

CONDITIONAL CONSTRUCTIONS IN AFRICAN LANGUAGES

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This paper serves as an introduction to the special issue of *Studies in African Linguistics* devoted to conditional constructions in African languages. I first describe the motivation for this volume and the common terminological conventions used in the papers, before discussing some of the more influential attempts to categorize conditional constructions together with some of the functions of conditional constructions. I then present an overview of conditional constructions in African languages, noting the various kinds of conditional meanings that are distinguished grammatically in different languages, and types of isomorphism between conditional constructions and other categories. I conclude with a note on concessive conditionals.

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1. Why have a special issue devoted to conditional constructions in African languages?

In contrast to the extensive literature on conditionals in English and other major European languages (see for example Lycan 2001 and von Stechow 2011 from a philosophical perspective, Dancygier & Sweetser 2005 from a cognitive linguistic perspective, and Evans & Over 2004 and Girotto & Johnson-Laird 2004 from a psychological perspective), far less work has been done on conditional constructions in other languages. Although morphological and syntactic descriptions of conditional constructions exist for many languages, these are sometimes incomplete, and information about the distribution and functions of conditional constructions is often lacking. Even the excellent *World Atlas of Linguistic Structures* (Dryer & Haspelmath 2013) has no chapters or features¹ dealing specifically with conditional constructions.

This special volume of *Studies in African Linguistics* contains descriptions of conditional constructions in languages representing Chadic, Eastern Nilotic, Kumuz, Mande, Atlantic, Kwa, and Grassfields and narrow Bantu. Descriptions of the forms of conditional constructions exist for many languages within these groups, but information about the functions of such constructions is often lacking or far from complete. The contributions in this volume therefore pay special attention to the distribution and interpretation of conditional constructions.

In a conditional sentence, a (typically subordinate) clause (the protasis) states some condition, the truth of which is not asserted, under which another (main) clause (the apodosis) holds. The protasis is conventionally labelled p and the apodosis is conventionally labelled q . Examples in the contributions to this volume of *SAL* are presented by placing each clause in a conditional

¹ A feature in *WALS* is a structural property of language that describes one aspect of cross-linguistic diversity.

sentence within square brackets labelled P for the protasis and Q for the apodosis.²

English constructions of the type ‘if *p*, (then) *q*’ are often presented as archetypal conditional sentences. However, ‘if *p*, (then) *q*’ sentences can be used to express a range of meanings, and conversely, various other constructions in English can also express conditions. This state of affairs reflects a fundamental problem in using the label ‘conditional’ to describe constructions in different languages with similar but distinct functions. The mere fact of producing an issue of a journal dealing with conditional constructions might suggest that the editors believe in cross-linguistic categories, including one labelled ‘conditional’; this is not the case. What we do believe, is that all languages have ways to express cases where one proposition describes the conditions under which some other proposition holds, and that many languages have constructions which are predominantly, or at least frequently, associated with the expression of such cases. We believe that there is sufficient “family resemblance” (LaPolla 2016) between such cases to warrant the use of the term ‘conditional construction’ to describe any linguistic construction for which the expression of such cases is, as Comrie (1986: 82) suggests, either the “basic function” or “one of the basic functions of the construction”. It is in this sense that the term ‘conditional construction’ should be understood in this volume.

2. Classifications of conditionals

To account for the range of conditional meanings found in English and other languages, various classifications of conditional constructions have been proposed. These include the classifications in Athanasiadou & Dirven (1997) discussed in Harley (2017), Feuillet (2006) discussed in Solomiac (2017), and Bhatt & Pancheva (2006). For reasons of space, however, we will only consider three classifications here: those found in Taylor (1997) and Thompson, Longacre & Hwang (2007: 255–262) are two of the more influential recent classifications (at least in the typological and linguistic literature), and the classification proposed in Saloné (1979) has been widely discussed particularly in relation to Bantu languages.

Thompson, Longacre & Hwang (2007), following Schachter (1971), make a basic distinction between *reality* conditionals and *unreality* conditionals. Reality conditionals refer to present, habitual/generic or past situations, distinguished in English by the tense and aspect marking in the protasis:

- (1) [If it’s raining out there,]_P [my car is getting wet.]_Q (present situation)
- (2) [If you step on the brake,]_P [the car slows down.]_Q (habitual/generic situation)
- (3) [If you were at the party,]_P [then you know about Sue and Fred.]_Q (past situation)

In English, if the protasis of a present or past reality conditional refers to a situation or event which is known to be true, *since* can often replace *if* (and *then* is omitted from the apodosis). This substitution cannot be made in habitual/generic reality conditionals, however. Substituting *since* for *if* expresses that both the protasis and the apodosis are true. For Comrie (1986: 79–81), genuine conditionals never express the factuality of either the protasis or the apodosis (although

² Other conventions do exist; for example, contributions to Dixon & Aikhenvald (2009) adopted SC (for ‘supporting clause’) and FC (for ‘focal clause’) rather than *p* and *q*.

factuality may be inferred or known independently of the use of a conditional construction), and so protases with *since* do not constitute genuine conditional clauses.

