CONDITIONAL CONSTRUCTIONS IN LOPIT, AN EASTERN NILOTIC LANGUAGE

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Lopit is an Eastern Nilotic language of South Sudan. It has a number of ways of expressing conditionals. The most common way involves the use of the subordinate clause marker -l- on the clause-initial verb which introduces the protasis. This marker is also used in other clauses which are not conditionals. There is also the conjunction lojo, ‘if, when’, which can introduce the protasis. Another method is the use of the irrealis, the conditional and the potential mode of the verb in the protasis. The first method appears not to be used in other Eastern Nilotic languages.

Keywords: conditional, Lopit, Nilotic

1. Introduction

Lopit [lpx] is an Eastern Nilotic language of South Sudan, spoken by around 50,000 people living in the Lopit Hills north-east of Torit in Eastern Equatoria province. It is part of the Lotuxo sub-group of the Lotuxo-Maa languages. Until recently, the Lopit language has received little descriptive attention. Some observations on Lopit were made by authors working on the related Otuho (Lotuko) language (Muratori, 1938) and in comparative wordlist data collected by Driberg (1932) and Vossen (1982). Lopit has only been the focus of linguistic description and documentation in more recent years. The language has six different dialects (Ngaboli, Dorik, Ngutira, Lomiaha, Lohutok and Lolongo), and data collected with speakers of a number of these has led to observations on aspects of Lopit phonetics and phonology (Turner, 2001; Stirtz, 2014; Billington, 2014) and morphology and syntax (e.g. Ladu et al., 2014; Moodie, 2016).

The data in this paper has come from elicitation, storytelling and conversation recording sessions with six members of the Lopit community in Melbourne. These speakers are aged between 30 and 55 and have migrated to Australia in the last 10 years. The recordings have been transcribed in ELAN and Fieldworks and a lexical database has been set up in Fieldworks. The examples in this paper are taken from the transcriptions of the recorded sessions and are examples of the Dorik dialect.1

In common with most other Eastern Nilotic languages, the basic constituent order is VSO. There is no grammatical tense in Lopit and temporal reference is made with a small range of adverbs or is determined from the discourse context. Aspect and mood are marked on Lopit verbs.

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The basic verbal morphology of Eastern Nilotic languages is shown in Table 1. This morphology is characterised by prefixes before and after the pronominal prefix or bound agreement pronoun (BAP). There are also many suffixes for both derivational and inflectional purposes. Some examples of typical prefixes are also shown in Table 1.

Table 1: Basic verb morphology in Eastern Nilotic verbs

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Word position</td>
<td>initial prefix</td>
<td>bound agreement pronoun (BAP)</td>
<td>prefix</td>
<td>ROOT</td>
</tr>
<tr>
<td>Example</td>
<td>imperative infinitive</td>
<td>person, number of subject and object</td>
<td>causative</td>
<td>habitual, directional, dative, applicative, voice, instrumental</td>
</tr>
</tbody>
</table>

In comparison to other Eastern Nilotic languages, Lopit has more prefixes in Positions A and C. These are considerably broader, both in terms of verbal processes expressed and of the morphemes used. These are shown in Table 2. In particular, a large number of aspect and mood inflections such as conditional, irrealis, and potential are marked on the verb.

Table 2: Prefixes in Lopit verbs

<table>
<thead>
<tr>
<th>A - initial prefix</th>
<th>B - BAP</th>
<th>C - prefix</th>
</tr>
</thead>
<tbody>
<tr>
<td>subordinator</td>
<td>l-</td>
<td>causative</td>
</tr>
<tr>
<td>VDM</td>
<td>l-</td>
<td>potential</td>
</tr>
<tr>
<td>imperative</td>
<td>h-</td>
<td>conditional</td>
</tr>
<tr>
<td>interrogative</td>
<td>te-, ite-, hoi-</td>
<td>irrealis</td>
</tr>
<tr>
<td>hortative</td>
<td>ali</td>
<td>deontic</td>
</tr>
<tr>
<td>infinitive</td>
<td>h-, nga-</td>
<td>inchoative</td>
</tr>
<tr>
<td>sequential</td>
<td>h(o)-</td>
<td>continuative</td>
</tr>
<tr>
<td></td>
<td></td>
<td>perfect</td>
</tr>
<tr>
<td></td>
<td></td>
<td>perfective</td>
</tr>
</tbody>
</table>

Lopit has the feature of advanced tongue root (ATR), which is common amongst Nilotic languages. It also has both lexical and grammatical tone. Tone is used, among other things, to mark the nominative case and to mark aspect. However, for the purposes of this paper, neither ATR nor tone features will be shown. These features have little impact on interpreting conditionals, at least for this introductory paper. The orthography of Lopit is still being developed and the orthography in this paper is in line with that used by SIL (Stirtz, 2015).

