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# **Tense and Aspect in Eight Languages of Cameroon**

**Stephen C. Anderson and Bernard Comrie**

*Editors*

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# Table of Contents

Preface . . . . .	xi
<i>Bernard Comrie</i>	
Section One: Narrow Bantu Languages	
Tense and Aspect in Makaa . . . . .	3
<i>Daniel Heath</i>	
Temps et aspect en kako . . . . .	17
<i>Urs Ernst</i>	
Koozime Verbal System . . . . .	47
<i>Keith H. Beavon</i>	
Le système temporel et aspectuel de la langue nomaande . . . . .	105
<i>Patricia Wilkendorf</i>	
Relative Time Reference in Nugunu . . . . .	147
<i>Carol Orwig</i>	
Section Two: Grassfields Bantu Languages	
Conditionals in Mundani . . . . .	165
<i>Elizabeth Parker</i>	
Complex Sentences and Subordination in Mundani . . . . .	189
<i>Elizabeth Parker</i>	

## Section Three: Chadic Languages

Tense and Aspect in Podoko Narrative and Procedural Discourse . . .	213
<i>Elizabeth Jarvis</i>	
Tense and Aspect in Mofu-Gudur . . . . .	239
<i>Kenneth R. Hollingsworth</i>	

### Narrow Bantu

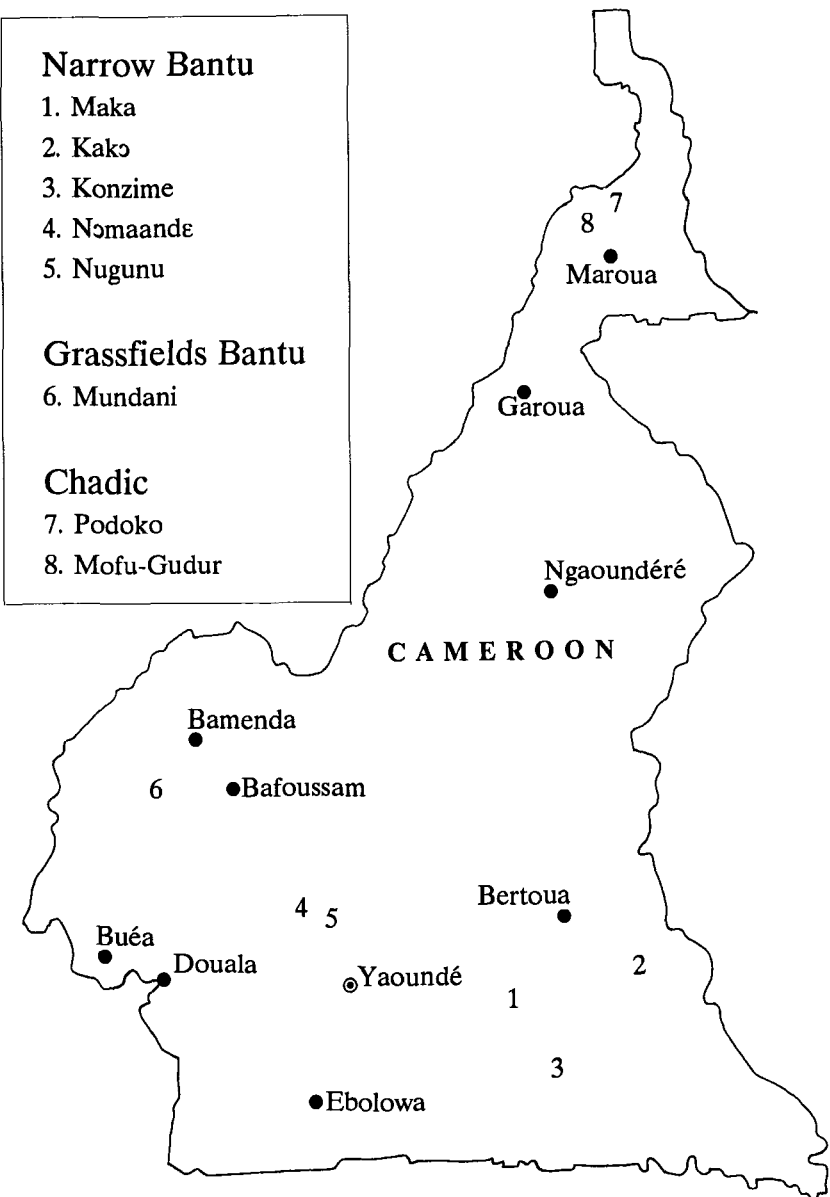
1. Maka
2. Kako
3. Konzime
4. Nɔmaande
5. Nugunu

### Grassfields Bantu

6. Mundani

### Chadic

7. Podoko
8. Mofu-Gudur



# **Complex Sentences and Subordination in Mundani**

**Elizabeth Parker**

## **Abstract**

Mundani is a Grassfields Bantu language of the Momo subgroup, spoken in the S. W. Province of Cameroon.