Unreality conditionals refer to situations which can be imagined (*imaginative* conditionals) or predicted to occur (*predictive* conditionals³); imaginative conditionals are further subdivided into *hypothetical* and *counterfactual* conditionals:

- (4) [If I saw David,]_P [I'd speak Barai with him.]_Q (hypothetical)
- (5) [If you had been at the concert,]_P [you would have seen Ravi Shankar.]_Q (counterfactual)
- (6) [If he gets the job,]_P [we'll all celebrate.]_Q (predictive)

Taylor (1997) and Saloné (1979) both distinguish three basic types of protasis, but the extensions of their categories differ. Taylor proposes the following categories of conditional clause:

- Factual: *p* is known to be true
- Hypothetical or 'possible': *p* could happen, but might not
- Counterfactual: *p* is known to be false

Taylor's *factual* conditionals correspond to Thompson et al.'s *reality* conditionals, and his category of *hypothetical* conditionals includes Thompson et al.'s *hypothetical* and *predictive unreality* conditionals.

Saloné distinguishes *simple* conditionals, which state that a proposition results if another proposition holds, from *imaginary* conditionals, which are subdivided into *hypothetical* conditionals, in which the apodosis expresses a hypothetical or imaginary proposition, and *counterfactual* conditionals, in which the protasis expresses a proposition which is assumed to be false. Saloné's *hypothetical* and *counterfactual* conditionals correspond to those of Thompson et al., but *simple* conditionals include not only Thompson et al.'s *reality* conditionals but also their *predictive unreality* conditionals; Saloné's example of a future *simple* conditional (below) would be classified as a *predictive unreality* conditional by Thompson et al. The different classifications are summarized in Table 1.

- (7) [If you go to the store,]_P [I will cook.]_Q

³ Note that this use of the term 'predictive' differs from that of Dancygier (1992, 1993) in which a 'predictive' conditional is one in which the content of the apodosis is predictable from the content of the protasis. Dancygier's 'predictive' conditionals are identical with the 'content' conditionals discussed below.

Table 1: Three classifications of conditional meanings

Thompson, Longacre & Hwang (2007)		Taylor (1997)	Saloné (1979)	
Reality		Factual	Simple	
Unreality	Predictive	Hypothetical		
	Hypothetical		Imaginary	Hypothetical
	Counterfactual	Counterfactual		Counterfactual

In addition to the different kinds of condition associated with the protasis, various types of relations between the protasis and the apodosis can be distinguished (see Sweetser 1990, 1996):

- Content: q is a prediction – [If it rains,]_P [the match will be cancelled.]_Q
- Epistemic: q is a conclusion – [If she does not answer,]_P [she is not at home.]_Q
- Directive: q is an exhortation – [If she does not answer,]_P [call her at work.]_Q
- Interrogative: q is a question – [If it rains,]_P [will the match be cancelled?]_Q

In all of the above types of relation, the protasis – whether hypothetical, factual or counterfactual – introduces a situation in which the apodosis applies. This has the effect of framing the discourse (as noted by Caron 2006, discussed in §4 below). For example, the conditional clause in line 1a (below⁴) introduces a situation in which the exhortations in lines 1b–4 apply, and the conditional clauses in lines 5a and 6a each indicate a change of topic:

- (8) 1. a. If there is a problem between your husband and you, b. you must deal with it at home.
 2. Do not allow yourself to make a noise outside where people will laugh at you.
 3. Do not make fun of your husband.
 4. Do not do anything which will make him feel ashamed.
 5. a. If he gives you work to do, b. you must do it well, so that he will be happy.
 6. a. If your husband is sad, b. you must help him so that he will have peace in his heart.

This close conceptual relationship between conditionals and framing is arguably what underlies the following pragmatic uses of conditional expressions:

- Argumentational conditionals, in which p is assumed for the sake of argument, and the question of whether p is factual, hypothetical or counter-factual is not at issue (as in example (8) above).

⁴ This is a translation of a text in Nuni [nnw] collected and glossed by Kadio Corneille and analyzed during a non-narrative discourse workshop led by Stephen Levinsohn in Burkina Faso in 2002.

- Nonconditional conditionals or speech act conditionals⁵, in which q is asserted and p states a situation under which q would be relevant: *If Peter asks you, I did receive his letter* (Geis & Lycan 1993, cited in Lycan 2001: 191).
- Qualified denials, in which the protasis is presupposed not to be true: *If Ronald Reagan stole money, I've never heard of it* (Geis & Lycan 1993, cited in Lycan 2001: 198).
- Pseudo-factive concessives, in which p is presupposed to be true and q contains a pronoun (*it* in the following example) which is coreferential with the protasis: *If I survived the summer, it was no thanks to you* (Geis & Lycan 1993, cited in Lycan 2001: 198).

In addition, Geis & Lycan (1993) mention two pragmatic uses of conditionals in English which do not seem to be so clearly related to the notion of framing:

- Qualified assertions: *If memory serves, the capital of Honduras is Tegucigalpa* (Geis & Lycan 1993, cited in Lycan 2001: 199).
- Factive concessives: *James' theory was plausible, if elaborate* (Geis & Lycan 1993, cited in Lycan 2001: 197).