In Lopit, there are a number of ways of expressing conditionals. The most common methods include the use of the subordinate clause marker l-, the use of the conjunction lojo, ‘if, then’ and the use of modal prefixes nagi-, irrealis; mai-, conditional; and ma-, potential. It is also possible to express conditionals without any overt marking. These methods will be discussed in the following.

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2 This is based on a study of the following languages: Maasai (Tucker & Mpaayei, 1955, Rasmussen, 2002), Toposa (Schröder & Schröder, 1984), Teso and Turkana (Dimmendaal, 1983, 1991), Bari (Spagnolo, 1933), Kuku (Cohen, 2000) and Lotuxo (Muratori, 1938). The template is adapted from Rasmussen (2002).
sections. Following this, I will discuss negative and concessive conditionals and then make a comparison with conditionals in other Eastern Nilotic languages.

2. Conditionals in Lopit

A conditional sentence consists of a subordinate clause (protasis, $P$) which states some condition under which a main clause (apodosis, $Q$) holds. Conditionals have been classified by Thompson, Longacre, & Hwang into two main groups, reality and unreality conditionals (2007, pp. 255–262). Reality conditionals refer to present, habitual or past situations. Unreality situations refer to predictive, hypothetical and counterfactual situations. I will use this classification in this paper.

A typical Lopit conditional construction is shown in (1).

(1) $[\text{[l-o-wwon holong]}P \ [\text{a-ma ila iso nang}]]_Q$

$\text{SBO-3SG-be sun/time 1SG-POT-wash FUT 1SG}$

‘If there is time, I might wash’ (Lit. ‘if there is sun, I might wash’) BP:40:39

The clause order can be reversed. This is common in many languages (Comrie, 1986, p. 83). The clause order appears to be determined by discourse context

(2) $[\text{a-ma ila iso nang}]_Q \ [\text{[l-o-wwon holong]}]_P$

$\text{1SG-POT-wash FUT 1SG SBO-3SG-be sun}$

‘I might wash if there is time’ BQ10:30

The different types of conditional constructions will now be examined.

2.1 Conditionals using the protasis beginning with the subordinate marker $l$.- There are many conditionals in which the protasis begins with a verb with the prefix $l$-. This prefix is often a general marker of subordination and is not just used for conditionals. It is used in a range of environments including the relative clause, cleft constructions, negative constructions, interrogatives and some serial verb constructions. In some of these, such as cleft, negative and interrogative constructions, it is not a marker of subordination. In these constructions the term “verb displacement marker” is more appropriate and the gloss VDM is used. Where the prefix $l$- is used to mark subordination, the gloss SBO (subordinate marker) is used.

A range of examples of conditionals using the subordinate marker is given in the following sentences. Sentence (3) is a (habitual) reality conditional.

(3) $[\text{[l-i-laha-k iye imune de sali hotub]}]_P \ [\text{[o-muri]}]_Q$

$\text{SBO-2SG-leave-APPL 2SG.NOM bread in oven too.long 3SG-burn}$

‘If you leave the bread in the oven too long, it burns.’ AZ:17:48

There are also conditionals of this format which are unreality conditionals. These can be hypothetical as in the following two sentences. In (4), a potential marker, $ma$-, is used in the apodosis to express the possibility of the outcome but the protasis uses the same subordinate clause format. The particle or adverb $ma$, ‘possibly’, in this sentence, indicates that there is a greater degree of doubt than in sentence (2).
Studies in African Linguistics 46(1&2), 2017

A negative hypothetical conditional clause can be expressed using the subordinate marker and the negative verb construction (*inya*).

(5) [l-inya hiteng]P [inya manya]Q
SBO-NEG cow NEG life
‘If there are no cattle, there is no life’ Cow narrative

A predictive (unreal) conditional can also be written with a normal subordinate clause and a main clause without any verbal modality as shown in sentence (6). This sentence is spoken by a leader to a group of hunters chasing a leopard and the apodosis predicts what will happen if the protasis eventuates.

