If the subordinate part is a verbal clause, the choice of the TAM category depends on the aspectual relation between the conditioning event and the predicted event. If both the event encoded in the conditional and the one in the MC take place at the same time, the conditional contains an imperfective predicate marker (38). If the prediction (expressed in the MC) is such that the conditioning event is expected to be completed before the MC event takes place, the conditional clause bears perfective and the MC imperfective aspect (39), (40), or future tense. As the comparison of (38) with (39) illustrates, the difference of perfective vs imperfective marking in the conditional clause does not correspond to the distinction between course of events conditionals (or the realis type) and hypothetical conditionals (or the irrealis type).
 - (38) Bambara. Imperfective aspect in both, the conditional (CEC) and the MC [ní í bɛ́ fíyen wéle]_{COND}, if 2SG IPFV.AFF blind.person call 'If you call a blind person,

[í bé mògo fila wéle]_{MC} 2SG IPFV.AFF person two call you call two people.' (Bailleul 2005:196, proverb n°1944)

(39) Bambara. Perfective in conditional (CEC), imperfective in MC sábu [ní cè ní mùso má jè]_{COND}, because if man and woman PFV.NEG have.sexual.relations 'Because, if a man and a woman don't have sexual relations

[dén té sòrɔ]_{MC} child IPFV.NEG get a child cannot be born.' [entretien sida 1994 04 10.dis.html, #369611]

(40) Bambara. **ní** conditional-perfective in conditional (HC), imperfective in MC ...[ní jà ìn má kèlɛ]_{COND},
 if drought DEF PFV.NEG combat
'...if we do not combat the drought (lit.: if the drought is not combatted),

²⁷ In Mandinka, no mention is made of a conditional auxiliary, but Malinké of Kita also has two alternative constructions parallel to those found in Bambara (Creissels 2009b:203-205).

[jàmana té sé kà yíriwa]_{MC}. country IPFV.NEG defeat INF progress the country will not be able to progress.' (Dumestre & Maïga 1993:7)

- <42> The alternative conditional clause displays the conditional auxiliary **mána**. Its use is restricted to affirmative clauses with verbal predicates, whereas the conjunction **ní** introduces both affirmative (38) and negative ((39), (40)) clauses, and both clauses with a verbal and a non-verbal predicate (42d).²⁸ In the conditionals with **mána**, no conjunction or other temporal or aspectual marker or copula can be added, and the negative counterpart of the auxiliary has almost fallen into oblivion.²⁹ To express negative parallels speakers of standard Bambara rather use conditionals with the conjunction **ní** described above.
 - (41) Bambara. Conditional clause with auxiliary **mána**

[í ká màrifa mána tíɲɛ]cond, 2SG CON rifle COND break 'If your rifle breaks,

[à bé sé k' ò dìla]_{MC} 3SG IPFV.AFF defeat INF D.DEM repair he can repair it.' (Bird, Hutchison & Kante 1977)

- <43> The copula of a clause with a nonverbal predicate (42a) cannot simply be combined with or substituted by the auxiliary **mána** (42b). **mána** can be used, when the copula is replaced by the verb **k**έ 'happen, become, do' (42c); otherwise the alternative construction bearing the conjunction **ní** is used (42d).
 - (42) a) Bambara. independent clause with nonverbal predicate and copula **b**έ [**b**']

kìbaru b' í fè news COP.LOC.AFF 2SG PP 'you have got news'

b) impossibility to use **mána** with a nonverbal predicate

*kìbaru mána (b') í fè news COND COP.LOC.AFF 2SG PP

c) mána-conditional clause with nonverbal predicate; copula replaced by verb ké

kìbaru mána kế í fè news COND do 2SG PP 'if you have got news'

d) conditional with the conjunction **ní**, clause with nonverbal predicate

ní kìbaru b' í fè if news COP.LOC.AFF 2SG PP 'if you have got news'

Followed by a word with an initial vowel, the vowel of the auxiliary $b\dot{\epsilon}$ elides and is realized b, in (35).

Thanks to Valentin Vydrin for directing my attention to the existence of **bìlén** ~ **bìlé** ~ **bèlé**, the negative counterpart of **mána**. This is an archaique morpheme represented by not more than one example in the *Corpus bambara de référence*.