These pragmatic uses of conditionals probably do not exhaust the functions of conditionals in English; other languages may not use conditional constructions for all of these functions, but may have additional uses for conditional constructions which are not found in English.

3. Grammatical marking of types of conditionals

The categorizations of conditionals discussed in §2 are useful for distinguishing different meanings, but they need not exhibit any direct correspondences with the conditional constructions found in a given language. That is, different languages distinguish different types of conditional meaning linguistically, leaving other meaning distinctions to be determined pragmatically. This section provides a brief overview of some of the ways in which the field of conditionality is subdivided in different African languages.

3.1. Expressing degrees of hypotheticality. Given the cross-linguistic variation concerning which types of conditionals are overtly expressed, Comrie (1986: 88–93) rejects attempts to distinguish discrete categories of conditionals, preferring instead to view different conditional sentences as falling along a continuum of hypotheticality, with reality conditionals at the higher end and counterfactual conditionals at the extreme lower end. Which particular distinctions within this continuum, if any, are expressed linguistically varies from language to language. There is evidence that some Bantu languages distinguish different degrees of hypotheticality in ways that cross-cut the distinctions between and within reality and unreality conditionals. Ngonyani (2017) argues that Ndendeule distinguishes three degrees of hypotheticality: the verbal prefix *ka-* in the protasis marks reality conditionals (including temporal subordinate clauses that

⁵ Also called 'biscuit conditionals', following Austin's famous example, *There are biscuits on the sideboard if you want them*.

would be glossed as *when* rather than *if* in English) and predictive unreality conditionals in which the condition is highly probable; the subordinating conjunction *anda* ‘if’ at the start of the protasis marks hypothetical and predictive conditionals in which the realization of the condition is merely possible; and the verbal prefix *nge-* marks counterfactual conditionals and hypothetical conditionals in which the condition is highly unlikely to be realized. A similar division is found in Cuwabo (Guérois 2017), although interestingly a high degree of hypotheticality (that is, counterfactual conditionals and hypothetical conditionals where the condition is highly unlikely to be realized) are marked by the verbal prefix *ka-*, whereas the possibly cognate form in Ndendeule marks a low degree of hypotheticality.

However, there is evidence from written Swahili that correlations between specific linguistic expressions and degrees of hypotheticality may reflect tendencies rather than categorical correspondences. In a corpus analysis of written Swahili, Mwamzandi (2017) found that both the verbal prefix *ki-* and the subordinating conjunction *ikiwa* ‘if’ can be used in protases expressing low and neutral degrees of hypotheticality, and that both *ngeli-/ngali-* and *nge-* mark counterfactual conditionals to a similar degree (24 and 23 occurrences respectively) whilst *nge-* can also mark non-counterfactual protases with a high degree of hypotheticality. In other words, corpus data suggests that the conditional construction which a speaker or writer chooses to use may correspond only partially and imperfectly to the degree of hypotheticality being expressed.

3.2. Variation in the expression of predictive conditionals. Saloné (1977, 1979) notes that although *predictive* conditionals, as in example (7) above, are semantically unreal, this is not always reflected in how they are marked morphosyntactically (see also Thompson et al. 2007: 258–9). In some languages (including English and Haya), *predictive* conditionals have the same morphosyntactic marking as *reality* conditionals, but in other languages (including Yoruba and Chagga) they have the same morphosyntactic marking as *imaginative unreality* conditionals (that is, *hypothetical* and *counterfactual* conditionals). This division is reflected in the fact that Thompson et al.’s *predictive* conditionals are included in Taylor’s *hypothetical* (as opposed to *factual*) category but in Saloné’s *simple* (as opposed to *imaginary*) category (see Table 1 above).

Haya marks *reality* and *predictive* conditionals with a ‘future tense’ in the protasis; in *reality* conditionals the ‘future tense’ marker occurs on the auxiliary *ba*, but in *predictive* conditionals it occurs on the lexical verb:

(9) [ká John a-la-ba y-á-ikiriza]_P [Jack y-á-yânga.]_Q
 if John 3SG-FUT-AUX 3SG-PST1-agree Jack 3SG-PST1-disagree
 ‘If John agreed, Jack disagreed (earlier today).’ (Saloné 1979: 68)

(10) [ká n-da-mu-bóna]_P [n-da-mu-gambîla]_Q
 if 1SG-FUT-3SG-see 1SG-FUT-3SG-tell
 ‘If I see him, I will tell him.’ (Saloné 1979: 70)

Hypothetical and *counterfactual* conditionals in Haya differ from *reality* and *predictive* conditionals in that the former must contain a past or perfect verb form in both clauses:

- (11) [ká n-a-ku-bona efarasy ein ámabába]_P [ti-n-á-ku-amini]_Q
 if 1SG-PST1-unreal-see horse having wings NEG-1SG-PST1-unreal-believe
 ‘If I saw a horse with wings, I wouldn’t believe it.’ (Saloné 1979: 75)

The same form may occur in the protases of *reality* and *predictive* conditionals in Eegimaa also (Basssene 2017). Conditionals in Eegimaa are expressed either through the combination of falling pitch and a pause, or by means of two morphemes that occur optionally in the protasis: the postverbal particle *me* and the clause initial construction *éni*. Both *reality* and *predictive* conditionals can be marked using *me*, the difference being indicated through the use of a connective or a future tense marker respectively in the apodosis. (No examples of *éni* in predictive conditionals are provided.)