This study defines the complex sentence as any sentence of more than one clause, whether those clauses are conjoined or subordinated one to another. In Mundani, the complex sentence (so defined) can take a variety of forms: a series of consecutivized clauses; a series of independent clauses that are juxtaposed without any overt indication of the relationship between them; a cluster of two or more clauses whose semantic relations are formalized by various markers. Apart from the markers of contrastive and conditional relations, there are four markers in Mundani that can be considered "basic". These markers, plus various compounds of them, permit a whole range of semantic relations to be formalized.

In addition to the marking of semantic relations, grammatical subordination may be signalled in certain clauses by means of the particle *lá* in final position, and/or a L-H tone pattern on the subject pronominal complex in the imperfective aspect or in future tenses. The coincidence of these markers of grammatical subordination with semantic dependency is almost (but not quite) complete. A discrepancy exists in two clause types that are semantically dependent but not subordinated grammatically, and a possible explanation for this discrepancy is proposed.

## **Résumé**

Le mundani est parlé dans la province du Sud-Ouest du Cameroun. Il appartient au groupe bantu des Grassfields, sous-groupe momo.

Dans cette étude, la phrase complexe sera définie comme une phrase composée de deux ou de plusieurs propositions, sans tenir compte des relations de coordination ou de subordination qui existent entre celles-ci. En

mundani, la phrase complexe ainsi définie se manifeste sous plusieurs formes. Elle peut se composer d'une série de propositions consécutives, ou d'une série de propositions indépendantes juxtaposées, sans marque explicite des relations qui les unissent. La phrase complexe peut également se composer d'une séquence de deux ou de plusieurs propositions dont les rapports sémantiques sont signalés par des morphèmes. En plus des marqueurs des relations contrastives et conditionnelles, il existe quatre marqueurs en mundani que l'on peut considérer comme formes de base. Ces formes et leurs composés permettent d'exprimer toute une gamme de relations sémantiques.

En plus des relations sémantiques, la subordination grammaticale est signalée dans certaines phrases au moyen de la particule *lá* en finale et du schème tonal B-H accompagnant un sujet pronominal complexe à l'imparfait et au futur. Ces marques de subordination grammaticale correspondent de façon presque exacte à la dépendance sémantique. Une divergence est relevée pour deux types de propositions, dépendantes du point de vue sémantique, mais indépendantes du point de vue grammatical. Un essai d'explication de cette divergence entre la dépendance sémantique et grammaticale sera proposé.

The following study of the complex sentence in Mundani is based on observations made during the period 1986–1989. The data were collected from written texts and from oral sources, and were checked and elaborated by James Jih Ndam with Sampson Akem Ketu.

The topics are grouped according to semantic rather than formal factors. Relative clauses are not included, as these are described in Parker 1985b. Conditional clauses are mentioned in §§5 and 7, but a more comprehensive description is found in the preceding paper in this volume.

For the purposes of this study, the complex sentence is defined as any sentence of more than one clause, whether those clauses are conjoined or subordinated one to another. For each type of complex sentence, certain formal features are noted, namely, the order of the clauses and the markers showing the relationship between them. Semantic features—the kinds of information encoded—are dealt with briefly. Section 8 of this study examines the occurrence of particular tone patterns on the subject pronominal complex in different clause types. It is seen that the tone pattern selected depends on the clause type, and that one of the two sets of patterns almost always coincides with the presence of the subordinator *la*.

## 1. Chronological ordering of events

**1.1. Consecutive constructions.** Consecutive constructions consist of a series of two or more verbs that share a common subject and a common tense-aspect specification. The subject and tense are expressed overtly only before the first verb in the series. Imperfective (IMPV) aspect is marked by



the suffix *-á* attached to each verb in the sequence; perfective (PFV) aspect is unmarked and can be assumed throughout the sequence when imperfective marking is absent. Each verb after the first in the series carries a prefix signalling 'same subject'. This prefix does not indicate the person-number category of the subject nor the tense-aspect specification of the verb. It can take one of the following two forms, depending on whether the verb to which it is attached is factive (FACT) or nonfactive (NFACT).

*Factive Ñ-*. This prefix is a syllabic nasal consonant which carries low tone and is homorganic with the initial consonant of the verb root to which it is attached. It has a low tone variant /è-/ preceding a voiceless fricative or nasal consonant (but frequently deleted before a nasal).<sup>1</sup>

- (1) *Tà lè ki?i ñ-tsèkê ñ-dzi èghidzi.*  
 3s P3 come FACT-sit FACT-eat food  
 He came, sat down and ate.