3.1.4. Conditional-relative clauses in Bambara

- <44> Although generalizing relative clauses are frequent in Bambara, the construction was not expressly discussed in Dumestre's (1987, 2003) grammar. The first examination of the topic is found in Vydrin's (2019) "Cours de grammaire bambara". Vydrin follows Creissels (2009) and Creissels & Sambou (2013) who studied the corresponding construction in Malinké of Kita and Mandinka calling it "construction relative généralisante" (generalizing relative construction). The generalizing relative is described as a construction combining features of a relative and a conditional and meaning 'the one who', 'any X who' or 'if there is a X that ...' (Vydrin 2019). The feature characteristic of conditionals found in this construction is the marking by means of the conjunction ní (43-46) or the auxiliary mána (47); the feature characteristic of relative clauses, a relativized NP marked by the relative morpheme mîn, and a NP coreferential with the RC in the MC.
- <45> Showing the deictic demonstrative ò, the coreferential NPs in the MCs are similar to those in sentences showing typical relatives. Furthermore, some show an element stressing the general meaning, expressing a higher-order category, i.e. tìgi 'person, agent' in (43), or mùso 'woman' in (45), always accompanied by the deictic demonstrative ò. Alternatively the second person singular pronoun í stands for an impersonal pronoun (44) 'the one, the person concerned'. A plural head is sometimes referred to by the pronoun òlu 'they' (46).
 - (43) Bambara. (**ní**-) CRC modifying the subject, coreferential in MC: **ò tìgi** [ní [mîn]_s yé dònkili dá dórɔn]_{CRC}, if REL PFV.AFF song sing only 'Whoever only sings the song,

[[ò tìgi]s bέ fàga]_{MC}
D.DEM agent IMPF.AFF kill
must die (lit.: the one will be killed).' [npogotiginin kokɔrɔbɔla]

Bambara. (ní-) CRC modifying the subject mògo 'person', coreferential in MC: í [ní [mògo mîn]s kéra dònso yé]_{CRC} kó if person REL become-PFV.AFF hunter PP say 'Whoever ~ anyone who becomes a hunter,

[páma-gen-fura ká yé [í fè_{OBL}]_{MC} negative.force-chase-medicine SUBJ see 2SG PP should be in possession of a medicine to chase away negative forces. (lit.: a remedy chasing negative forces should be seen with you') (Dumestre 1979:386)

(45)Bambara. (ní-) CRC modifying the subject, coreferential in MC: mùso (superordinate category³⁰) [mîn]_s kó [ní ù wólo kúngo kɔ́nɔ]_{CRC} yé if REL say 3SG PFV.AFF 3PL give.birth forest in 'Whoever says she has born them in the wilderness,

... [[ò mùso]_{CS} yé ù bá yé]_{MC}
D.DEM woman COP 2SG mother PP
this woman is their mother.' Freely: 'The woman who pretends to have born them in the wilderness is their mother.' (Görög-Karady, 1979:52 ff.)

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³⁰ The CRC includes a clause that is the complement of the verb kó.

(46) Bambara. (**ní**-) CRC modifying the oblique; coreferential in MC: pronoun **òlu** [ní wùlu dòn-na dú mín kɔ́nɔ], [à b' if dog enter-PFV.AFF compound REL in 3SG IPFV.AFF 'Whatever compound the dog enters, he directly goes toward

í nésin [òlu]_{GEN} ká súrofana sìgi-len mà] REFL orient 3PL.EMPH CON dinner put-PART PP their (the compound's members') served dinner' (Dunbiya & Sangare 1996:53)

- <46> The coreference in the last example builds on the metonymic relation between $\mathbf{d}\hat{\mathbf{u}}$ 'compound' as a place where the dog enters and $\mathbf{d}\hat{\mathbf{u}}$ 'family', represented by $\mathbf{\delta}\mathbf{l}\mathbf{u}$ 'they' as the people living in one compound and who the dinner has been prepared for.
 - (47) Bambara. (**mána**-) CRC modifying one conjoint of the subject; coreferential in MC: pronoun **ò**

[ń ní [kúngo-taa-la mîn]_{CONJ} mána bèn síra fè, 1SG and wilderness-go-AG REL COND meet road PP 'I explain it to every person walking in the wilderness I meet

ń b' à néfo [ò yé]_{OBL} ...

