

CONDITIONALS IN TUWULI¹

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This article examines the forms and functions of conditional clauses in Tuvuli, a Kwa language spoken in South-Eastern Ghana. It reveals how the traditional categories of conditionals (e.g. hypothetical, counterfactual, concessive) do not match up very well with the formal categories found in Tuvuli, and attempts to provide semantic characterisations for each distinct construction. The article also investigates the distribution and functions of conditional clauses in Tuvuli discourse, showing how some text types and genres use conditionals much more than others, and in some cases, for quite distinct purposes.

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Tuvuli² is a Kwa language spoken by about 11,000 people in nine towns of the mountainous and linguistically diverse Volta Region of South-Eastern Ghana. Language use is reported to be vigorous, with the language being used by all generations in all domains (Lewis, Simons & Fennig 2015). It is one of at least 14 ‘Ghana-Togo Mountain Languages’ (Ring 1995), several of which have been the focus of research only during the last decade (e.g. Bobuafor 2013, Soubrier 2013), and some of which are yet to be adequately described. Their precise genetic classification and unity as a group is still a matter of some dispute (see Blench 2006), although most classifications agree that Tuvuli’s closest relatives are Ikposso and Igo, both spoken in Togo. The main previous study on Tuvuli is Harley (2005), which this article updates and complements by examining the discourse function of conditionals in texts of various genres in addition to illustrating their morphosyntactic characteristics. Most of the examples used are taken either from original texts collected in Ghana between 1997 and 2002 (both oral and written), or from observed mother-tongue conversations. A few of the rarer examples were elicited using constructed scenarios.

The article is split into four main sections: The first section gives a brief typological overview of Tuvuli, focusing on features that are helpful for understanding the forms of conditional sentences. Section two then discusses the basic properties of conditional clauses, including the various uses of the conditional morpheme *nte*. Section three explains how two main categories of conditionals (unmarked and marked) can be posited on formal grounds and illustrates the fact that they don’t match up very well with various traditional categories of conditionals proposed in previous typologies. Section four then examines the distribution and functions of conditional

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² The autodenominations for the language, people and traditional area are Tuvuli, Bawuli and Luwuli respectively. The general name for the geographical area is Bowiri. The ISO 639-3 code is [bov].

clauses in various text types and genres. Finally, a brief conclusion is given in section five, along with some ideas for further research.

1. Tuwuli typology

Phonologically, Tuwuli exhibits the common seven-vowel system (/i/, /e/, /ɛ/, /a/, /ɔ/, /o/, /u/) widespread throughout Africa, but unusually with full cross-height, root-controlled, ATR vowel harmony. Thus the vowels /i/, /e/, /o/, and /u/ form one harmony set, whilst the vowels /ɛ/ and /ɔ/ form another, although there are occasional exceptions to this. The low vowel /a/ is compatible with vowels from both sets and blocks the spread of ATR harmony. Tuwuli also has five nasal vowels (/ĩ/, /ẽ/, /ã/, /õ/, /ũ/) which partake in harmony rules to a lesser degree. There is also limited labial harmony between roots and prefixes, operating within the noun-class system and certain verbal prefixes.

Word order is fairly strictly SVO, with obligatory subject arguments which are usually realised either as independent noun phrases or as pronominal clitics attached to the verb. These clitics differ in form from independent pronouns, and vary slightly depending on the tense-aspect marking on the verb. Tuwuli also has an extensive noun class system, but unlike many other Kwa languages, subject agreement on the verb is not obligatory in simple clauses. Instead, referential agreement on verbal proclitics and independent pronouns is used primarily for the disambiguation of participants in discourse, and consequently may be switched on and off several times during the course of a single narrative. Referential agreement is mostly phonologically transparent, with some slight anomalies such as nouns whose class marker begins with either *d-* or *IV-*, which take a *d-* agreement affix on independent pronouns, but an *IV-* agreement affix on verbs.

Tense-aspect-mood (TAM) marking is mainly achieved using verbal prefixes, which occur between the pronominal clitic and the verb root. Perfective aspect is the unmarked form (and so is not represented in the glosses in this article) whilst all other TAM categories are marked either by affixes or, in the case of subjunctive mood, by a low tone on the pronominal clitic, as in the verb *ɔ-ya* – ‘you should come’ (see example (3)).

Another important verbal prefix is the focus marker *IV-* which can be either grammatically or pragmatically controlled, depending on a variety of factors. In general, it is grammatically controlled in tense-marked verbs with negative polarity, but pragmatically controlled in other cases.³ It is incompatible with pronominal clitics and must be preceded by an independent noun phrase. It should not be confused with the *IV-* agreement affix, which is used in discourse to cross reference nouns taking either a *d-* or *IV-* noun class marker.

2. Basic properties of conditional clauses.

Conditional clauses in Tuwuli can be formally identified by the clause-initial conditional morpheme *nte*. The protasis (condition) usually comes before the apodosis (consequent), as shown in (1), although occasionally the order is reversed, as in (2).⁴ In these and the rest of the examples

³ There is considerable pan-African evidence in support of a strong link between focus and negation, even to the extent that some authors (e.g. Marchese 1983) have claimed that negative sentences are inherently focussed.

⁴ In most West African languages, sentence-final conditionals are very rare, excluding cases when the conditional clause functions as the object complement of a main clause verb, as in example (4). In a

in this article, protases and apodoses are each enclosed in square brackets and labelled with a subscript _P and _Q respectively.

- (1) [ntɛ m-mɔ ye,]_P [m-aa-bi ye]_Q
 COND 1SG-see 3SG.OBJ 1SG-FUT-tell 3SG.OBJ
 ‘If I see him, I will tell him.’

- (2) [m-aa-bi ye]_Q [ntɛ m-mɔ ye]_P
 1SG-FUT-tell 3SG.OBJ COND 1SG-see 3SG.OBJ
 ‘I will tell him, if I see him.’

Conditional clauses can also function as a temporal adverbial clause, as in (3), or as the object complement of a higher verb, as in (4):

- (3) [ntɛ o-sila ɔ-mɔ fi a pɛ,]_P [lɔkɔa ɔ-ya]_Q
 COND 2SG-do:as:soon:as 2SG-see fire DET exactly then 2SG.SBJV-come
 ‘As soon as you see the fire, then come.’