*Nonfactive ē-*. This prefix is a mid vowel with a mid tone and it is often elided with a preceding vowel.

- (2) *Ta-a e-ki?i e-tseke e-dzi èghidzi.*  
 3s-F NFACT-come NFACT-sit NFACT-eat food  
 He will come, sit down and eat.

Parker 1985a:2–7 sets out further details of verb forms used in consecutive constructions, and of the interaction of the factive-nonfactive distinction with tense and aspect. Various kinds of semantic information encoded in the consecutive construction are also outlined (Parker 1985a:8–9). Note that one of the consecutive's main functions is to express the coordination of two or more events. The verbs that express the events are usually (but not invariably) arranged in the chronological order in which the events actually occur in the real world. This normal ordering is seen in (1) and (2). Occasionally, however, a verb in the series falls outside the main

<sup>1</sup>Abbreviations used in the examples—not mentioned elsewhere—are: c(#) noun class number; CONT continuous; DEF definitizer; EMPH emphatic; F1 today future; F2 tomorrow future; F3 after tomorrow future; IMP imperative; INCEPT inceptive; INT interrogative; LOC locative; NEG negative; O object; PO possessive; PROG progressive; REF reflexive; S subject; SIM simultaneity; a cedilla under a vowel signals nasalization.

Tones are marked as follows: ˘ low or extra-low tone (L), ˊ rising tone, ˋ falling tone, ˆ high tone (H), and – mid-tone (M). High and mid tone are left unmarked except where it is desired to draw attention to them.

chronological sequence. This is the case with *eye* in (3), which expresses the purpose of the preceding verb *ngà*: it was Lucas' intention to see him, but it is not certain whether he actually did so.

- (3) *Lukàs dzà n-gà àbẹ e-ye atò,*  
 Lucas PFV<sup>^</sup>go<sup>^</sup>out FACT-go outside NFACT-see 3sO  
*n-dò? Ø-ni ambè vi n-gà.*  
 FACT-then FACT-take c1<sup>^</sup>bag c1<sup>^</sup>3sPO FACT-go<sup>2</sup>  
 Lucas went outside to see him, then took his bag and went.

The time sequence may be made more explicit by including *elò?o* or *ebò* in the series of consecutive verbs. *Elò?o* exists as an independent verb meaning 'move, finish'; *ebò* is an auxiliary verb with the sense 'then (do something)'. When inserted into a consecutive construction, either verb may be translated as 'then' or 'afterwards'.

- (4) *Tà dzi n-dò? Ø-nu*  
 3sS PFV<sup>^</sup>eat FACT-then FACT-drink  
*m-bô n-dò?osi me e-ghă.*  
 FACT-then FACT-get<sup>^</sup>up INCEPT NFACT-go  
 He ate, then drank, and afterwards got up to go.

**1.2. Juxtaposition of clauses.** Where actions or events in a series do not share a common agent, they may be expressed as a series of separate, juxtaposed clauses, each with its own subject and verb. The clauses are normally arranged in the same order as the order of the events in time. There is a sequence of three such clauses in (5). The clauses are bound together by a single sentence intonation (with lowered pitch on the final two or three syllables), and so they are separated orthographically only by commas.

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<sup>2</sup>The noun class of specific nouns is marked in the examples only where there is a concord marker which agrees with it in the immediate context, in which case both the noun and its corresponding agreement marker have their noun class indicated.

- (5) *Tà tsì èkpɛ nyâ bu,*  
 3SS PFV^remove c8^bones meat c8^DEF

*tà mà?tè a silob, abə kɔ? n-gbi.*  
 3SS PFV^throw LOC floor dog PFV^get^up FACT-grab

He removed the meat bones, he threw them on the floor, Dog got up and grabbed them.

**1.3. The chronological marker *ka* 'before'.** In addition to consecutive constructions and simple juxtaposition of clauses, a chronological sequence of events may be expressed by linking two clauses by the marker *ka* 'before', as in (6). *Ka* may occur with the full range of tenses—past, present, or future.

- (6) *Ma-a ghă adzi ka tsě ghă akatè.*  
 1SS-F go LOC^stream before pass go LOC^school  
 I'll go to the stream before going on to school.

## 2. Complement clauses

Complement clauses expressing the content of a verb of speaking, thinking, feeling, or hearing may be introduced by one of two separate complementizers—*nê* 'say' that' or *ndi* 'how'. These two forms are illustrated in (7) and (8). In (7), the verb *su* 'say' is in parentheses to show that it may be optionally deleted before the complementizer (COMP) *nê*.