(6) [l-i-diyak itei,]P [e-isok iso hiyo hi-hony kulu]Q
SBO-2PL-miss you.PL 3SG-finish FUT people INF-bite all
‘If you miss, he will kill the people and eat them all’ Mountain hunting story

To date, no counterfactual conditionals have been observed using the subordinate clause marker to introduce the protasis.

2.2 Conditionals using the subordinating conjunction *lojo*. A second method of marking conditionals is the use of the subordinating conjunction *lojo*, ‘when, if’. This is related to the verb *jo*, ‘say’ and it shows person and number agreement (see Table 3). The third person bound agreement pronoun marker is normally *e*- but vowel assimilation changes this to *o*- in front of back vowels. The word *lojo* could be regarded as a grammaticalised form of the verb *l-o-jo*, SBO-3SG-say.

<table>
<thead>
<tr>
<th>person</th>
<th>singular</th>
<th>plural</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1&lt;sup&gt;st&lt;/sup&gt;</td>
<td>2&lt;sup&gt;nd&lt;/sup&gt;</td>
</tr>
<tr>
<td>BAP</td>
<td>a-</td>
<td>i-</td>
</tr>
<tr>
<td><em>lojo</em></td>
<td>lajo</td>
<td>lijo</td>
</tr>
</tbody>
</table>

An example of the use of *lojo* is shown in the following. The verb *wu*, ‘go’, is placed after the subject and is required to be prefixed with the subordinate marker *l*.-

(7) [lajo nang l-a-wu a Torit,]P [a-bot nang a bolis]Q
if.1SG 1SG.NOM SBO-1SG-go to Torit 1SG-go.direct 1SG.NOM to police
‘If I go to Torit, I will go straight to the police’ BQ:14:20

This compares with the related sentence (8) where the main verb *wu*, ‘go’, is in the clause-initial position and is prefixed with the subordinate marker, *l*.-
(8) \[l-a-wu nang a Torit,\] \[a-bot nang a bolis\]
SBO-1SG-go 1SG.NOM to Torit 1SG.go.direct 1SG.NOM to police
‘If I go to Torit, I will go straight to the police’ BC:42:44

It appears that the construction in (8) and in sentences (2) to (6) is more common than the use of the construction in (7). There is another distinction between the two forms. The consultant stated that ‘lawu nang a Torit’ means ‘if I go to Torit’ but not ‘when I go to Torit’ (BQ:11:54). On the other hand \(lajo/lojo\) can mean either ‘if’ or ‘when’ as shown in the conditional clause in (7) and the adverbial clause in (9).

(9) \[lojo inye l-o-pora\] \[imune o-pora de sali ina\]
when.3SG 3SG.NOM SBO-3SG-bake read.ABS 3SG-bake on fireplace.ABS this.F
‘When she makes bread, she bakes on this fireplace’ BV:30:27

2.3 Conditionals using an ‘if..., then’ construction. Lopit has an ‘if..., then’ conditional construction in which both the protasis and apodosis have overt marking. This can be made with either the subordinating marker (10) or the \(lojo\) conjunction (11) marking the protasis. The conjunction \(hojo\) is used in the apodosis. This conjunction is similar to \(lojo\), except that the initial consonant is \(h-\), which is the sequential (or narrative or subsecutive) marker. The \(hojo\) conjunction also shows agreement for number and person similar to \(lojo\) in Table 3. When it is used, it is necessary to use the sequential marker \(h-\) on the verb.

(10) \[l-i-yom iye,\] \[hojo hati iye kwan h-o-liba\]
SBO-2SG-rest 2SG.NOM and.then.3SG and 2SG.ABS body.NOM SEQ-3S G-be.good
‘If you rest, then you feel well’ (Lit. ‘your body is good’) BV:26:18

(11) \[lojo inye l-o-lot-u\] \[hoijo iyohoi h-oi-daha\]
if.3SG 3SG.NOM SBO-3SG-go-VEN and.then.1PL 1PL.NOM SEQ-1PL-eat
‘If he comes, then we will eat’ AH:01:21:30

Comrie states that overt apodosis marking often involves particles of pronominal origin (Comrie, 1986, p. 88). Whilst the conjunction \(hojo\) shows pronominal agreement, its origin is verbal (\(jo\), ‘say’). It is this meaning, together with the use of the sequential marker, \(h-\), that characterise this conjunction as an apodosis marker.