- (4) kɔ̌, bɔ-aa-dã [ntɛ fɔ-aa-lɛ]
 TOP 1PL-FUT-look COND 3SG.REF-FUT-become:good
 ‘In that case, we’ll see if it will be okay.’

They can also be stacked, even inside another subordinate clause, as in (5):

- (5) e-bi ye kī ni, [ntɛ y-a-naa ɛ-na-sã ɔnɔ a ni,]_P
 3SG-tell 3SG.OBJ COMP LINK COND 3SG-IPFV-go 3SG-AUX.go-sing song DET LINK
 [ntɛ ɛ-mɔ lɛtsa-nyɛ-lɛtsa nɛ osī ni,]_P [ɛ̌-ta-bɔɛ]_Q
 COND 3SG-see thing-be-thing LOC path link 3SG.SBJV-NEG-pick:up
 ‘He told him that, if he was going to sing the song, if he saw anything on the road, he shouldn’t pick it up.’

The conditional morpheme *ntɛ* can also take a nominal rather than a clausal complement, as shown in (6):

- (6) [ntɛ aye ni,]_P [wã bati bi-bumɛna nɔ]_Q
 COND way LINK ask people 3PL-help 2SG.OBJ
 ‘If that’s the case, ask people to help you.’

ntɛ also occurs in negative conditionals where it combines with *mbɔɛ*, the polar question marker. Again, it may take either a clausal or a nominal complement, and the nearest equivalent expression in English is ‘except (if)’, although it is often translated as ‘unless’, ‘until’ or ‘only if’ as shown in (7) and (8):

sample of 53 texts in Tuwuli, only 2 out of 81 sentences with conditional clauses had the order apodosis-protasis.

- (7) [n-l-aa-wa]_Q [mbɔɛ-ntɛ m-pi katsokpa]_P
 1SG-NEG-FUT-lie:down PQM-COND 1SG-catch old:woman
 ‘I will not lie down until I catch the old woman.’
- (8) [mbɔɛ-ntɛ bi-bula lɔfɔã kade,]_P [bɛ-te osole nɛ ye awɛ]_Q
 PQM-COND 3PL-destroy tortoise own 3PL-receive woman LOC his hand
 ‘Only if they got rid of tortoise could they take the woman from him.’

Conditional clauses often end with the linker *ni* (see (5) and (6) above) which strengthens the conceptual link between the condition and the consequent. In such cases, *ni* is considered part of the protasis, since it is usually followed by a pause. However, it is not simply a subordinate clause marker, since, like more typical connectives, it occurs in a range of other medial environments, and not all subordinate clauses are compatible with *ni*. It is not a sequential marker either, since it can be used to link simultaneous events. In effect, *ni* tells the hearer that two pieces of information are to be bound together conceptually, such that the second is some kind of extension of the first. In narrative discourse, *ni* often communicates a sense of anticipation towards the following proposition. Indeed, a possible alternative gloss for *ni* would be ‘anticipatory marker’, as suggested in Harley (2005:498).⁵

3. Formal types of conditionals

The typology of conditional clauses given by Thompson, Longacre and Hwang (2007) maintains the classic distinction between reality and unreality conditionals. Reality conditionals, sometimes called factual conditionals, involve protases that refer to real, present or past conditions, whereas unreality conditionals involve protases that refer to unrealised situations, either those that could yet happen or could have happened, but didn’t. A different typology is offered by Athanasiadou & Dirven (1997), who suggest a three-way distinction between: ‘course of events’ conditionals, which correspond to ‘naturally occurring’ conditionals and which could usually be translated using ‘whenever’; hypothetical conditionals, which include a whole range of degrees of hypotheticality including counterfactuality; and pragmatic conditionals, which pragmatically offer a solution to an implied problem. A third typology is given by Comrie (1986), who sees conditionals as forming a continuum of hypotheticality, with factual conditionals at one end and counterfactual conditionals at the other. Different languages grammaticalise the continuum in various ways, from a single grammatical form for the whole continuum (e.g. Mandarin and Indonesian) to three distinct degrees of hypotheticality (e.g. Latin and Persian), although the range of hypotheticality associated with each form varies from language to language. Comrie doesn’t suggest any terms for the different categories of conditionals, but simply talks about ‘lower hypotheticality’ conditionals and ‘higher hypotheticality’ conditionals.

Conditionals in Tuvuli don’t fit neatly into any of these typologies, but can be split into two main types on formal grounds: unmarked and marked. Unmarked conditionals contain no extra morphology than would be expected from basic clause structure constraints, whereas marked

5 The linker *ni* is possibly related to the connective *né* in Ewe, another Kwa language spoken just to the south and east of Tuvuli, although *né* has a much more restricted distribution in Ewe than *ni* does in Tuvuli (cf. Ameka 2008:155–161).

conditionals involve additional coding, either in the form of special independent morphemes or a predicate focus construction. Marked conditionals are frequently used for conditionals on the hypothetical/counterfactual end of the continuum, but not always. The extra coding involved does not mark hypotheticality or counterfactuality *per se*, but in each case, has a more general function, whose interpretation is restricted by the context. An obvious question then, is how useful this formal distinction between unmarked and marked conditionals is. Ultimately, it is most useful for the purposes of description, since it is far from clear that these formal categories of conditionals correspond to distinct functional sets, and in any case, the amount of coding in conditional clauses forms more of a continuum rather than two discrete categories.

3.1. Unmarked conditionals. The simplest and most common type of unmarked conditional is when the protasis contains a perfective (unmarked) verb together with its arguments (i.e. minimal clausal content). Such clauses indicate either generic (example (9)) or future conditions (examples (10) and (11)), the two being distinguished by the tense-aspect of the verb in the apodosis:

GENERIC/HABITUAL:

- (9) [nte ɔ-mɔ lɔfɔã ni,]P [d-e kanɛ liti deĩ tigigli]Q
 COND 2SG-see tortoise LINK AGR-it back behind have sections
 ‘If/Whenever you see tortoise, his back is all patched.’