- (7) *Tà (su) nê, à ka n-gà.*  
 3SS (say) COMP^that 2SS NEG FACT-go  
 He says that you should not go.

- (8) *Malià nà-à n-kpà?t-à ndi,*  
 Mary PROG-IMPV FACT-plan-IMPV COMP^how

*yè-á lɔ?ɔ lə akɛŋ la.*  
 LOG^SUB-F FI cook cooking^pot SUB  
 Mary is planning how she will cook a meal.

In (8), a complement clause introduced by *ndi* is closed by the subordinator (SUB) *la* and uses the characteristically subordinate tone pattern on the subject pronominal complex—in this case *yè-á* (L-H) instead of the H-M pattern that would appear in a main clause (§8). The logophoric (LOG)

pronoun *ye* appears in subject position in the complement clause, instead of the normal third-person-singular pronoun *ta*. In complement clauses introduced by either *ndi* or *nê*, the use of logophoric pronouns is obligatory to indicate coreference with a third-person-singular subject in the main clause. Logophoric forms and their functions are described in Parker 1986:151–56.

Unlike *nê*, *ndi* does not permit the deletion of a preceding verb of speaking. A complement clause introduced by *ndi* always has to do with the manner in which something is done, so it is not surprising that *ndi* also functions as a marker of certain adverbial clauses of manner (§6).

### 3. Comparison

A common way to express a comparative notion in the language involves the use of the consecutive form of the verb *ētsē* ‘pass, surpass’.

- (9) *Tà kô                    ñ-tsè                    am.*  
 3sS PFV^know FACT-surpass 1sO  
 He knows more than I do. (lit. He knows and surpasses me.)

A comparison may also be implied by an adverbial clause of manner introduced by *m̃b̃i?i* ‘as’ or the more emphatic form *wu m̃b̃i?i* ‘just as’.

- (10) *Ghia    m̃b̃i?i    tà-á                    è-sù-a                    awê    la.*  
 IMP^do as    3sS^SUB-IMPV NFACT-tell-IMPV 2sO    SUB  
 Do as he is telling you!

- (11) *Tà-à    ñ-gì-à                    mènà                    mi*  
 3sS-IMPV FACT-do-IMPV c6a^matters c6a^3sPO  
  
*wu    m̃b̃i?i    tàt                    vi                    lè    wua    ñ-gì-à                    la.*  
 just as    c1^father c1^3sPO    P3 CONT FACT-do-IMPV SUB  
 He is behaving just as his father used to do.

As seen in (10) and (11), an adverbial clause of manner introduced by *m̃b̃i?i* is closed by the subordinator *la*. It adopts the characteristically subordinate tone pattern on its subject pronoun—*tà-á* (L-H), in (10), instead of *tà-à* (L-L), which would be the form used in a corresponding main clause (§8).

Close semantic links between the notions of comparison, circumstance, manner, and purpose are reflected in Mundani by the possibility of using the same marker *m̃b̃i?i* for each of them, although various other formal features distinguish the different clause types. Compare sentence (10)

above with (16), (17), and (23) below. See also Beekman et al. (1981:99–100) for comments on these semantic relationships.

#### 4. Contrast

Two coordinate clauses in a contrastive relationship are linked by the marker *ka* ‘but’. This marker is homophonous with the negative marker in future tenses, as in (12), and with the emphatic marker used in certain relative clauses, as in line 4 of (13).

- (12) *Mâ ni ekab wu te ñ-dɔʔ,*  
 1s PFV^take c3^money c3^DEF until FACT-finish

*ka à ka su wòt.*  
 but 2s NEG tell person

I have already taken the money, but you should not tell anyone.

Where the relationship of contrast exists between a conditional (COND) sentence and an immediately preceding sentence (i.e., a minimum of at least three clauses), *ka* is replaced by the marker *mbə*, ‘but (if)’. In (13), the preceding sentence happens also to be conditional, but this is not a prerequisite for the use of *mbə* as a marker of the contrastive relationship. Note that *mbə* is homophonous with one of the two possible markers of the conditional construction itself, but it occurs in initial position in the antecedent clause, whereas the conditional marker is placed between the antecedent and consequence clauses (compare (13) with (14a)).