- (12) [Gu-sen-i me,]_P [n’ u-nnom-en-il é-be.]_Q
 3PL-give-2SG DEP CON 2SG-buy-CAUS-3PL CL-cow
 ‘If they give you (money), you sell them a cow.’

- (13) [A-sen-i me,]_P [pan u-nnom-en-ol é-be.]_Q
 3SG-give-2SG DEP FUT 2SG-buy-CAUS-3SG CL-cow
 ‘If he gives you (money), you will sell him a cow.’

In Yoruba and Chagga, in contrast to Haya but like Eegimaa, the protasis is not marked for tense, but the apodosis can be. In the Yoruba examples below, the *predictive* (Saloné’s *future simple*) conditional and the *hypothetical* conditional both contain *bí* ‘if’ and the indefinite marker *bá* in the protasis, and future tense in the apodosis:

- (14) [bí mo bá lo sí ilé-awosan,]_P [mo máa pàdé òré mi]_Q
 if 1SG INDEF go to cinema 1SG FUT meet friend my
 ‘If I go to the cinema, I will meet my friend.’ (Saloné 1979: 72)

- (15) [bí m bá rí esin t’ó ni iyé,]_P [màá dákú]_Q
 if 1SG INDEF see horse REL has wings 1SG.FUT faint
 ‘If I saw a winged horse, I would faint.’ (Saloné 1979: 73)

3.3. Hypothetical and counterfactual conditionals. Thompson et al. (2007: 257) note that *hypothetical* and *counterfactual* conditionals often exhibit “special marking”.⁶ Cross-linguistically, *hypothetical* and *counterfactual* conditionals are typically encoded in two basic

⁶ Note that Comrie (1986: 89) claims that no language has a specific form to mark *counterfactual* conditionals, but rather that counterfactuality is implied in certain contexts. Nevertheless, many languages have one or more conditional constructions which allow counterfactual interpretations (and other constructions which do not), and it is in this sense that we will use the term *counterfactual*.

ways. Some languages mark the protasis with a past tense,⁷ whilst others use a dedicated morpheme that expresses hypothetical and/or counterfactual conditionality. Some languages employ both strategies. In Zulu (Halpert 2012), counterfactuality can be indicated either by using a past imperfective verb form in the protasis, or through the use of a dedicated counterfactual marker *ngabe*. In the former case, a counterfactual interpretation can be cancelled given a non-counterfactual apodosis, but when *ngabe* is used, a counterfactual interpretation is not cancellable. In Ghómálá' (Bessala & Moguo 2017), both a past tense and a dedicated morpheme are used in combination. Whereas the protases in *reality* and *predictive* conditionals are not marked for tense and optionally contain the conditional marker *bê*, the protases in *hypothetical* and *counterfactual* conditionals must contain special past tense forms together with the conditional marker *pê'*.

Before looking the various morphosyntactic strategies found in different African languages to express *hypothetical* and *counterfactual* conditionals, it should be noted that in some languages, *hypothetical* and *counterfactual* conditionals are distinguished inferentially. For example, Allison (2017) provides evidence that counterfactual conditionals in Makary Kotoko are morphosyntactically identical to other types of conditional, and that counterfactual interpretations are determined entirely by the contexts in which utterances occur.

A clear example of a past tense being used to express *counterfactual* conditionals is found in Vwanji (Bantu). In Vwanji (Eaton, forthcoming), *counterfactual* conditionals are indicated by the presence of the far past form of the auxiliary 'be' in both the protasis and the apodosis. This strategy replaces the use either of the conditional verb prefix *nga-* plus subjunctive, or of the subordinating conjunction *naβe* plus subjunctive, which are found in other conditional constructions.

(16) [ʏ-ɪ¹a-β-ile ʊ-β-e kʊ=kɪ-kʊlʊkʊlʊ]_p
 2SG-PST4-be-ANT 2SG-be-SUBJ LOC=CL-celebration

[ʏ-ɪ¹a-β-ile ghʊ-i-pʊlika ɪ-N-pola]_Q
 2SG-PST4-be-ANT 2SG-PROG-hear AUG=CL-news

'If you had been at the celebration, you would have heard the news.'

In Dzùungoo (Solomiac 2017) all types of conditional can be marked by the conditional morpheme *ye* or the negative conditional morpheme *ma* in the protasis, and it is only the use of the past tense in the protasis (in addition to a conditional morpheme) that indicates *hypothetical* ('unrealizable') and *counterfactual* ('unrealized') conditionals. The apodosis typically contains a future tense marker in such cases. A slightly more complex situation holds in Eegimaa (Bassene 2017), in which *counterfactual* conditionals are indicated through the use of the verbal suffix *-en* (describing a prior event or situation that formerly existed but no longer holds) in *both* clauses, whereas in *hypothetical* conditionals (where the situation described in the protasis is still

⁷ Imperfective aspect and subjunctive mood have also been observed to correlate with counterfactuals (von Fintel 2012). However Iatridou (2000) argues that counterfactual interpretations of conditionals in Modern Greek and certain other languages are primarily due to past tense morphology, whereas the occurrence of imperfective aspect and subjunctive mood is governed by language-specific rules that are incidental to any counterfactual interpretation.

realizable) *-en* only occurs in the protasis, the apodosis being unmarked.