2.4 Conditionals using specific verb forms in the protasis. There are also ways of expressing conditional constructions without the use of the subordinate marker (\(l-\)) or \(lojo\). One of these involves the use of the irrealis form of the verb in the protasis. The marker \(ngai-\) is glossed as irrealis, (IRR). Once again, either a simple main clause, (12), or a potential verbal construction in the main clause, (13), can be used. Both these conditionals can be regarded as hypothetical. The sense in (12) is that the potential event (‘choosing a book’) is quite likely to eventuate.

(12) \[e-liba\] \[i-ngai-nyimo iye buk\]
3SG-be.good 2SG-IRR-choose 2SG.NOM book
‘It is good if you would choose a book’, ‘it would be good if you chose a book’ AF:1:15:11
Counterfactual conditional constructions can also be expressed with the irrealis. The following sentence uses the irrealis in both the protasis and the apodosis.

(14) [e-ngai-nya inye l-o-mwei]P\\ldots\
\begin{tabular}{l}
3SG-IRR-NEG 3SG VDM-3sg-be.ill
\end{tabular}
‘If he were not sick (Lit. ‘Were he not sick’)\\ldots\
\begin{tabular}{l}
... [e-ngai-ibong inye ho hiyo hona l-o-lunga]Q
\end{tabular}
\begin{tabular}{l}
3SG-IRR-meet 3SG with people REL.PL VDM-3PL-be.many
\end{tabular}
‘he would have met many people’ AD1:28:21

Another way of expressing conditionals is the use of the conditional marker \textit{mai-}, glossed here as \textsc{con}. The following sentence has the verb in the protasis in the conditional form and the irrealis form in the apodosis.

(15) [e-mai-ra hiteng honoro]P [a-ngai-huru nabo h-a-yama-re]Q
\begin{tabular}{l}
3SG-CON-be cow bead 1SG-IRR-pick one SEQ-1SG-marry-INST
\end{tabular}
‘If a cow were a bead, I would pick one to marry with’ AA:30:33

It is also possible to have the conditional marker, \textit{mai-}, in both the protasis and the apodosis.

(16) [i-mai-wolo iye habu]P [i-mai-ruk iye inye]Q
\begin{tabular}{l}
2SG-CON-see 2SG.NOM chief 2SG-CON-like 2SG.NOM 3SG.ABS
\end{tabular}
‘If you met the chief you would like him.’ AB:00:07:35

It appears that counterfactuals can only be made with the modality markers \textit{ngai-}, \textit{ma-} and \textit{mai-}. The main difference between \textit{ngai-}, \textit{ma-} and \textit{mai-} seems to relate to the specific meaning conveyed rather than to any particular syntax. They are only used with hypothetical and counterfactual conditionals.

A distinguishing feature of the use of \textit{ngai-}, \textit{ma-} and \textit{mai-} is that they don’t require a subordinating marker when in a subordinating clause. This is in contrast to subordinating clauses without modality marking such as those presented in Sections 2.2 and 2.3.

2.5. Negative Conditionals. With negative conditionals, the main clause depends on a certain condition not being met (Thompson et al., 2007, p. 260). English uses the morpheme \textit{unless} to signal this negative condition. In Lopit, one can express a negative conditional in a similar way. Sentence (17) is an example, although there is no Lopit word equivalent to ‘unless’ and the Arabic loan word \textit{ilei}, ‘unless’ is used.
Conditional constructions in Lopit

(17) [inya nang l-a-wu a torit]₀
NEG 1SG.NOM VDM-1SG-go to Torit
‘I won’t go to Torit…
… [ilei l-e-itik nang ho iye]ₚ
unless SBO-1PL-go.together 1SG.NOM and 2SG.NOM
… unless I and you go together’ BU:03:55

The consultant stated that this construction would not always be used and that sentence (18) would be a more usual way of expressing it. This construction uses the subordinate marker in the protasis to indicate a conditional. As was discussed in relation to sentences (2) to (6) above, it is one of the common ways of expressing conditionals in Lopit

(18) [inya nang l-a-wu a Torit]₀ [l-inya iye l-i-wu]ₚ
NEG 1SG.NOM VDM-1SG-go to Torit SBO-NEG 2SG.NOM VDM-2SG-go
‘I’m not going to Torit if you don’t go’ BU:03:55