- (13) *Àfāʔ yaa bɔ fāʔà la wu àghi-a*  
 c7^work c7^DEM 3ps work SUB be c7^thing-c7^morning

*wòbɛ e tanke la, ko a-à ñ-gà leme.*  
 c1^human^being c1s plan SUB COND c7s-IMPV FACT-go disappear

*Mbə a wu àghi-a Mbɔɔmà ka tà tanke la,*  
 but c7s be c7^thing-c7^morning God EMPH 3s plan SUB

*ko betsiʔa bi ka liimè.*  
 COND can 2ps NEG destroy

If this work that they have been doing is something that a human being has planned, then it will disappear. But if it is something that God has planned, you will not be able to destroy it.

### 5. Circumstance

A subordinate clause giving the circumstances or setting of the event expressed in the main clause may be one of the following:

- (a) The antecedent clause of a conditional sentence (if...)
- (b) A temporal adverbial clause (when...)
- (c) An adverbial clause of circumstance introduced by *m̃biɲ* (as, since...)

Examples of each clause type are given in (14–16).

(14) Antecedent clause of a conditional sentence

a. With *ko* or *m̃bə*

*Bò me dzi èkab nyaŋ,*  
3pS<sup>^</sup>SUB<sup>3</sup> SIM eat money much

*ko/m̃bə bɔ me ni bèzi m̃-bi bɔ nengaa.*  
COND 3pS SIM take wives FACT-give<sup>^</sup>birth children through  
If they earn a lot of money, they take wives and have children by them.

b. With *na* . . . *la*

*A-a lɔʔɔ à lə akɪŋ,*  
2sS-F FI<sup>^</sup>HORT 2sS cook cooking<sup>^</sup>pot

*na à bakà bɔ afà? la.*  
COND 2sS PFV<sup>^</sup>NEG have work SUB

You should cook a meal if you don't have any work to do.

Conditional sentences are described in Parker 1989. In (14a), the conditional relationship is marked optionally by *ko* or *m̃bə* placed at the beginning of the consequence clause. The choice between the two markers depends on the personal preference of the speaker. The order of the clauses is antecedent-consequence, and the antecedent clause adopts subordinate tone patterns on the subject pronominal complex (§8).

A different type of conditional structure is illustrated in (14b). The order of clauses is reversed (consequence-antecedent). The antecedent clause is

<sup>3</sup>In the antecedent clause of a conditional sentence, it has been observed that in the perfective a low tone replaces the normal high on the second- and third-person-plural-subject pronouns *bɪ* and *bɔ*.

introduced obligatorily by the conditional marker *na*. It is closed by the subordinator *la* and carries subordinate tone patterns on its subject pronominal complex. This second type of conditional sentence is less common than the first.

In (15), a temporal clause precedes a main clause. It is unmarked except for a subordinate tone pattern on the subject pronominal complex—in this case *à-á* (L-H) instead of the pattern *á-ā* (H-M) characteristic of a main clause. An alternative way of expressing the temporal notion in (15) would be to use the nominal *àfî?* ‘time’ followed by a relative clause *Afî?a [à-á kî?î la]* ‘At the time when you will come’. This type of structure could precede or follow the main clause.

- (15) *À-á kî?î, à me lòòte mètàsà bato? bu.*  
 2sS-F<sup>^</sup>SUB come 2sS INCEPT cut mouths c2<sup>^</sup>calabashes c2<sup>^</sup>DEF  
 When you come, you should begin to cut the mouths of the calabashes.

In (16), an adverbial clause of circumstance introduced by *m̀bî?î* is closed by the subordinator *la*. In the imperfective or future, it would carry a subordinate tone pattern on the subject pronominal complex.

- (16) *M̀bî?î tà ghî ñ-dà èghidzi ale la, mâ ghî ñ-dzi.*  
 since 3sS P1 FACT-cook food thus SUB 1sS P1 FACT-eat  
 Since she had cooked food (earlier today), I ate it (earlier today).

The relationship between the clause types illustrated in (14)–(16) is very close. In particular, the distinction between conditional and temporal types is neutralized where there is no conditional marker present.

## 6. Manner

Adverbial clauses of manner always follow the main clause to which they are subordinated. They may be introduced by one of two markers—*m̀bî?î* ‘as’ or *ñdî* ‘how’—or by a compound marker in which *m̀bî?î* or *ñdî* is one component. In every case the adverbial clause of manner is closed by the subordinator *la* and employs subordinate tone patterns on the subject pronominal complex. Examples are given in (17)–(20). Note that these sentences are also comparisons (§3). The marker *ñdî* and its compound forms always have to do with the MANNER in which a given action or event occurs. The emphatic form *wu m̀bî?î* ‘just as’ is illustrated above in

(11). The emphatic form of *ndi* is *wu ndi* 'just how'. The form *ngu-ndi* always implies uncertainty.

- (17) *Ghia mbi?i ta su la.*  
 IMP^do as 3sS PFV^say SUB  
 Do as he says!