1SG IPFV.AFF 3SG explain D.DEM PP

(lit. me and whoever walks around in the wilderness meet on the road,
I explain it to him/her' [dumestre-manigances 2003 09-dis.html, #320942]

3.1.5. Summary: the constructions in Bambara

- <47> Like in the Senufo languages discussed above, Bambara relatives are correlative constructions. The typical RC precedes the MC. The head is marked by means of the relative morpheme mîn / mínnù ~ múnnù originating in a deictic demonstrative, which is still in use in this function in another Manding variety. In a Bambara RC, mîn has subordinating function, and its position signals the syntactic role relativized. The main difference vis-à-vis the Senufo languages is the strict word order in Manding. A coreferential NP in the MC usually consists of or is determined by the discourse demonstrative ò.
- <48> There are two types of conditionals, one introduced by the conjunction **ní** 'if', possible with all clause types and both polarity values, and another one that shows the (affirmative) conditional auxiliary **mána**, which is restricted to verbal clauses. CRCs are possible with either conditional marking. The other features of the clause correspond to those of RCs.

4. Conclusion: the constructions and their meaning

<49> In the previous sections of this paper I have shown that several Gur and Mande languages spoken in large areas in West Africa have a type of relative clause that is additionally marked as conditional. These languages are Syer and Supyire, two varieties belonging to the Senufo group (Gur), and Bambara as a representative of Manding (Mande). According to formal reasons the relevant construction was called the conditional-relative clause. From a functional point of view these constructions are said to be nonreferential (Carlson 1994) or generalizing relative clauses (Creissels 2009, Creissels & Sambou 2013, Vydrin 2019). Such 'generalizing' relative clauses translate into English with a pronoun that comprises the element -ever as in whoever, whatever, related to the representative-instance quantifier every, or any X that, comprising another quantifier of the same type, any.

The question to be answered in this section is how the generalizing function of CRCs is brought about in the three languages presented above. Therefore, it is worthwhile resuming the functions of each of the formal components making up the conditional-relative clauses.

<50> On the one hand, the conditional expresses a hypothetical event, i.e. an event abstracted from a concrete, real situation. It creates a hypothetical mental space, which is distinct from current reality and establishes a particular viewpoint by removing the situation from the current reality of the actual speech event (Langacker 1997:220-221). The two main subtypes of conditionals discussed above are the hypothetical conditionals (HCs) and the course of events conditionals (CECs). The HCs represent hypothetical non-factual events. The CECs, bearing the same hypothetical encoding, reflect habitual or generic situations resulting from former real instances of an event type that have occurred at specific points in time. The similarity of encoding of these two subtypes provides evidence of the possibility for hypothetical events to be interpreted as general, habitual or universally valid events, provided they are combined with some higher-order terms and/or the appropriate tense-aspect marking.

Thus, the Bambara proverb (38) 'If / when(ever) you call a blind person, you call (in fact) two people' results from the observation of several instances of a scene where a blind person comes in the company of a child guiding him or her to the one who requests him/her to come. Nevertheless, it is also valid when the speaker him/herself never observed a concrete event of this type. Building up a hypothetical mental space (Fauconnier 1995, Langacker 1997) triggered by the conditional auxiliary in Syer, Supyire and Bambara or by means of the conjunction ní 'if' in Bambara, the speaker detaches the situation from all concrete occurrences and thereby generalizes it.

- <51> On the other hand, a RC modifies clausally a participant of an event that has a syntactic role in the MC. But this syntactic role is only indirectly represented in it by means of a coreferential NP. The relative morpheme corresponding to the interrogative in Syer, to the (extended) demonstrative in Supyire and the unique relative morpheme, originating in a presently obsolete demonstrative in Bambara signals which argument of the clause will be co-referred to in the MC, i.e. about which one the speaker wants to tell something in the MC. The RC modifies and thereby restricts the referent among other entities belonging to the same type. The type of entity is either specified lexically, when the head is overtly mentioned, or only schematically, when the head is replaced by the relative pronoun. The event expressed in the MC holds for the entity restricted by the event expressed in the RC.
- <52> The CRC makes use of both the function of the conditional as a means to abstract from concrete instances of an event type and of the relative as a means to restrict the referent of a type of entity. In the CRC, the conditional encoding conveys the modifying event a hypothetical property; a particular type is restricted by the hypothetical property. By a clause meaning 'hypothesize an entity X restricted by the hypothetical event expressed in the RC', abstraction is made from a concrete individual, because an entity that is modified by a non-actual event is itself non-actual. This means it can be any entity of the given type, under condition that the hypothetical restriction applies. The coreferential NP in the MC refers to such a hypothetical or non-actual entity and the MC predicts something upon such a non-actual and consequently generalized entity.

In English generalizing relatives *every X that*, *any X that* the generalization is achieved through the representative-instance quantifiers³¹ *every*, *any*, *a*, which stand for any member of a particular type restricted or modified by the event expressed in the RC. In the three languages discussed above generalization of a property attributed to a type is achieved by presenting this property as hypothetical.