2.6 Concessive conditional clauses. Concessive conditionals are often similar to ordinary conditionals but they carry additional presuppositions not signalled by ordinary conditionals. They are used to assert two propositions against the background assumption “that the relevant situations do not normally go together, i.e. that the situation described in one clause is an unfavourable condition for the situation described in the other (i.e., ‘if \( p \) then normally not-\( q \))” (Haspelmath & König, 1998, p. 566). Haspelmath and König have divided concessive conditionals into three types. These are scalar (‘even if’), alternative (‘whether or not’) and universal (‘whatever, however much’) concessive conditionals (Haspelmath & König, 1998, p. 563). They say that universal concessive conditionals are usually regarded as a variety of relative clauses and that alternative concessive conditionals are very often treated together with embedded interrogatives. Only scalar concessive conditionals are usually analysed as a specific type of conditional. Nevertheless they state that all three types meet the semantic requirements of being both conditional and concessive.

Thompson et al., on the other hand, only consider one type of concessive conditional, which is what Haspelmath and König call the scalar type. In this type, the presuppositions carried by the conditional “match quite closely those carried by such contrary-to-expectation morphemes as the English *even*” (Thompson et al., 2007, p. 261).

Lopit does not have a morpheme (or morphemes) similar to the English *even if*. However, it does have the morpheme *hidong*, ‘even’ which is placed within the subordinate clause rather than at the start of the clause. Sentence (19) is an example of a conditional using the irrealis form of the verb in the subordinate clause. The presence of the word *hidong* indicates that, contrary to normal expectations, “I will go to Torit if it rains”.

(19) [e-ngai-sa hidong bi]ₚ, [a-wu nang a Torit]₀
3SG-IRR-rain even indeed 1SG-go 1SG.NOM to Torit
‘Even if it rains, I will go to Torit’ (Lit. ‘Should it even rain, I go to Torit’) BT:55:09
The protasis in (19) contains the irrealis form of the verb which indicates a hypothetical situation and is similar to (14). Thus it could be said that Lopit has a form of the (scalar) concessive conditional.

Lopit appears to have what Haspelmath & König describe as alternative concessive conditionals (i.e. ‘whether or not’ conditionals). Lopit doesn’t have a word with the meaning of ‘or’. However, the sequential marker can be used together with the subordinate marker and the potential particle ma as shown in the following sentence.

Lopit appears not to have a universal concessive conditional. The following sentence was considered because it can have the meaning of a “whenever” conditional. However, the literal translation given in (21) is also a sensible English construction and, syntactically, the sentence looks like a simple SVO clause. In addition, the morpheme ai, ‘any’ is a loan word from the Arabic (aya, ‘any”).

There are other ways in Lopit of expressing the semantic requirement of a universal concessive conditional. The following sentence can be interpreted as “Bring whatever cow you want!” However, syntactically, it is an imperative clause with a relative clause expressing the concession meaning.

Hence, it seems reasonable to say that Lopit does not have universal concessive conditionals.

2.7. Conditionals without overt marking. Lopit also has conditionals where there is no form of conditional conjunction, special verb form or subordinate marking. Some examples, which come from a narrative about cows, are given in (23) and (24). In these sentences, there are two declarative clauses in each sentence and no overt marking. The context of the sentences (i.e. the speaker is talking about the importance of cows) enables the hearer to understand the connection between the two clauses. The connection is that the first clause states some condition under which the second clause holds.
(23) \([\text{e-yei tohoni}]_p \ [\text{e-wak hiyo hiteng}]_q\)
3SG-dies person 3PL-want people cow
‘A person dies, people want a cow’ Cow narrative

(24) \([\text{o-wwon himora}]_p \ [\text{e-wak hiyo hiteng}]_q\)
3SG-be peace 3PL-want people cow
‘There is peace, people want a cow’ Cow narrative

This form could be described as an unmarked form of conditional. Some conditionals can be identified on the basis of “clear semantic equivalence with if-then sentences” but without “morphological, syntactic or semantic markers” (Ferguson, Reilly, Meulen, & Traugott, 1986, p. 6). It is an example of a situation that Haiman describes as where “the protasis is paratactic with the apodosis” (Haiman, 1986, p. 218). This is common in colloquial speech and narratives in general.

3. Conditionals in Eastern Nilotic languages

Conditionals in a number of Eastern Nilotic languages (Teso, Maasai, Turkana, Lotuko and Bari) were examined and a review is provided here. Teso has conditional sentences utilising an ‘if’ clause for hypothetical conditionals with the word arai, ‘if’.