- (18) *Ta-a li e-mě e-ki?i,*  
 3sS-F F3 NFACT-again NFACT-come

*mbi?i-ndi akate atò a su la.*  
 as-how c7^letter 3sPO c7^S PFV^say SUB  
 He will come back as his letter says.

- (19) *Dzŋn na-à n-gi-à mènà mi*  
 John PROG-IMPV FACT-do-IMPV c6a^matters c6a^3sREF

*ndi betsi?a wòt ka fèele atò la.*  
 how can person NEG blame 3sO SUB  
 John is behaving in a way that no one can blame him.

- (20) *Tà me lene wā wu*  
 3sS SIM beat c1^child c1^DEF

*ngu-ndi bô-ó n-dèn-a atò mġ la â?*  
 be-how 3ps^SUB-IMPV FACT-beat-IMPV 3sO also SUB INT  
 Does he beat the child in the same way that he is also being beaten?

## 7. Cause and effect

The antecedent-consequence relationship in conditional sentences, described briefly in §5, is one kind of cause-effect relation. Other cause-effect relations are illustrated in this section.

**7.1. Means-purpose.** Two initial generalizations can be made about purpose sentences. First, the order of clauses is always means-purpose. Second, the purpose clause is not marked by the subordinator *la*, and the subject pronoun does not carry a subordinate tone pattern. In other words, there is no indication in a means-purpose sentence that either clause is subordinated to the other.



There are three strategies for conveying the notion of purpose. The first is that two clauses can be simply juxtaposed, with no overt marker of the relationship between them. The purpose clause must follow the means clause and is normally in the hortatory (HORT) mood, as in (21).

- (21) *Tà tɔ atò, tà kɪʔi ɲa èghi bu.*  
 3sS PFV<sup>call</sup> 3sO 3sS HORT<sup>come</sup> give c8<sup>things</sup> c8<sup>DEF</sup>  
 He called him to come and give the things.

The second strategy for indicating purpose is to use the speech introducer *nê* 'say) that' with its extended function as a marker of a means-purpose relation. In this case, it is translated as 'so that, in order that'. The presence of *nê* implies that the purpose is already fulfilled at the moment of speech or is certain to be fulfilled. This type of purpose sentence is illustrated in (22).

- (22) *Tà wu-a ñ-kɪ-a awê,*  
 3sS CONT-IMPV FACT-search-IMPV 2sO  
*nê, à kɪʔi ñ-gà adzi.*  
 so<sup>that</sup> 2sS HORT<sup>come</sup> FACT-go LOC<sup>stream</sup>  
 He was looking for you so that you should come and go to the stream.

Finally, the means-purpose relation may be marked by *m̀bɪʔi* 'so that, in order that'. In this case, the purpose is uncertain: it may or may not be fulfilled. *M̀bɪʔi* may also be used to express a negative purpose 'so that not, lest', without the further addition of a negative marker. The mood or tense specification of the verb in the purpose clause shows whether the sense is positive or negative. Future tense indicates a positive interpretation, as in (23a); the hortatory mood indicates a negative one, as in (23b).

- (23) Explicit purpose marker *m̀bɪʔi*

- a. *Tɔ atò m̀bɪʔi tá-ā kɪʔi e-dzi èghidzi bi.*  
 IMP<sup>call</sup> 3sO so<sup>that</sup> 3sS-F come NFACT-eat c8<sup>food</sup> c8<sup>3sPO</sup>  
 Call him so that he can come and eat his food!
- b. *Su atò m̀bɪʔi tà kpen.*  
 IMP<sup>tell</sup> 3sO lest 3sS HORT<sup>fall</sup>  
 Tell him so that he will not fall!

**7.2. Reason-result.** The reason-result relation is commonly signalled by one of four markers—*ngunê*, *m̃bîîinê*, *na*, or *m̃bîîina*—any of which can be translated ‘because, since, for’. With these markers, the result clause always precedes the reason clause. Examples are given in (24)–(27).

Examples (24) and (25) illustrate reason clauses introduced by one of two compound forms where *nê* is the main constituent: *ngu-nê* and *m̃bîîi-nê*. These clauses display no marks of subordination.

- (24) *Pitâ me ghă abę ale,*  
Peter SIM go outside thus

*ngu-nê atî tâ-á tseke la ñtsě.*  
since chair [3sS^SUB-F sit SUB] be^not  
Peter went outside since there was no chair for him to sit on.

- (25) *Tɔ Lukàs tà kîîi, m̃bîîi-nê tà bakà wu asi,*  
IMP^call Lucas 3sS HORT^come because 3sS PFV^NEG be present

*bà ka ko ñ-tsɔ̃t̃è àñaa ngaa.*  
1pS NEG know FACT-settle matter DEM  
Call for Luke to come, since if he is not present, we shall not be able to settle that matter!