FUTURE/PREDICTIVE:

- (10) [nte ɔ-na fɔsɔ,]P [ɔ-l-aa-buki o-puli ɔ-kɛna nɔ tudzuma]Q
 COND 2SG-get sickness 2SG-NEG-FUT-add 2SG-be:able 2SG-do your works
 ‘If you become sick, you will not be able to do your work any longer.’

- (11) [nte ɛ-ya,]P [bɔ-aa-via ye fo-e akũ fɔletsɔ]Q
 COND 3SG-come 1PL-FUT-ask 3SG.OBJ REF-it on matter
 ‘If/When he comes, we will ask him about it.’

Note that whether the condition is expected to be fulfilled or is just a possibility is not marked. The conditions in (9), (10) and (11) could indicate either case depending on the context.

The next simplest type of unmarked conditional involves the presence of a past temporal adverb such as *kadzɔ* - ‘yesterday’ in the protasis. This forces a past interpretation in which the fulfilment of the condition is not known, as shown in (12):

PAST:

- (12) [nte ɛ-ya kadzɔ,]P [y-aa-nyi awã]Q
 COND 3SG-come yesterday 3SG-FUT-get:to:know there
 ‘If he came yesterday, he will have got to know the place.’

Finally, there are unmarked conditions in which the semantics of the verb in the protasis requires specific tense-aspect marking. This is the case for imperfective, present progressive and (expected) future conditions, as shown in (13), (14) and (15):

IMPERFECTIVE:

- (13) [nte a-nya lisĩ,]P [lokɔa ð-kai ogu kĩ]Q
 COND 2SG.IPFV-eat yam then 2SG.SBJV-remember story DEM
 ‘Whenever you are eating a yam, then you should remember this story.’

PRESENT PROGRESSIVE:

- (14) [nte oni la-mɔ ka-ko finyaĩ]P [yĩ tetadiɛ a-vɔ]Q
 COND rain be-with NMLZ-pour now my clothes IPFV-get:wet
 ‘If it’s raining now, my clothes are getting wet.’

EXPECTED FUTURE:

- (15) [nte fɔ-aa-lɛ ni,]P [kɛna fɔtsa kĩ fɔ-a-ya kĩ bame]Q
 COND 3SG.REF-FUT-become:good LINK do things REL 3SG.REF-IPFV-come DEM types
 ‘When it is about to be ready, do the following kinds of things.’

Although the future morpheme *aa-* (probably derived from *a-naa* ‘is going to do X’) is primarily a tense marker, it is occasionally used in main clauses in a more modal sense to indicate either obligation or potentiality. Indeed, a modal interpretation of *aa-* is fairly common in the protases of conditionals, where it often indicates a more remote condition than would be suggested by its absence. To see this illustrated, compare examples (16) and (17). In (16), in which there is a perfective (unmarked) verb in the protasis, there is no indication that the fulfilment of the condition might not be possible:

- (16) [nte e-puli ɛ-ya-nya ɔmatɔ a akũ ni,]P
 COND 3SG-be:able 3SG-come-eat town DET on LINK
 [ɛ-l-aa-fĩ onyole odi-manɔ li-te e-dzĩ nkpã nɛ ɔmatɔ a kame]Q
 3SG-NEG-FUT-allow man one-no FOC-stay 3SG-live life LOC town DETinside
 ‘If/when he is able to overcome the town, he will not leave anyone alive in the town.’

Contrast this with (17), which contains the same protasis verb, this time with the future tense morpheme. Here, there is a recognition that the condition frequently may not be possible:

- (17) [nte aa-puli ni,]P [bɔlɛ futsoku nɛ kɔba a kame]Q
 COND 2SG.FUT-be:able LINK uproot tree:stumps LOC farm DET inside
 ‘If you can, uproot the tree-stumps on the farm.’

Another example (this time with the condition placed sentence-finally) is given in (18), in which the speaker is recognising the fact that the item in question is hard to get hold of:

- (18) [e-kĩ y-a-sua tukonto a nɛnɛ]Q [nte aa-na y-e odu]P
 3SG-REL 3SG-IPFV-close winds DET be:good COND 2SG.FUT-get REF-it type
 ‘The one which shuts out drafts is good, if you can get that kind.’

3.2. Marked conditionals. As their name suggests, marked conditionals contain some kind of additional coding, either in the form of special morphemes such as the irrealis morpheme *kufɛ* or the contrast marker *malo*, or in the form of a predicate focus construction involving verbal periphrasis. These are discussed in turn below. There are other morphemes that occasionally occur in conditional clauses, such as the topic marker *kɔ̃*, the concessive marker *titɔ̃*, and the additive marker *leme*, but these will not be discussed in detail, as they are not as closely associated with conditional clauses as *kufɛ* and *malo*. Marked conditionals frequently indicate conditions on the counterfactual/hypothetical end of the spectrum, although their basic function is broader than that, and they sometimes have non-counterfactual or non-hypothetical interpretations.

3.2.1. The irrealis morpheme *kufɛ*. The irrealis morpheme *kufɛ* typically occurs clause-initially in the apodosis, although it can occur clause-finally in the protasis, depending on which clause is being modified. The basic function of *kufɛ* is to indicate that there is something misleading, unrealised, or unfulfilled about the information given. Hence, one common meaning associated with *kufɛ* is counterfactuality, as shown in (19), in which the apodosis contains information which is obviously false:

- (19) [nte ɔ-nya fu-kĩ,]_P [kufɛ o-ku]_Q
 COND 2SG-eat REF-DEM IRR 2SG-die
 ‘If you had eaten this, you would have died.’

However, in other contexts, a clause-initial *kufɛ* in the apodosis may simply indicate an unlikely consequent, and sometimes even a vain wish that such a consequent might still just happen, as in (20):

- (20) [nte aa-ya,]_P [kufɛ fɔ-nɛnɛ]_Q
 COND 2SG.FUT-come IRR 3SG.REF-be:good
 ‘If only you were to come, it would be good.’