(25) \([\text{Arai ilosi ijo}]_p \ [\text{a-buni aupar ka ijo}]_q\)
If go you I shall accompany?? with you
‘If you go I shall accompany you’ (Hilders & Lawrance, 1957, p. 42)

For counterfactual conditionals, Teso uses an ‘if…when’ construction (aria…, ti…) and the conditional prefix \(k\)- in the protasis, together with the subjunctive aspect in the apodasis (Hilders & Lawrance, 1957, p. 42).

(26) \([\text{Arai k-alot eong mol}]_p \ [\text{ti kadum apesan}]_q\)
If CON-1SG.go I tomorrow then would get money
If I were to go tomorrow, I would get the money’ (Hilders & Lawrance, 1957, p. 43)

Teso can also have a conditional construction without an ‘if’ in the protasis. This is done with the conditional verbal prefix \(k\)-.

(27) \([\text{k-alot eong Kampala}]_p \ [\text{kejukakini ijo agangat}]_q\)
CON-1SG.go I Kampala I send you help
‘If I go to Kampala, I shall send you help.’ (Loyola, 2007, p. 116)

In Turkana, the protasis usually precedes the main clause, but may also follow it. Conditional clauses are introduced by the markers \(a ni\). The marker \(a\) is an associative linker meaning ‘or’ and the marker \(ni\) is also used as an anaphoric element indicating ‘place just referred to’. The second
marker can be bound to the verb. The conditional mode is marked by an initial verbal marker \( k- \) (Dimmendaal, 1983, p185). An example of a hypothetical conditional is shown in (28).

(28) \[ a \ ni-k-a-ingit \ ayong \ ngakiro . \] \( _p \) \[ a-yen-un-i ] \( _Q \)
if if-CON-I-ask I.NOM matters I-know-VEN-A
‘If I ask questions, I will know.’ (Dimmendaal, 1983, p185)

Dimmendaal states that the marker \( k- \) is probably the same marker found in relative clauses. It is probably cognate with the Teso \( k- \). It might be similar to the Lopit subordinate marker (SBO) \( l- \). However, the prefix \( k- \), which is common in many Nilo-Saharan languages (Greenberg, 1963), is expressed in Lopit as the velar fricative and is written as \( h- \). The Lopit prefix \( h- \) is used as a sequential and interrogative marker, similar to \( k- \) in Turkana (see Appendix 1 for a list of Eastern Nilotic verbal prefixes). Thus the Lopit prefix \( l- \) appears to be different.

In order to indicate a counterfactual situation, an auxiliary verb, \( ra \), ‘to be’, which is inflected for aspect, is used to give the meaning of “if I were to…”. In these clauses, the conditional markers (\( a n i \)) are optional (Dimmendaal, 1983, p186).

(29) \[ k-a-ra-i \ a-to-nyam \ akimuj \ nakalalani ] \( _p \) \[ k-a-deka-kin-a ] \( _Q \)
‘If I were to have eaten a lot of food, I would have fallen sick.’ (Dimmendaal, 1983, p186)

In Maasai, the protasis is introduced by the morpheme \( te \), ‘if’. This is used for both hypothetical (30) and counterfactual (31) conditionals. The sequential or narrative marker (N-tense in Maasai) is used in conditionals (Tucker & Mpaayei, 1955, p103).

(30) \[ te \ n-a-suj ] \( _p \) \[ n-aa-idong ] \( _Q \)
if SEQ-1SG-follow SEQ-3SG>1SG-hit
‘If I follow him he will beat me’ (Tucker & Mpaayei, 1955, p. 103)

(31) \[ te \ n-aa-ipoto ] \( _p \) \[ anaata \ a-shomo ] \( _Q \)
if SEQ-3SG>1SG-call should 1SG-go.PFV
‘Had he called me, I should have gone’ (Tucker & Mpaayei, 1955, p. 102)

Lotuko (Otuho) also has a number of particles or subordinating conjunctions which introduce the protasis in conditionals. There is a more general conjunction morpheme \( al \), ‘if, when’ which is used in hypothetical conditionals such as (32). This may be related to the Lopit \( l- \) although it can be replaced by other conjunctions such as \( kwiya \) and \( ara \). Further work is required to understand any link.