A reason clause introduced by *na* or the compound form *m̃bîîi-na* is closed by *la*, and the subject pronominal complex carries subordinate tone marking. For example, *à-á* (L-H) occurs in (26) instead of the nonsubordinate *á-ā* (H-M). There is no observable semantic difference, however, between the subordinate and nonsubordinate constructions.

- (26) *Me ko awê, na à-á kpene abeme ebi la.*  
INCEPT take^care 2sO because 2sS^SUB-F fall inside hole SUB  
Take care because you may fall into a hole!

- (27) *Ka ñ-gà angele tò, m̃bîîi-na tà wu l̃i la.*  
NEG FACT-go beside 3sPO because 3sS PFV^be wizard SUB  
Don't go near him because he is a wizard!

In the reason-result relation, the order of clauses is reversed when the relationship is marked by *ale* ‘so’, or by the emphatic form *è wu ale*, which is a complete clause in its own right meaning ‘since it is so’. Examples of these are given in (28) and (29).

- (28) *Vi Pità è su atò nê, tà gha n-dze*  
 wife Peter c1S PFV^tell 3sO COMP^that 3sS HORT^go FACT-see  
*a Fɔ̌, ale tà sà? atetsɔ? n-gà.*  
 c1^O chief so 3sS PFV^wake^up LOC^morning FACT-go  
 Peter's wife told him he should go and see the chief, so the next morning he went.
- (29) *Tàt wê nà-à n-gɔ̌ɔn-à,*  
 c1^father c1^2sPO PROG-IMPV FACT-be^sick-IMPV  
*è wu ale, à nì atò n-gà a wasipità.*  
 it be so 2sS HORT^take 3sO FACT-go LOC hospital  
 Your father is sick, so you should take him to the hospital.

Notice, finally, that in sentences (24)–(29) the semantic relationship between the two clauses could be interpreted as grounds-conclusion rather than as reason-result.

**7.3. Grounds-conclusion.** There are two main additional ways in which a grounds-conclusion relation may be expressed. First, the relation may be signalled by the compound marker *nɔ̌ɔn* 'since', introducing the grounds clause. With this marker, the order of clauses is not fixed—both grounds-conclusion and conclusion-grounds orders are acceptable. The grounds clause is always closed by *la* and, in the imperfective and future, carries a subordinate tone pattern on the subject pronoun. Examples (30) and (31) illustrate the grounds clause in initial and final positions, respectively.

- (30) *Nɔ̌ɔn à fà?à àfà? ayê te n-dò? la,*  
 since 2sS PFV^work c7^work c7^2sPO until FACT-finish SUB  
*à tsi? me tɔ̌ èkatè bê.*  
 2sS HORT^instead INCEPT read c8^books c8^2sPO  
 Since you have already completed your work, you should begin to read your books.
- (31) *A-a lɔ̌ɔ à lɔ̌ akɔ̌,*  
 2sS-F F1 2sS HORT^cook cooking^pot  
*nɔ̌ɔn à bakà bɔ̌ afà? la.*  
 since 2sS PFV^NEG have work SUB  
 You should cook a meal, since you don't have any work to do.

Finally, the grounds-conclusion relation may be marked by one of three compound forms derived from *ɲkàà* ‘because of’. These forms, which are *ɲkàà-nê*, *ɲkàà-na*, and *ɲkàà-ndi*, introduce the grounds clause and may be translated ‘since’. The order of clauses with these markers is always conclusion-grounds, as in (32)–(34). A grounds clause introduced by *ɲkàà-nê* has no marks of subordination. A grounds clause introduced by *ɲkàà-na* or *ɲkàà-ndi* is closed by *la* and carries a subordinate tone pattern on the subject pronominal complex. The verb *ɲgùà* ‘being’ normally precedes *ɲkàà-ndi*.

- (32) *Bà le tsi èlen-e àli laane nê wu Abù?*  
 1<sub>PS</sub> P3 put c5^name-c5^morning day today say^that be Abu?

*ɲkàà-nê bò le wua ɲ-dzà-a ɲ-gà-Ø*  
 because 3<sub>PS</sub> P3 CONT FACT-go^Out-IMPV FACT-go-IMPV

*ɲ-kì-a èbù? ane àli-a ngaa.*  
 FACT-look-IMPV slaves on c7^day-c7^morning DEM

We called the name of this day Abu? because they would go out looking for slaves on that day.