Other languages have special morphosyntactic constructions that indicate *hypothetical* and/or *counterfactual* conditionals. Lopit (Moodie 2017) has three ‘modality’ markers, *ngai-*, *ma-* and *mai-*, that are only used with *hypothetical* and *counterfactual* conditionals; these occur (in various combinations) in both the protasis and the apodosis. This pattern is also found in Hausa (Chadic, where the ‘irrealis’ marker *dà:*, rather than the ‘conditional’ marker *in*, occurs in both clauses of counterfactual conditionals (compare (17) with (21) and (22) below).

- (17) [dà: sun tàimàke: mù,]_P [dà: mun gamà:]_Q
 IRR 3PER help 1PL IRR 1PL.PER finish
 ‘If they had helped us, we would have finished’ (Caron 2006: 71)

In other languages, different morphosyntactic marking occurs in the protasis and apodosis. *Counterfactual* and *hypothetical* conditionals in Digo (Bantu) are expressed through the use of *kala* ‘if’ (from *ichikala* ‘if it be’) in the protasis and the ‘conditional’ verbal prefix *nge-* in the apodosis, rather than the use of either the ‘dependent’ *chi-* or ‘potential’ *ka-* verbal prefixes that occur in the protases of *reality* and *predictive* conditionals (compare (18) with (23) below).

- (18) [kala a-ka-ona pesa yuya]_P [nge-kala a-ka-zi-hala]_Q
 if 3SG-ANT-see 10.money that.one COND-be 3SG-ANT-10-take
 ‘If that man had seen money, he would have taken it’ (Nicolle 2013: 166)

Counterfactual conditionals in Gumuz (Williamson & Larson 2017) are often (but not always) expressed by prefixing the regular conditional marker *k-*⁸ to the non-future form of the ‘verb of presence’ *wot* in the protasis, followed by a relative clause.

In Buwal (Viljoen 2017), *counterfactual* conditionals are marked with the modal adverb *kēdē* ‘perhaps’ in the protasis, and there is no tense or aspect marking that distinguishes counterfactual conditionals from other types. In contrast, counterfactual conditionals in Tuwuli (Harley 2017) are indicated through the occurrence of the irrealis morpheme *kufe* at the beginning of the apodosis alone; *kufe* also has a range of other functions associated with non-assertion.

4. Isomorphy

As noted in section 1 above, for Comrie (1986: 82) a construction can be considered to be a conditional construction if its “basic function” or “one of the basic functions of the construction” is to express a conditional meaning. In practice, determining which function should be considered ‘basic’ is not always straightforward, as conditional markers are often isomorphic with markers of other semantic categories, notably (relative) time, irrealis, topic, and existence (in the form of copulas).

The use of the same construction to indicate conditionality and (relative) time (*if/when* clauses) is very common in African languages, and is found in the majority of the languages

⁸ This may be cognate with the conditional verb prefix *k-* found in a number of Eastern Nilotic languages including Teso and Turkana (Moodie 2017).

discussed in this volume (Buwal, Tuwuli, Lopit, Dzùùngoo, Eegimaa, Cuwabo, Ndendeule, and Swahili). The term ‘situative’ is sometimes used to refer to constructions with this function, which could be understood in terms of the extension of conditional meaning to include events that are considered almost certain to occur. For example, Koorete (Omotic; Höft 2014) has four conditional suffixes, one of which, *-ete*, functions as either a conditional or a temporal marker depending on the context:

(19) [eeh-ete]_P [woong-u-wa]_Q
 love.INF-COND buy.IPFV-TRV-IMP
 ‘If (you) like (it), buy (it)!’

(20) [niya es-u-na ta gooch-ete]_P [taa-so ne yoww-e]_Q
 2SG.ACC 3M.SG-TRV-INST 1SG.SBJ pull.INF-COND 1SG.ACC-LOC 2SG.SBJ come.JUS-FVC
 ‘When I pull you by it (the string), may you please come to my home.’

The Hausa conditional marker *in* (examples (21) and (22)) and the ‘dependent status’ marker *chi-* in Digo (example (23)) may each, likewise, receive either a conditional or a temporal interpretation, depending on the context:

(21) [in za: kà hu:tà:,]_P [kà zaunà: nân]_Q
 if FUT 2SG rest 2SG.SBJ sit here
 ‘If you want to rest, sit here.’ (Caron 2006: 71)

(22) [in mun gamà cî-n àbinci]_P [sai mù fita ya:wò:]_Q
 if 1PL.PER finish EAT-GL food then 1PL.SBJ go_out stroll
 ‘When we have finished eating, we’ll go for a walk.’ (ibid.)