Here the future tense morpheme in the protasis is being used in its modal sense of indicating a more remote condition. The use of *kufɛ* in the apodosis simply draws attention to the desirability of the consequent by highlighting the current state of affairs which is not at all promising.

In the protasis, *kufɛ* suggests that there is something misleading about the information in the condition. In (21) for example, one would usually expect to harvest a crop when it is ready, but by using *kufɛ* in the protasis, the speaker is indicating that in this case, the readiness of the palm-nuts is misleading in the sense that the usual course of events does not apply:

- (21) [nte fɔ-aa-le kufɛ ni,]_P
 COND 3SG.REF-FUT-become:good IRR LINK
 [ta-tsua adĩ nɛ kulele kame]_Q
 NEG-cut.off palm:nuts LOC dry:season inside

‘When it is about to be ready, don’t harvest the palm nuts in dry season’.

Contrast (21) with example (15), repeated below in (22), which uses an identical protasis but without *kufɛ*. Here the readiness of the crop for harvesting is to be followed by actions leading up to the expected harvest:

- (22) [nte fɔ-aa-lɛ ni,]_P [kɛna fɔtsa kɪ fɔ-a-ya kɪ̃ bame]_Q
 COND 3SG.REF-FUT-become:good LINK do things REL 3SG.REF-IPFV-come DEM types
 ‘When it is about to be ready, do the following kinds of things.’

The broad function of *kufɛ* is helpfully illustrated by its use in simple main clauses. Clause-finally, it suggests there is something misleading about the information given in the preceding clause. Consider the sentence in (23). When someone is told something, the usual assumption is that they will listen to what is being said and learn from it. The use of *kufɛ* here tells the hearer that that this assumption is not valid. Note that both clauses contain information which is true, and so there is nothing counterfactual or hypothetical about their meaning:

- (23) bi-bi yɪ kufɛ, lɛmɛ n-ta-tse
 3PL-tell me IRR ADD 1SG-NEG-listen
 ‘They told me, but I didn’t listen.’

Clause-initially, *kufɛ* sometimes approaches what might be considered a marker of evidentially. For example in (24), the use of *kufɛ* changes what would otherwise be a straight presentation of the facts, into a more cautionary, hypothetical presentation of the facts:

- (24) kufɛ bi-yua kɔkɔɛ
 IRR 3PL-finish already
 ‘They will have already finished.’

Here, *kufɛ* is basically presenting an imaginary scenario, albeit one which the speaker thinks is quite likely to be true. However, in other contexts, such imagined scenarios may be clearly counterfactual, as in (25):

- (25) kufɛ n-ku!
 IRR 1SG-die
 ‘(It was as if) I died!’

Hence, it is clear that *kufɛ* has a function which includes both hypotheticality and counterfactuality, but is essentially broader in scope. It indicates to the hearer that usual assumptions and implications made from the rest of the information in the clause are misleading in some way.

3.2.2. The contrast marker *malo*. The basic function of the contrast marker *malo* is to highlight some constituent as presenting some original, surprising or otherwise particularly significant information in contrast to various alternatives. It is most commonly glossed in English as ‘even’ or ‘too’. Given its inherent element of contrast, it is well suited for use in concessive conditionals. Concessives imply a contrast between the propositions expressed by the protasis and apodosis, in which the nature of the contrast is the unexpected validity of the apodosis, in the light of information given in the protasis. In Tuvuli, concessives are marked by using *malo* at the end of the protasis, as shown in (26) and (27):

(26) [nte ɔ-nye ogbeni malo ni,]_P [dã kī o-deĩ funitsã koba o-bũ]_Q
 COND 2SG-be hunter CONT LINK look COMP 2SG-have food farm 2SG-add
 ‘Even if you are a hunter, see that you also have a farm for food.’

(27) [nte lutsoku na nɛ ɔwɔ kame owi buna malo,]_P
 COND log be LOC river inside time pass CONT
 [lɛ-l-aa-dani ɔwɔlate]_Q
 AGR-NEG-FUT-become crocodile

‘Even if a log remains in the river for a long time, it does not become a crocodile.’⁶

However *malo* has a broader function than simply indicating concession.⁷ In (28) *malo* indicates that the condition is particularly significant in that if it is fulfilled, the consequences are highly advantageous:

(28) [nte aa-puli malo ni,]_P
 COND 2SG.FUT-be:able CONT LINK
 [fĩ bi-do paipu bɛ-kpa nɔ nɛ tɔtɔ kame]_Q
 allow 3PL-put pipe 3PL-give 2SG.OBJ LOC houses inside
 ‘And if you possibly can, let them lay a pipe into your houses.’

Here, *malo* cannot have a concessive interpretation. Indeed, it is difficult to imagine what such an interpretation could be, since ‘even if you can (let them lay a pipe), let them lay a pipe into your houses’ makes little sense. Rather, the future morpheme is being used in the protasis in its modal sense of indicating a more remote condition (as in example (18) above), whilst *malo* is being used to draw attention to this particular condition because of its highly desirable consequences.

malo is also frequently used to highlight contrastive nominal constituents, as in (29) and (30):

⁶ The person who wrote this proverb originally gave it the alternative free translation ‘Being born in an oven does not make you a doughnut’.

⁷ In English too, the word ‘even’, which is sometimes called a ‘concessive adjunct’ because of its association with concessive conditionals, has a much broader function than indicating concession, and is better analysed as a scalar additive particle which indicates the presupposition of a contextually relevant alternative option that satisfies the sentence and is evaluated as a more ‘extreme’ value along some ordered scale (König 1991).

(29) yĩ malo, m-a-nyε nɔ kɔɛ pii
 1SG CONT 1SG-IPFV-bring:out 2SG.OBJ thanks many
 ‘And I too, give you many thanks’

(30) nde nɔ malo ɔ-kɔna?
 how 2SG CONT 2SG-think
 ‘What do YOU think?’