The representative-instance quantifiers *every*, *any*, *a* quantify a single, arbitrary instance of the nominal category, which is, however, a representantive of it. By using them, generalization is achieved, because, "although just one member of the class is actually mentioned and ascribed a property, what holds for a representative member must hold for the others as well" (Langacker 1997:217).

Abbreviations

Numbers before an abbreviation indicate 1st or 2nd (or, in Bambara 3rd) person pronouns, numbers following an abbreviation stand for the noun class of the referent.

1sgs	first person singular subject	INTER	interrogative morpheme
1sgns	first person sing. non-subject	IP	intransitive prefix
AFF	affirmative	IPFV	imperfective
AG	AGENT	IT	itive
Aux	auxiliary	L	low tone
CON	connective (genitive)	M	mid tone
COND	conditional auxiliary	MC	main clause
COND	conditional clause	NEG	negative
CONJ	conjoint	O	object
COP	copula	OBL	oblique
COP.LOC	copula in clause with predicate locative	PART	participle
CEC	course of events conditional	PFV	perfective
CRC, CRC	conditional-relative clause	PL	plural
DEF	definite	PP	postposition
D.DEM	discourse demonstrative	PR	simple pronoun
DEIC.IDEN	deictic identifier	PROH	prohibitive
DEM	demonstrative	PRF	perfect
DP	discourse particle	PROG	progressive
EMPH	emphatic	Q	question marker
FP	future prefix	RC, RC	relative clause
FUT	future	REFL	reflexive
HAB	habitual	REL	relative morpheme (determiner or pronoun)
HAB.SEQ	habitual sequential	SUF	relativizing suffix
HC	hypothetical conditional	REM	remote past
HEST	hesternal past	RES	resumptive subject pronoun
HL	high-low tone	RM	clause-final relative marker
HOD	hodiernal past	S	subject
GEN	genitive	SG	singular
IDEN	identifier	SUBJ	subjunctive
IND	indefinite morpheme	V	verb
INF	infinitive	X	oblique

References

Athanasiadou, Angeliki and René Dirven 1997

'Conditionality, hypotheticality, counterfactuality'. In: Athanasiadou, Angeliki and René Dirven (eds.) *On conditionals again*, pp.61-96. Amsterdam: Benjamins

Bailleul, Charles 2005

Sagesse bambara. Proverbes et sentences. Bamako: Donniya

Bailleul, Charles, Gérard Dumestre, and Valentin Vydrin 1992

Npogotigiw ni bilisiw. Sankt-Petersburg: Gafedilanso Eropukènè

Bird, Charles, John Hutchison, and Mamadou Kanté 1977

An ka bamanankan kalan. Introductory Bambara. Bloomington: Indiana University Linguistics Club

Carlson, Robert J. 1994

A grammar of Supyire. Berlin: Mouton de Gruyter

Carlson, Robert J. 1997

The Senufo languages. Gur Papers / Cahiers voltaïques 2:23-42.

Carlson, Robert J. 2012

'Proto-Senufo noun phrase syntax and morphology'. Proto-Niger-Congo. Comparison and reconstruction. International congress, Paris, 18-21 September 2012 (abstract and handout)

Comrie, Bernard and Tania Kuteva 2013a

'Relativization strategies'. In: Dryer, Matthew S. and Martin Haspelmath (eds.) *The World Atlas of Language Structures Online*. Leipzig: Max Planck Institute for Evolutionary Anthropology. http://wals.info/chapter/s8, (accessed 2015-10-02)

Comrie, Bernard & Tania Kuteva 2013b

'Relativization on subjects'. In: Dryer, Matthew S. and Martin Haspelmath (eds.) *The World Atlas of Language Structures Online*. Leipzig: Max Planck Institute for Evolutionary Anthropology. http://wals.info/chapter/122, (accessed 2017-08-11)

Creissels, Denis 2009a

'Les relatives corrélatives: le cas du malinké de Kita'. *Langages* 174:39-52.

Creissels, Denis 2009b

Le malinké de Kita: un parler mandingue de l'ouest du Mali. Cologne: Köppe

Creissels, Denis & Pierre Sambou 2013

Le mandinka: phonologie, grammaire, textes. Paris: Karthala

Dombrowsky-Hahn, Klaudia 1998

'Contact minyanka-bambara: l'exemple de la relativisation'. *Gur Papers / Cahiers voltaïques* 3:27-34.