(23) [A-**chi**-phaha mimba,]_P [a-na-tsimb-ir-wa mihi]_Q
 3SG-DEP-get 9.womb 3SG-CONT-dig-APPL-PAS 4.plants
 ‘If/When she became pregnant, (roots) would be dug up for her (from) trees.’⁹

The examples above illustrate isomorphy in markers of the protasis, but similar functions can be found in the apodosis. In Makary Kotoko (Allison 2017) the ‘sequential marker’ *aro* ‘then’ is used to join clauses which express either a conditional or a temporal relation; such conditional and temporal constructions are otherwise morphosyntactically indistinguishable.

Morphosyntactically identical constructions occur in Eegimaa (Bassene 2017) which can be interpreted as conditional clauses or purpose clauses (without an overt ‘conditional’ marker), and conditional clauses or relative clauses (with the ‘conditional’ marker *me*), depending on the speaker’s intonation and rhythm. In each case, a pause after the protasis yields a conditional interpretation.

Isomorphy between conditionals and topics has also been well documented. Haiman (1978:

⁹ This example comes from a text describing traditional Digo culture, and the subject refers to any woman who became pregnant.

577) identified two languages – Turkish and Tagalog¹⁰ – in which the regular conditional marker is also the regular topic marker, as well as other languages in which there is partial identity between conditionals and topics. Based on these similarities, Haiman (ibid. 564) argued that the protasis of a conditional sentence functions like a topic clause: “Conditionals, like topics, are givens which constitute the frame of reference with respect to which the main clause is either true (if a proposition), or felicitous (if not).” However, Caron (2006) argued that conditionals are better thought of as ‘frames’ rather than topics¹¹, and noted that in some languages, such as Hausa, the protasis may follow the apodosis, thereby functioning as an antitopic:

- (24) [kadà kà sàya:]_Q [in ya: yi tsà:da:]_P
 NEG 2SG.SBJ buy if 3SG.PER do expensiveness
 ‘Don’t buy [it] if it’s [too] expensive’ (Caron 2006: 76)

Furthermore, in Banda Linda (Adamawa) and in a number of Chadic languages, there is isomorphy between conditionals and focus markers; in Polci (Chadic) the form used is the copula *kən*:

- (25) wún gi kən yu jən a ga: gi
 girl DEICT COP pour milk in calabash DEICT
 ‘THE GIRL poured milk into the calabash’ (Caron 2006: 78)

- (26) [Gärbà kən ndʒaŋ ɔ: wú]_P [dɛ kə fū:-m]_Q
 Garba COP cut meat COMPL INJ 2SG.SBJ tell-1SG
 ‘If Garba slaughters an animal, tell me’ (ibid.)

This is similar to the situation in the Grassfields language Ghómálá’ (Bessala & Moguo) in which the ‘conditional’ marker *bā* also functions as a copula which occurs in a cleft construction indicating argument focus.

5. A note on ‘concessive conditionals’

If in English can be modified by *even* to yield an interpretation which can be taken as the opposite of *only if*. Although this type of construction has been called a ‘concessive conditional’, *even if* clauses do not in fact express conditions at all, and constructions involving *even if* cannot receive an *iff* (‘if and only if’) interpretation.¹² Example (27) below can be paraphrased as ‘I will dance no matter what happens, including if she sings’ where ‘she sings’ is an event that would be expected to make ‘I will dance’ unlikely (see Lycan 2001: 127 for discussion).

- (27) [Even if she sings,]_P [I will dance]_Q

¹⁰ Haiman (1985: 34–35) also discusses Korean and Vietnamese.

¹¹ Similarly, Sweetser (1990: 125–133) argues that protases in English express givenness and that this need not always correspond with topicality.

¹² For more detailed discussions of concessive conditionals, see Haspelmath & König (1998), König & Haspelmath (no date), and Moodie (2017).

English expresses ‘alternative concessive conditional clauses’ with the subordinating connective *whether* and the disjunction *or*. In this construction, the markers *whether* and *or* join different clauses which typically present an exhaustive set of alternatives. This can sometimes be truncated to ‘whether or not *p*, *q*’, which is interpreted similarly to ‘even if *p*, *q*’ except that it is not necessarily the case that the situation described in *p* would be expected to make the situation in *q* unlikely. Thus in (28) ‘she sings’ has no bearing on whether ‘I will dance’ is more or less likely to happen:

(28) [Whether or not she sings,]_P [I will dance]_Q¹³

The fact that English and some other languages can express ‘concessive’ subordinate clauses with a modified ‘if’ construction (e.g. *even if*) does not mean that translation equivalents of *even if* in other languages must always be considered a sub-category of conditionals, since concessive constructions do not necessarily share formal properties with conditional constructions. This is seen in Dzùungo (Solomiac 2017), which has two concessive markers: *kènseen*, which co-occurs with the conditional marker *ye*, and *ári* (borrowed from Jula), which co-occurs with the negative subjunctive marker *mà*. The former has a clear formal similarity with conditional clauses, the latter does not.