In such cases, *malo* looks suspiciously like a topic marker, although Tuwuli has a separate topic marker, *kɔ̃*, which lacks the element of contrast that *malo* has, and which can be reasonably accurately glossed in English as ‘as for’ or ‘in the case of’. The assumption that *malo* contains an element of contrast is supported by the fact that it cannot modify a discourse-initial referent (unlike the topic marker *kɔ̃*), since in such cases it would be unclear what the referent is being contrasted with. Furthermore, *malo* is compatible with either marked focus or marked topic constructions, suggesting it is not a type of either, since marked topics and marked focus constructions can never mark the same constituent, as suggested by Lambrecht (1994).

Tuwuli does however appear to have a more conventional concessive marker *titɔ* which is typically used in non-conditional environments, usually in conjunction with the contrast marker *malo*, as illustrated in (31) and (32):

(31) titɔ kĩ ɔ-laa boe kame malo, m-a-tε ka-do
 CONC COMP 2SG-NEG.be 1PL.OBJ inside CONT 1SG-IPFV-receive NMLZ-put:in
 kĩ bawuli babi badi a-kpa nɔ ka-bumεna
 COMP Bowiri children some IPFV-give 2SG.OBJ NMLZ-help
 ‘Even though you are not with us, I hope that some Bowiri people are helping you.’

(32) titɔ nde, Baguma aa-bumɔ ye
 CONC how God FUT-help 3SG.OBJ
 ‘No matter what, God will help him.’

It is possible to use *titɔ* in a conditional clause, but only when it modifies a nominal constituent which is the focus of the concessive interpretation, as shown in (33):

(33) [ntε a-kεna litsedi mɔ titɔ kabisẽ kabii le-de nɔ malo,]_P
 COND 2SG-IPFV-do something with CONC child small FOC-advise 2SG.OBJ CONT
 [kεne kĩ a-tse ye ɔɛdo]_Q
 it:is:necessary COMP 2SG-IPFV-listen his voice

‘If you do something and EVEN A SMALL CHILD advises you, you must listen to his voice.’

The contrast marker *malo* is similar in function to one other morpheme which sometimes occurs in conditional clauses: the additive morpheme *lemε*, often glossed in English as either ‘but’

or ‘also’. The function of *leme* is to add a new thought to the discussion to be interpreted alongside what has just been mentioned, as shown in (34):

- (34) [nte n-kona n-na-mena kunya kame leme,]_P
 COND 1SG-think 1SG-go-with tomorrow inside ADD
 [m-a-mo kī nte bo-ta-kena litsedi nviā kī ni,
 1SG-IPFV-see COMP COND 1PL-NEG-do something today DEM LINK
 kunya kame le-l-aa-le boe bawa kōlaa.]_Q
 tomorrow inside FOC-NEG-FUT-be:good our grandchildren at:all

‘And if I think into the future, I can see that if we do nothing today, it will not be well with our grandchildren.’

Although *leme* entails an element of contrast, it does not imply as emphatic a contrast as *malo*, and so it is not surprising that *leme* and *malo* cannot modify the same constituent, although it is usually possible to replace *malo* with *leme* and still form a grammatical sentence. Example (35) below may help to illustrate the difference between them:

- (35) fo-pone lububu, fo-a-dā mgbā leme, fo-yole malo
 3SG.REF-be:sufficient fatness 3SG.REF-IPFV-look red ADD 3SG.REF-ripen CONT
 ‘It is big, and red, and (more significantly) RIPE too.’

Here, someone is pondering a selection of mangos when he sees one which looks particularly promising. He notices first its size, and then adds a comment about its colour using *leme*, but its most significant feature in this context is that it is ripe enough to eat, hence the use of *malo* in the last clause. Replacing *malo* with *leme* here would remove this extra significance, and the ripeness would then just be an additional characteristic on a par with the redness.

3.2.3. The predicate focus construction. The third and most interesting strategy of marking a conditional clause is the use of the predicate focus construction, in which a nominalised copy of the verb occurs right before the regular inflected verb. This is an extremely rare construction, which can be used, for example, when the truth value of the condition is being debated, as in (36) and (37):

- (36) [nte ka-vū b-a-vū ni,]_P [bo-aa-nu be fo-wola]_Q
 COND NMLZ-fight 3PL-IPFV-fight LINK 1PL-FUT-hear their shouts
 ‘If they WERE fighting, we would hear their shouts.’
- (37) [nte ka-nya o-nya fu-kīi]_P [kufe o-ku]_Q
 COND NMLZ-eat 2SG-eat REF-DEM IRR 2SG-die
 ‘If you HAD eaten this, you would have DIED.’

From the free translation of example (37), it looks like a straight counterfactual, but the counterfactuality is actually being handled by the use of *kufe* in the apodosis. What the predicate focus construction is adding is a challenge to the idea that the condition could still be true, despite

the consequent clearly not being true. Indeed, it is quite possible to omit the predicate focus construction, but leave the regular counterfactual interpretation, as in (38):

- (38) [ntɛ ɔ-nya fu-kĩĩ]_P [kufɛ o-ku]_Q
 COND 2SG-eat REF-DEM IRR 2SG-die
 ‘If you had eaten this, you would have died.’

This is simply a point of information, rather than a point of argument, and so could potentially be the opening line in a discourse, unlike (37), which could only form part of an ongoing debate. Traditional analyses of conditionals do not usually distinguish such pairs, possibly because in English, the equivalent sentences differ only by the presence or absence of stress placement on the words ‘had’ and ‘died’.⁸

In main clauses, the predicate focus construction is typically used to focus attention on the verb in question, as shown in (39):

- (39) nɛ ka-fula m-aa-fula d-e, ka-tɔlɛ m-aa-tɔlɛ
 NEG NMLZ-boil 1SG.FUT-boil AGR-it NMLZ-fry 1SG-FUT-fry
 ‘I won’t BOIL it, I’ll FRY (it).’

Indeed, even in conditional clauses, the predicate focus construction can still have its usual verb-focus sense without having its ‘truth value’ interpretation, as illustrated in (40):

- (40) [ɔ-l-aa-puli ɔ-bɔɛ ɔ-nya]_Q [mbɔɛ-ntɛ ka-nɔ aa-nɔ]_P
 2SG-NEG-FUT-be:able 2SG-take 2SG-eat PQM-COND NMLZ-sell 2SG.FUT-sell
 ‘You won’t be able to get something to eat, unless you can SELL (it).’