Dombrowsky-Hahn, Klaudia 2015

A grammar of Syer: phonology, morphology and argument realization (Western Karaboro, Senufo). Cologne: Köppe

Dombrowsky-Hahn, Klaudia 2018

'Relative clauses in Syer (Western Karaboro, Senufo, Gur) '. In: Kramer, Raija and Roland Kießling (eds.) *Current approaches to Adamawa and Gur languages. To the Honour of Raimund Kastenholz. Afrika und Übersee Beiheft 34*, pp.127-170. Cologne: Köppe

Dumestre, Gérard 1979

La geste de Ségou racontée par des griots bambara. Paris: Armand Colin

Dumestre, Gérard 1989

La pierre barbue et autres contes du Mali. Edition bilingue bambara - français. Angers: Ville d'Angers, Bibliothèque Municipale

Dumestre, Gérard 2003

Grammaire fondamentale du bambara. Paris: Karthala

Dumestre, Gérard 2011

Dictionnaire bambara - français suivi d'un index abrégé français - bambara. Paris: Karthala

Dumestre, Gérard and Ismael Maïga 1993

Baabu ni baabu. Paris: Éditions du MRAP/Différences

Dunbiya, Siyaka and Bakari Sangare 1996

An ka yele dəənin. Bamako: Jamana

Fauconnier, Gilles 1995

Mental spaces: aspects of meaning construction in natural language. Cambridge: Cambridge University Press

Givón, Talmy 2001

Syntax: an introduction. Volume II. Amsterdam: John Benjamins

Görög-Karady, Veronika 1979

Contes Bambara du Mali recueillis et présentés par Veronika Görög. Transcription et traduction, en collaboration avec Abdoulaye Diarra. Dessins de Abdoulaye Diarra.

Mali bamannsiirinw (vol. 1). Paris: Publications Orientalistes de France

Kuteva, Tania and Bernard Comrie 2005

'The typology of relative clause formation in African languages'. In: Voeltz, Erhard F. K. (ed.) *Studies in African Linguistic Typology*, pp. 209-228. Amsterdam: Benjamins.

Langacker, Ronald W. 1997

'Generics and habituals'. In: Athanasiadou Angeliki and René Dirven (eds.) *On conditionals again*, pp. 191-222. Amsterdam: Benjamins

Miehe, Gudrun, Brigitte Reineke, and Kerstin Winkelmann 2012

Noun class systems in Gur languages. Vol. II. North Central Gur languages. Cologne: Köppe

Miehe, Gudrun and Kerstin Winkelmann (eds.) 2007

Noun class systems in Gur languages, Vol. I. Southwestern Gur languages (without Gurunsi). Cologne: Köppe

Nikitina, Tatiana 2012

'Clause-internal correlatives in Southeastern Mande: a case for the propagation of typological rara'. *Lingua* 122:319-334

Sweetser, Eve 1990

From etymology to pragmatics. Metaphorical and cultural aspects of semantic structure. Cambridge: Cambridge University Press

Traugott, Elizabeth C. 1985

'Conditional markers'. In: Haiman, John (ed.) *Iconicity in syntax: proceedings of a Symposium on Iconicity in Syntax, Stanford, June 24-26, 1983*. Amsterdam: Benjamins Vydrin, Valentin (2019)

Cours de grammaire bambara. Ouvrage en réalité augmentée. Paris: Presses de l'INALCO

Syer data are taken from recorded texts indicated in parentheses at the end of an example. Examples not showing a source are elicited. The sources of Bambara data indicated in [] stem from the *Corpus bambara de référence*, an online ressource under: http://cormand.humanum.fr/noms_fichiers.html or other internet sources. Among them are the following:

[diarra-ntalen.dis.html] Jara, Umaru Nanankoro. 2012

Ntalen. Manuscrit; http://cormand.huma-num.fr/noms_fichiers.html (accessed 2017-09-08)

[dumestre-manigances_2003_09-dis.html]

http://cormand.huma-num.fr/noms fichiers.html (accessed 2017-09-08)

[entretien sida 1994_04_10.dis.html] – Entretiens sur le sida: Zacharia avec A., 10.04.1994

http://cormand.huma-num.fr/noms_fichiers.html (accessed 2017-09-08) [npogotiginin kokorobola]

https://www.indiana.edu/~afrifolk/bam_folk/ftale/ftale_bam1.pdf (accessed 2017-09-08)

Examples without references were elicited.