In Gumuz (Williamson & Larson 2017) concessives are formed by adding a locative suffix *-an* to the regular conditional *k-* + *non-future* verb form in the protasis, or to the *nagw-* + *non-future* verb form in cases where the protasis is known to be true. These constructions are clearly related to (non-concessive) conditional constructions. In contrast, concessive constructions in Buwal (Viljoen 2017) do not contain any marker of (non-concessive) conditionality. However, Buwal has four distinct expressions, each of which occurs at the start of the protasis: *màdā* ‘if’ for ‘possible conditionals’ (that is, *reality*, *predictive*, and *hypothetical* conditionals), *kēdē* ‘perhaps’ for *counterfactual* conditionals, *sēj* ‘except/only if’ for ‘necessary conditionals’ (that is, *iff*), and *káw* ‘even if’ for concessive conditionals. The fact that these expressions occur in very similar constructions (in terms of position and the tense/aspect marking of the associated verb) and the fact that *káw* can co-occur with *màdā*, argue for treating clauses containing each of these four expressions as types of a more general conditional schema.

6. Conclusion

Conditional constructions constitute a complex area of enquiry that is under-represented in the literature on African languages. This introduction has described some of the ways in which the semantic field of conditionality is expressed, noting how different semantic distinctions are represented in various ways in different languages. It has also shown how the linguistic representation of conditionality overlaps with the representation of other semantic categories, including (relative) time, topic, and concession.

¹³ The protasis can also be rendered ‘Whether she sings or not’ with no change of meaning.

Abbreviations

1	1 st person	FUT	future
2	2 nd person	FVC	final vowel continuous
3	3 rd person	GL	genitive link
10	noun class 10	IMAG	imaginative
ACC	accusative	IMP	imperative
ACT	active	INF	infinitive
ANT	anterior	INJ	injunctive
APPL	applicative	INST	instrumental
AUG	augment	IPFV	imperfective
CAUS	causative	JUS	jussive
CL	classifier	LINK	linker
COM	comitative	M	masculine
COMP	complementizer	NOMZ	nominalizer
COMPL	completive	NPAST	non-past
CON	connective	PAS	passive
COND	conditional	PER	perfect
CONT	continuative	PL	plural
COP	copula	PST1	near past
DAT	dative	SBJ	subject
DEICT	deictic	SET	setting
DEP	dependent	SG	singular
DS	different subject	SUBJ	subjunctive
FEM	feminine	TRV	transition vowel
FOC	focus		

References

- Aikhenvald, Alexandra Y. 2009b. Semantics and grammar in clause linking. In: R. M. W. Dixon & Alexandra Y. Aikhenvald (eds.) *The semantics of clause linking: A cross-linguistic typology*. Oxford: Oxford University Press, 380–402.
- Allison, Sean. 2017. Conditional constructions in Makary Kotoko. *Studies in African Linguistics* 46: 33–49.
- Athanasiadou, Angeliki & René Dirven. 1997. Conditionality, hypotheticality, counterfactuality. In Angeliki Athanasiadou & René Dirven (eds.) *On conditionals again*. Amsterdam/Philadelphia: John Benjamins, 61–96.
- Austin, John L. 1961. Ifs and cans. In: J. O. Urmson & G. J. Warnock (eds.) *Philosophical papers*. Oxford: Oxford University Press, 153–80.
- Bassene, Mamadou. 2017. Conditionals in Jóola Eegimaa. *Studies in African Linguistic* 46:103-119.