Here, the predicate focus construction is being used to focus on the verb in the protasis (i.e. what needs to be done) rather than to question whether the action may or may not be possible. Thus, like the future tense morpheme, the predicate focus construction seems to have developed an additional function in conditional clauses, clearly related to its more basic function in main clauses.

⁸ The traditional definition of a hypothetical condition is one that the speaker believes is unlikely to be fulfilled, whilst that of a counterfactual condition is one that the speaker believes cannot possibly be fulfilled, or is contrary to fact. Thus it is not clear which category a condition that the speaker believes is unlikely to *have been* fulfilled would be in, since it has features of both categories. If example (38) is considered a straight counterfactual, then example (37) would have to be considered a hypothetical counterfactual.

4. The use of conditionals in discourse

The fact that conditional sentences are more common in certain text types than in others has been documented on many occasions. Typically, conditionals are more common in expository and procedural texts than in narratives. For example, Kuo (2006) found that in Mandarin, expositions accounted for almost 70% of all conditionals in his data sample, whereas narratives accounted for only 7%. Similarly, Marchese (1987) found that in Godié (Kru; Ivory Coast), conditionals accounted for over a quarter of all clauses in procedural texts, compared to only 2% for narratives (or 4.3% if animal folktales are included). However, such studies vary as to which text types or genres are included, and so one cannot always usefully compare results between the studies. Furthermore, the function of conditionals varies not only from language to language, but may also depend on the text type and genre. Inventories of genres also differ from language to language, although the four broad types of monologic text (narrative, expository, procedural and hortatory) are usually considered to be universal, and so are maintained in this article, along with a few other genres.

4.1. The distribution of conditionals in discourse. This section provides some preliminary findings on the distribution of conditionals in various types and genres of *Tuwuli* discourse. The database for analysis consisted of 39 narrative texts, 8 hortatory texts, 5 expository texts, 4 procedural texts, 143 proverbs, 52 riddles, 3 letters, and 3 poems. Most of the data was written, although a few of the shorter texts were oral. The oral texts were collected during fieldwork in Ghana between 1997 and 2002, while the written texts were produced during various literacy workshops held between 2000 and 2001. Some of the expository and hortatory texts were of considerable length, comprising small books, which meant that similar amounts of data were gathered in three out of the four main text types, leaving just procedural texts relatively under-represented. One lengthy procedural text was excluded because it contained large sections of expository text which would have skewed the results. The distribution of conditionals in each of the text types and genres included in the study is shown in Table 1.

Table 1 shows that, in line with previous studies, conditionals are most frequent in procedural and expository discourse and least common in riddles and narratives. However, their frequency in procedural texts (37.9%) must be taken as preliminary, since the amount of procedural text analysed was relatively small. Also, the frequency of conditionals in poems (9.1%) is a little misleading as all six conditionals in this genre were found in a single poem, and consisted of the same line being repeated six times.

Table 1: Conditionals per text type / genre

Text type / Genre	# Texts	Total # sentences	Total # conditionals	Av. % of sentences with a conditional clause
Procedural	4	66	25	37.9%
Expository	5	1118	257	23.0%
Proverbs	143	143	32	22.4%
Hortatory	8	1211	156	12.9%
Poems	3	66	6	9.1%
Letters	3	211	13	6.2%
Narratives	39	1109	54	4.9%
Riddles	52	52	1	1.9%

Considering the forms of conditionals mentioned in section three, it should be noted that generic/habitual and future/predictive conditionals are by far the most common type, and that unmarked conditionals are far more common than marked conditionals. A quantitative study of the distribution of the various forms of conditionals throughout the different text types and genres is left as a matter for future research.

4.2. The functions of conditionals in discourse. This section makes some preliminary statements on the function of conditionals in each of the text types/genres in Table 1 above, with the exception of poems and riddles, which didn't contain enough examples for a meaningful analysis.

4.2.1. Procedural discourse. Marchese (1987) suggests that in Godié (A Kru language spoken in Ivory Coast) the high frequency of conditionals in procedural texts can be attributed to the fact that they help the hearer remember a procedure by separating the instructions into chunks of conceptually related actions, which may consist of anything between one and eight clauses. Such a device would be particularly helpful with oral texts, since the hearer may not be able to refer back to the procedure as often as with written instructions. The text-structuring function of conditionals is seen, in the Godié case, from the fact that by looking at the content of the conditional clauses alone, one can see a basic outline of the whole procedure. Furthermore, conditionals often co-occurred with other markers of discontinuity such as paragraph markers and change of subjects.

Conditionals in Tuwuli procedural texts seem to have a similar text-structuring function. For example, in the text 'How to prepare *kadzokpa* with bean stew', the first group of actions consists of boiling up all the ingredients for the stew together, illustrated in (41):

- (41) nte o-bo a-tɔ kadzokpa mə awɔna tenye,
 COND 2SG-say 2SG.IPFV-cook kadzokpa with beans stew
 a-te awɔna a nɛ fi,
 2SG.IPFV-put:on beans DET LOC fire
 e-bo mə kɔntɔmlɛ fu-bo,
 AGR-become:ready with cocoyam:leaves 3SG.REF-become:ready
 fɔ-dɔ kɛnaawo kakɔ kadi fɛɛ.
 3SG.REF-become:soft until place certain not:long
 lɔkɔa ɔ-ya ɔ-ya-dɔ koobi mə tidzale mə lɛdeme,
 then 2SG-come 2SG-come-put:in fish with pepper with salt
 o-te flee e-fu.
 2SG-put:on all AGR-boil
 lɔkɔa o-se o-ke ɔ-kpɛ o-ko nɛ lutuku kame, o-nuna foe flee.
 then 2SG-remove 2SG-stand 2SG-scoop 2SG-pour LOCpot inside 2SG-mash it all
 ‘If you say you are cooking kadzokpa with bean stew,
 you put some beans on the fire,
 and add cocoyam leaves,
 and cook them until they become soft.
 Then you add fish, pepper and salt,
 and put it on the fire and boil it.
 Then you remove it (from the fire), scoop it out into a bowl and mash it.’