(32) \[ al \ o-lleyo \ nacang \ teya ] \( _p \) \[ i-ramana \ nana ] \( _Q \)
if 3-appear game there 2SG-tell me
‘If game appears there, tell me.’ (Arber, 1936, p. 42)

The conjunction \( kwiya \), ‘perhaps, if’ is “commonly used for conditional sentences, particularly the more indefinite” (Arber, 1936, p. 42). The following is given as an example.
Conditional constructions in Lopit

There is another particle ara, ‘if’, which is also used in reality conditionals. This particle can also be used in hypothetical conditionals when used with the immediate past temporal adverb dwo, ‘moment ago’, which appears in both the protasis and apodosis.

Bari has the morpheme kɔ́, ‘if’, which introduces the protasis in reality and hypothetical conditionals. The particle á, ‘then,’ can be used optionally to introduce the apodosis (Spagnolo, 1933, p. 260).

For a counterfactual situation, the particle kó is followed by kódyö́, ‘perhaps, almost’. This latter word can appear in any position in the protasis or it can also appear in the apodosis (Spagnolo, 1933, p. 261). The mood and aspect of the verbs can also be changed.

From this brief study, it appears that conditionals in Lopit are generally similar to those in other Eastern Nilotic languages. Table 4 lists the variety of constructions used to express conditionals for the Eastern Nilotic languages studied. It shows those languages using a protasis...
beginning with an ‘if’ kind of morpheme, those with an ‘if..., then’ construction and those which use irrealis or conditional verb forms without an ‘if’ morpheme.

<table>
<thead>
<tr>
<th>Language</th>
<th>‘if’</th>
<th>‘if...,then’</th>
<th>without ‘if’, using irrealis or conditional verbal form</th>
<th>subordinate marker only</th>
<th>no marking of protasis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teso</td>
<td>arai</td>
<td>arai....ti</td>
<td>yes</td>
<td>-</td>
<td>?</td>
</tr>
<tr>
<td>Turkana</td>
<td>á</td>
<td>?</td>
<td>yes</td>
<td>-</td>
<td>?</td>
</tr>
<tr>
<td>Maasai</td>
<td>te</td>
<td>?</td>
<td>-</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Lotuko</td>
<td>al, kwiya, ara</td>
<td>al.....ottati..</td>
<td>-</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>Bari</td>
<td>kó</td>
<td>kó.....á..</td>
<td>-</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Lopit</td>
<td>lojo</td>
<td>lojo....hojo</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
</tbody>
</table>

Although the information is not complete, there are several observable trends. Firstly, all of the languages have some kind of conditional particle or conjunction which introduces the protasis (i.e. something similar to the English ‘if’). Secondly some languages can express conditionals without an ‘if’ particle by using irrealis and/or conditional forms of the verb.

It appears that the use of a subordinate marker in the protasis is only found in Lopit. This observation depends on how one interprets the $k$- prefix in Teso and Turkana, as illustrated in (27) and (29) respectively. If this is a conditional marker, then it is unlike the Lopit subordinate marker. If it is a general subordinate marker then the construction may be similar between the languages. However, this is probably unlikely since the apodosis in both (27) and (29) also commences with the prefix $k$-, which would not be normal for a main clause if it were a subordinate marker. In addition, at this stage, the prefix $k$- appears only to be found in Lopit.

It is worth noting that this is only a preliminary study and more work is required to be able to make definite comparisons.

4. Discussion and Conclusion

Lopit has three main ways of expressing conditionals. The first is the use of the subordinating marker $l$- to signal a subordinating clause. The second is the use of the conjunction $lojo$ which can take the meaning equivalent to the English ‘if’. This can be described as a subordinating morpheme (Thompson et al., 2007, p. 256). These first two methods are used for reality, predictive and hypothetical conditionals, but not for counterfactual conditionals. The third method is the use of specific modal forms such as the irrealis, $ngai$-, the potential, $ma$- and the conditional, $mai$- . This method is used for counterfactual conditionals and does not involve the use of the subordinate marker $l$- or the conjunction $lojo$ in the protasis.

The use of subordinating morphemes and of specific modal forms are reported as the most common for the world’s languages (Comrie, 1986, p. 87; Thompson et al., 2007, p. 256). The use of specific modal forms is common where the verb encodes some form of hypotheticality or counterfactuality (Comrie, 1986, p. 87; Thompson et al., 2007, p. 257). This is also the case for Lopit.
In some of the conditionals marked with the subordinating marker in the protasis, there is a special verb form in the apodosis, such as in (1). However, for many conditionals such as (3), (5) and (6), the subordinate marker is the only overt marker related to conditionality. Thus, in these sentences, it is only the marking of subordination that establishes a relation between the two clauses.