- Bessala, Ndzana Biloa Gaston & Francine Fotso Moguo. 2017. The conditional mood in Ghómálá'. *Studies in African Linguistics* 46: 143–156.
- Bhatt, Rajesh & Roumyana Pancheva. 2006. Conditionals. In: Martin Everaert, Henk Van Riemsdijk, Rob Goedemans & Bart Hollebrandse (eds.) *The Blackwell companion to syntax*. Oxford: Blackwell, 638–687.
- Caron, Bernard. 2006. Condition, topic and focus in African languages: Why conditionals are not topics. *ZAS Papers in Linguistics* 46: 69–82.
- Comrie, Bernard. 1986. Conditionals: A typology. In: Elizabeth Closs Traugott (ed.) *On conditionals*. Cambridge: Cambridge University Press, 77–99.
- Dancygier, Barbara. 1992. Two metatextual operators: negation and conditionality in English and Polish. *Proceedings of the 18th Annual Meeting of the Berkeley Linguistic Society*, 61–75.
- Dancygier, Barbara. 1993. Interpreting conditionals: Time, knowledge, and causation. *Journal of Pragmatics* 19: 403–434.
- Dancygier, Barbara, & Eve Sweetser. 2005. *Mental spaces in grammar: Conditional constructions*. Cambridge: Cambridge University Press.
- Dryer, Matthew S. & Martin Haspelmath (eds.). 2013. *The world atlas of language structures online*. Leipzig: Max Planck Institute for Evolutionary Anthropology. (Available online at <http://wals.info>; accessed on 2015-04-03.)
- Eaton, Helen. Forthcoming. Vwanji (G66). To appear in: Mark Van de Velde & Koen Bostoen (eds.) *The Bantu languages*, (2nd edition). Abingdon: Routledge.
- Evans, Jonathon & David Over. 2004. *If*. Oxford: Oxford University Press.
- Feuillet, Jack. 2006. *Introduction à la typologie linguistique*. Paris: Honoré Champion.
- von Fintel, Kai. 2011. Conditionals. In: Klaus von Heusinger, Claudia Maienborn & Paul Portner (eds.) *Semantics: An international handbook of meaning (vol. 2)*. Berlin/Boston: de Gruyter Mouton, 1515–1538.
- von Fintel, Kai. 2012. Subjunctive conditionals. In: Gillian Russell & Delia Graff Fara (eds.) *Semantics: An international handbook of meaning (vol. 2)*. New York/Abingdon: Routledge, 466–477.
- Geis, Michael L. & William G. Lycan. 1993. Nonconditional conditionals. *Philosophical Topics* 21: 35–56.
- Giroto, Vittorio & Philip N. Johnson-Laird. 2004. The probability of conditionals. *Psychologia* 47: 207–225.
- Guérois, Rozenn. 2017. Conditional constructions in Cuwabo. *Studies in African Linguistics* 46: 193–212.
- Haiman, John. 1978. Conditionals are topics. *Language* 54: 564–589.
- Haiman, John. 1985. *Natural syntax*. Cambridge: Cambridge University Press.
- Halpert, Claire. 2012. Zulu counterfactuals in and out of conditionals. In: Bruce Connell & Nicholas Rolle (eds.) *Selected proceedings of the 41st Annual Conference of African Linguistics*. Somerville, MA: Cascadilla Proceedings Project, 117–127.
- Harley, Matthew W. 2017. Conditionals in Tuwuli. *Studies in African Linguistics* 46(2): 121–141.
- Haspelmath, Martin, & Ekkehard König. 1998. Concessive conditionals in the languages of Europe. In: Johan van der Auwera & Dónall P. Ó Baoill (eds.) *Adverbial constructions in the languages of Europe*. Berlin: Mouton de Gruyter, 563–640.

- Höfft, Lydia. 2014. Koorete conditional constructions. Unpublished ms. SIL Ethiopia.
- Iatridou, Sabine. 2000. The grammatical ingredients of counterfactuality. *Linguistic Inquiry* 31:231–270.
- König, Ekkehard & Martin Haspelmath (no date). Questionnaire on concessive conditional clauses. Available at http://www.eva.mpg.de/lingua//tools-at-lingboard/pdf/ET_5_6_Haspelmath_concessive_conditional_clauses.pdf, accessed 31 March 2015.
- LaPolla, Randy J. 2016. On categorization: Stick to the facts of the languages. *Linguistic Typology*. 20: 365–375.
- Lycan, William G. 2001. *Real conditionals*. Oxford: Clarendon Press.
- Moodie, Jonathan. 2017. Conditional constructions in Lopit, an Eastern Nilotic language. *Studies in African Linguistics* 46: 51–66.
- Mwamzandi, Mohamed. 2017. A corpus study of Swahili conditionals. *Studies in African Linguistics* 46: 157–173.
- Ngonyani, Deo S. 2017. Conditionals in Ndendeule. *Studies in African Linguistics* 46: 175–192.
- Nicolle, Steve. 2013. A grammar of Digo: A Bantu language of Kenya and Tanzania. Dallas: SIL International.
- Saloné, Sukari. 1977. Conditionals. In: E. R. Byarushengo, A. Duranti & L. M. Hyman (eds.) *Haya grammatical structures*. *Southern California Occasional Papers in Linguistics* 6: 149–160.
- Saloné, Sukari. 1979. Typology of conditionals and conditionals in Haya. *Studies in African Linguistics* 10: 65–80.
- Schachter, Jacqueline C. 1971. *Presupposition and counterfactual conditional sentences*. University of California, Los Angeles: Doctoral dissertation.
- Solomiac, Paul. 2017. Le conditionnel en dzùùngoo de Samogohiri. *Studies in African Linguistics* 46: 85–101.
- Sweetser, Eve E. 1990. *From etymology to pragmatics*. Cambridge: Cambridge University Press.
- Sweetser, Eve E. 1996. Mental spaces and the grammar of conditional constructions. In: Gilles Fauconnier & Eve Sweetser (eds.) *Spaces, worlds, and grammar*. Chicago/London: University of Chicago Press, 318–333.
- Taylor, John R. 1997. Conditionals and polarity. In: Angeliki Athanasiadou & René Dirven (eds.) *On conditionals again*. Amsterdam/Philadelphia: John Benjamins, 289–306.
- Thompson, Sandra A., Robert E. Longacre & Shin Ja J. Hwang. 2007. Adverbial clauses. In: Timothy Shopen (ed.) *Language typology and syntactic description*, vol.2: *Complex constructions* (2nd edition). Cambridge: Cambridge University Press, 237–300.
- Viljoen, Melanie. 2017. Conditional constructions in Buwal. *Studies in African Linguistics* 46: 17–32.
- Williamson, Travis T. & Eric Larson. 2017. Form and function of conditional constructions in the Gumuz language of Metekel Zone. *Studies in African Linguistics* 46: 67–84.

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