Similarly, the last group of actions involves serving it up and setting the table. A fairly literal English translation of this chunk is given in (42):

- (42) ‘When you have finished moulding it onto a plate,
 Then you take the stew and pour it all around the porridge.
 Then you take some oil, spread it on top, and put the plate on a table.
 Then you cover it with a cloth.
 Then you get another bowl for washing your hands, and put that on the table as well.
 And then you get soap for washing your hands, and water, and put them down too.’

A second function of conditionals in procedural texts is to introduce a closing or summary statement (e.g. ‘If you want to cook kadzokpa with bean stew, that it the way we cook it’).

4.2.2. Narrative discourse. The summary statement function of conditionals is also common in narratives, as the last line from a folktale illustrates in (43):

- (43) ade foe-sũ mɔ [nte ɔ-mɔ lofoã ni,]_P
 COP 3SG.REF-sake with COND 2SG-see tortoise LINK
 [d-e kanɛ liti deĩ tigiqli]_Q a tsoo
 AGR-it back behind have sections DET PFORM

‘And that is why, whenever you see tortoise, his back is all patched.’

Folktales, which are a sub-type of the narrative genre, are often given to explain various observable phenomena in the world (e.g. ‘how the dog became domesticated’ or ‘why chameleons change their colour’), and so the last line naturally mentions the particular behaviour that the folktale is intended to explain. The condition simply gives the setting in which the general truth can be observed. Not surprisingly, the form of the conditional in this case is typically habitual/generic. The conditional clause allows the speaker to draw the hearer into the setting (by using ‘If/Whenever *you* see a tortoise...’ which makes it more real to the hearer than simply saying ‘And that is why tortoise’s back is all patched’.

Although conditionals are not very common in narratives – a total of 54 occurred in all 39 texts – a number of different functions can be identified. One of the most common is to express a temporal setting for the event expressed in the main clause, as illustrated in (44):

- (44) [nte okpokũ babi naa ɔwɔ ni]_P
 COND baboon children go river LINK
 [dzakpa a-na-dzĩ be osĩ ka-pili be ɔmɔa ɔmɔa
 leopard IPFV-AUX.go-sit 3PL path NMLZ-catch 3PL one one
 ka-kɔa ka-tɔ ka-nya]_Q
 NMLZ-use NMLZ-cook NMLZ-eat

‘Whenever baboon’s children went to the river, leopard would go and wait on the path, and catch them one by one, and cook and eat them.’

The temporal setting function of conditionals is a fairly general function, related to both its use in closing explanatory statements, and as a text-structuring device in procedural texts. As mentioned above, conditions in summary statements give the temporal setting in which the general truth can be observed, whilst conditional clauses in procedural texts are essentially a way of grouping a series of chronological actions into distinct chunks, in which the temporal setting for one chunk is the completion of the previous chunk. The form of the conditional clause in both cases is again usually habitual/generic.

Another common function in narratives is to express the condition for an undesirable consequent, which is usually interpreted as some kind of warning. It is frequently contained in direct or indirect speech, as illustrated in (45):

- (45) [nte o-sua d-e akũ]_P [ɔ-l-aa-nyɔne daa]_Q
 COND 2SG-cover AGR-it on 2SG-NEG-FUT-flatulate at:all
 ‘When you wear it, you must not flatulate.’

Such warnings are intended to influence the hearer's behaviour by hopefully disuading them from taking a certain course of action, which is an indirect way of instructing them in what they should do. In this respect, they are similar to procedures, which are also a form of instruction. The form of the conditional clause in this case is usually future/predictive. The vast majority of conditional clauses in narratives can be accounted for with the above three functions (summary explanations, temporal settings and warnings).

4.2.3. Proverbs. The explanatory and instructional functions of conditionals also explains their frequent occurrence in proverbs, which often take the form of observations from the natural world (46) or warnings (47) intended to instruct:

- (46) [nte sōwā dzī nɛ ɔyɔwa akũ,]_P
 COND tsetse:fly sit LOC broom on
 [ɔyɔwa a lɛ-l-aa-puli ɛ-kɔ s-e.]_Q
 broom DET FOC-NEG-FUT-be:able 3SG.REF-kill AGR-it
 'If a tsetse fly perches on a broom, that broom cannot kill it.'

- (47) [nte ɔ-nyɔa nɔ nyina,]_P [nɔ ɔtsɔ̃ lɛ-l-aa-ma]_Q
 COND 2SG-shy:away your mother:in:law your wife FOC-NEG-FUT-give:birth
 'If you shy away from your mother in-law, your wife shall remain childless.'

4.2.4. Letters. In texts of a more conversational nature (e.g. letters), conditionals also function to introduce a new topic for discussion, as shown in (48):

- (48) [nte ɔ-ya nɛ Marko ka-lɛ wĩ a,]_P
 COND 2SG-come LOC Mark NMLZ-speak good DET
 [Dr.Ring fɔ̃ bɔ-vɛlɛ bati badi kĩ be a-tsā ovoli a kame
 Dr.Ring allow 1PL-pull people some REL 3PL IPFV-move book DET inside
 lɔkɔa ɛ-kpɔla nɛ Tuwuli ka-lɛ onukpɛ̃]_Q
 then3SG-separate LOC Tuwuli NMLZ-speak mouth
 'When it comes to Mark's Gospel, Dr. Ring helped us to get some people to go through the book and draft it in Tuwuli.'

4.2.5. Expository discourse. In expository texts, as in letters, conditionals often introduce a new option or scenario as the basis for further discussion, as shown in (49)⁹:

- (49) [nte otsole a-nɛ lɛmɛ,]_P [lɔkɔa a-sui t-e lɔkɔ biala]_Q
 COND woman 2SG-be ADD then 2SG.IPFV-tie AGR-it place every
 'And if you are a woman, then you tie it all up.'

⁹ In Ford and Thompson's (1986) study of conditionals in written English, the function of exploring new options accounted for more than half the conditionals in their data.