Comrie considers that in order to have conditional constructions, a language must have “a formally identifiable syntactic construction whose basic function is to encode conditional. This construction may have other functions in addition to that of expressing conditionals, but this must be the main function” (Comrie, 1986, p. 82). He also allows for a weaker definition in which the encoding of conditionals is “one of the basic functions of the construction in question” (Comrie, 1986, p. 82). Thus in Lopit, constructions with lojo (which can mean both ‘if’ as in (7) and ‘when’ as in (9)) would be considered conditional constructions according to the ‘weaker’ characterisation. Similarly, constructions with the subordinate marker l- (as in (1) to (6)) would also be of the ‘weaker’ type, since this subordinate marker has other basic uses as is discussed above.

Lopit also has some concessive conditionals. There are constructions for scalar and alternative conditionals (using Haspelmath & König's terms (1998, p. 563)). Universal concessive conditionals and negative conditionals can be constructed using Arabic loan words. However, it appears that it is more usual to express the kinds of meanings conveyed in these sentences using ordinary conditionals.

Conditionals in Lopit have much in common with other Eastern Nilotic languages. However, Lopit appears to be the only one which is able to express conditionals with a subordinate marker which is not a special conditional marker.
Table 5: Verbal prefixes used in Eastern Nilotic languages

<table>
<thead>
<tr>
<th>Sub-group</th>
<th>Lotuxo-Maa</th>
<th>Teso-Turkana</th>
<th>Bari</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language</td>
<td>Lopit</td>
<td>Lotuko</td>
<td>Maa</td>
</tr>
<tr>
<td></td>
<td>Turkana</td>
<td>Toposa</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Toposa</td>
<td>Teso-Turkana</td>
<td></td>
</tr>
<tr>
<td>imperative</td>
<td>te-, ite-(1), i- (2), ha-</td>
<td>te-, tV-(1), i-(2), ha-</td>
<td>te-</td>
</tr>
<tr>
<td>hortative</td>
<td>ali-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>infinitive</td>
<td>nga-(1), h-(2)</td>
<td>none</td>
<td>a-, ata-</td>
</tr>
<tr>
<td>negation</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>subordinator</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>interrogative</td>
<td>h-</td>
<td>k-</td>
<td></td>
</tr>
<tr>
<td>conditional</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>discourse</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>inchoative</td>
<td>hi-</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Yes
- No
- None
- Change
Conditional constructions in Lopit

Abbreviations

<table>
<thead>
<tr>
<th></th>
<th>1st person</th>
<th>IRR</th>
<th>irrealis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2nd person</td>
<td>NEG</td>
<td>negative</td>
</tr>
<tr>
<td>2</td>
<td>3rd person</td>
<td>NOM</td>
<td>nominative</td>
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<tr>
<td>3</td>
<td>ABS</td>
<td>PL</td>
<td>plural</td>
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<tr>
<td>ABS</td>
<td>APPL</td>
<td>POT</td>
<td>potential</td>
</tr>
<tr>
<td>APPL</td>
<td>A</td>
<td>PST</td>
<td>past</td>
</tr>
<tr>
<td>A</td>
<td>CAUS</td>
<td>Q</td>
<td>question maker</td>
</tr>
<tr>
<td>CAUS</td>
<td>COMP</td>
<td>RC</td>
<td>relative clause</td>
</tr>
<tr>
<td>COMP</td>
<td>CON</td>
<td>REDUP</td>
<td>reduplication</td>
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<tr>
<td>CON</td>
<td>DAT</td>
<td>REL</td>
<td>relative marker</td>
</tr>
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<td>DEO</td>
<td>SBO</td>
<td>subordinator</td>
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<tr>
<td>DEO</td>
<td>F</td>
<td>SEQ</td>
<td>sequential</td>
</tr>
<tr>
<td>F</td>
<td>FUT</td>
<td>SG</td>
<td>singular</td>
</tr>
<tr>
<td>FUT</td>
<td>IMM</td>
<td>V</td>
<td>verb</td>
</tr>
<tr>
<td>IMM</td>
<td>INF</td>
<td>VDM</td>
<td>verb displacement marker</td>
</tr>
<tr>
<td>INF</td>
<td>INST</td>
<td>VEN</td>
<td>ventive</td>
</tr>
<tr>
<td>INST</td>
<td>M</td>
<td>masculine (and small things)</td>
<td></td>
</tr>
</tbody>
</table>

References


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