Indeed, conditional clauses frequently contain the topic marker *kɔ̃*, since as Haiman (1978:572) insightfully points out, conditionals, like other topics, are formal devices in which the speaker either directly or indirectly seeks the agreement of his interlocutor as to the validity of an established entity, as if he/she were asking “*You know ___ ?*”¹⁰. Conditionals can also be used to introduce thematic topics, as opposed to new or contrastive topics. For example, in expository texts, and in speech sections of narratives, conditional clauses can be used to state a contextual assumption as the basis for a future course of action, as shown in (50):

- (50) [nte aye fɔ̃-la kɔ̃ ni,]p
 COND that:way 3SG.REF-be:like TOP LINK
 [ɛ-fɔ̃ ɛ-bɔ̃ɛ de nɛ awã kĩ le-waa,
 3SG-allow 3SG-pick:up stone LOC there REL AGR-be:lying
 ɛ-na-mɛna kakɔ̃ kpale-wa]Q
 3SG-go-with place clear-PP

‘If that’s the way it is, he should let him pick up the stone lying there and take it to a clear place.’

Another common function in expository texts is to support the chain of logical reasoning or argumentation. This can be done either deductively or inductively. In the former case, the conditional clause can give the scenario for which the claim made in the main clause is the logical consequent, as shown in (51):

- (51) [nte nɛ aye,]p [fɔ̃-a-fɔ̃ boe adɔ̃ le-vɔ̃]Q
 COND NEG that:way 3SG.REF-IPFV-allow our teeth FOC-spoil
 ‘If not, then it causes our teeth to rot.’

In the latter case, the conditional clause can be used to introduce supportive evidence for a previous claim. The conditional clause in (52) could be paraphrased as “if you want support for what I’m saying, ...”:

- (52) [nte n-l-aa-ma fɔ̃vã]p [mi-dã oti kĩ e-wuga bave]Q
 COND 1SG-NEG-FUT-give:birth lie 2PL-look person REL 3SG-drink palm:wine
 ‘If I’m not lying, look at someone who has been drinking palm wine.’

4.2.6. Hortatory discourse. As for hortatory texts, it is common to find sections of expository and narrative material embedded within such texts, and so extracting functions of conditionals unique to hortatory texts is often very difficult in practice. Indeed, no new functions of conditional clauses were found in the hortatory texts included in the data.

¹⁰ In Godié, in the pause between the protasis and apodosis, the hearer often responds with an affirmative response indicating their agreement as to the validity of the established condition (Marchese 1977, 1987).

4.2.7. Summary of discourse functions. The discourse functions of conditionals discussed above are not all completely unrelated. Some functions have clear similarities with others, and so it is perhaps helpful to try and group them into broad functional groups, even if these groups are somewhat overlapping and not mutually exclusive. Table 2 gives an overview of the discourse functions of conditionals found in the database.

Table 2: Summary of discourse functions

General function	Specific function	Text-type
Marks major units	Groups conceptually-related actions	Procedures
	Gives a closing or summary statement	Procedures & narratives
Sets a scene	Gives a temporal setting for an event	Narratives
	Gives the setting for a general truth	Narratives & proverbs
Presents a new idea	Introduces a new topic	Expositions and letters
	Introduces a new scenario	Expositions
Gives instruction	Gives a warning	Narratives & proverbs
	Presents a logical conclusion	Expositions
	Presents supporting evidence	Expositions

Putting the information in Tables 1 and 2 together, perhaps the clearest observation that appears is that the two text-types that use conditionals most, namely procedures and expositions, use them for quite distinct and sometimes unique purposes. In procedural texts, conditionals have a clear structure-marking function, whereas in expository texts, conditionals are used mainly for introducing new ideas and for building or strengthening an argument. Narratives, which use conditionals far less, are somewhat less restrictive in their use.

5. Conclusion

This article has examined the forms and functions of conditional clauses in Tuwuli. After some introductory remarks in sections one and two, section three focussed on the forms of conditional clauses. A formal distinction was made between ‘unmarked’ and ‘marked’ conditionals based on the amount of non-basic coding material in the conditional clause, although it was noted that such a distinction was useful primarily for the purposes of description rather than for identifying distinct functional groups. In looking at Tuwuli conditionals from a typological perspective, it was shown that the traditional typological distinctions (e.g. between reality and unreality conditionals) are not upheld in Tuwuli, and how well-known categories such as hypothetical, counterfactual and concessive conditionals do not have any clear formal equivalents. Instead, such meanings are contextual interpretations of morphosyntactic arrangements which have much broader semantic ranges. For example, the function of the morpheme *malo* is along the lines of ‘presenting some original, surprising or otherwise particularly significant information in contrast to various alternatives’, which naturally includes concessive meaning, although is clearly broader than that, overlapping with the meaning of morphemes like ‘even’, ‘too’ and ‘also’ in English.

Section four focussed on the distribution and functions of conditional clauses in various text types and genres found in Tuwuli discourse. It was shown that conditionals are far more common in some text types (e.g. procedurals, expository texts and proverbs) than in others (e.g. narratives),

and that to some extent the different text types use conditionals in different ways. For example, in procedural texts, conditionals are used to structure texts into coherent stages or groups of actions, which helps hearers remember the procedure, whereas in expositions, conditionals are frequently restricted to presenting new ideas or giving instruction through warnings and logical arguments. Although the findings were rather preliminary in places, they help to pave the way for more qualitative studies looking at the precise distribution of the various forms and functions of conditional clauses in comparison to other subordinate clause types, which would no doubt reveal further insights into their role in Tuwuli discourse.

Abbreviations used

1	First person	IRR	Irrealis
2	Second person	LINK	Linker
3	Third person	LOC	Locative
ADD	Additive	NEG	Negative
AGR	Agreement	NMLZ	Nominaliser
AUX	Auxiliary	OBJ	Object
COMP	Complementiser	PFORM	Performative
CONC	Concessive	PL	Plural
COND	Conditional	PP	Past participle
DEM	Demonstrative	PQM	Polar question marker
CONT	Contrast	REF	Referential
FOC	Focus	REL	Relativiser
FUT	Future	SBJV	Subjunctive
DET	Determiner	SG	Singular
IPFV	Imperfective	TOP	Topic

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