- (33) *Bì ka ɲ-gà èwen afi? yaa,*  
 2<sub>PS</sub> NEG FACT-go market c7^LOC^time c7^DEM

*ɲkàà-nà ɲbìɲ nà-à ɲ-kǎ e-lu la.*  
 since rain PROG-IMPV FACT-want NFACT-rain SUB

You should not go to market now, since rain is threatening to fall.

- (34) *Ma me la?a nê,*  
 1<sub>SS</sub> SIM say COMP^that

*wə am ka fâ? àfâ? yu ale,*  
 c1^child c1^1<sub>SPO</sub> NEG work c7^work c7^DEF thus

*ɲ-gù-a ɲkàà-ndi tà-á ɲ-gòɲn-a la.*  
 FACT-be-IMPV since 3<sub>SS</sub>^SUB-IMPV FACT-be^sick-IMPV SUB

I said that my child should not do the work since he is sick.

## 8. Tone patterns on the subject pronominal complex

**8.1. Independent clauses.** An independent clause is one which can stand alone in semantic terms and to which other clauses are linked in a dependent relationship. The forms of the subject pronominal complex in independent clauses are set out in (35).

Column A gives the tense-aspect specification of the clause in which given pronoun forms occur. These specifications are: perfective aspect (PFV) and imperfective aspect (IMPV), which are both unmarked for tense but normally interpreted as present; past before yesterday (P3); past yesterday/general past (P2/P, a single form with two functions); past today (P1); and future tenses (F). (For an outline of the tense-aspect system of Mundani, see Parker 1985a.)

In column B, the numbers 1, 2, and 3 represent first, second, and third persons, respectively. In column C are given the singular pronoun forms, and in column D the plural forms, with the tones written separately beside each form.

Notes on chart (35):

- (a) Pronoun forms in positive and negative sentences are identical except where otherwise indicated.
- (b) The basic pronoun form may be combined with a preverbal tense or aspect marker. Where this occurs, the marker has been separated from the pronoun proper by a hyphen. The preverbal imperfective marker is the suffix *-à*; the marker of tense P2/P is also *-à*. The marker of future tense in positive clauses is *-ā*, but in the negative this tense marker is displaced to clause-final position and carries a high tone. In third person plural pronoun forms, the vowel of the tense or aspect marker assimilates to the preceding root vowel /ɔ/; e.g., *bɔ-à* → *bɔ-ɔ̃*.
- (c) Subject pronouns in the imperfective and tense P2/P are identical. The distinction between the two constructions is maintained in the verb forms.
- (d) Tense P1 (past today) employs the same set of subject pronouns as the perfective. This is because P1 is signalled by an auxiliary verb—*elɔʔɔ*, *eghĩ*, or *eli*—which in the perfective occurs as *lɔʔ*, *ghĩ*, or *li*. The following main verb is in its consecutive form, e.g., *mā lɔʔ mbēn* 'I danced (earlier today).'
- (e) A replacive low tone pattern overrides the pronoun tones in tense P3 and the future negative.

## (35) Tone patterns on the subject pronominal complex in independent clauses

A TNS/ASP	B PERSON	C SG	D PL
PFV	1	<i>mâ</i> HL	<i>bââ</i> HL
		<i>m̃</i> (NEG) H	<i>bá</i> (NEG) H
	2	<i>à</i> L	<i>bí</i> H
	3	<i>tà</i> L	<i>bó</i> H
IMPV	1	<i>má-à</i> H-L	<i>bá-à</i> H-L
	2	<i>à-à</i> L-L	<i>bí-à</i> H-L
	3	<i>tà-à</i> L-L	<i>bó-ò</i> H-L
P3	1	<i>ñ</i> L	<i>bââ</i> LL
	2	<i>à</i> L	<i>bì</i> L
	3	<i>tà</i> L	<i>bò</i> L
P2/P	1	<i>má-à</i> H-L	<i>bá-à</i> H-L
	2	<i>à-à</i> L-L	<i>bí-à</i> H-L
	3	<i>tà-à</i> L-L	<i>bó-ò</i> H-L
P1	1	<i>mâ</i> HL	<i>bââ</i> HL
	2	<i>à</i> L	<i>bí</i> H
	3	<i>tà</i> L	<i>bó</i> H
F	1	<i>má-ā</i> H-M	<i>bá-ā</i> H-M
		<i>ñ...á</i> (NEG) L...H	<i>bâ...á</i> (NEG) L...H
	2	<i>á-ā</i> H-M	<i>bí-ā</i> H-M
		<i>à...á</i> (NEG) L...H	<i>bì...á</i> (NEG) L...H
	3	<i>tá-ā</i> H-M	<i>bó-ō</i> H-M
		<i>tà...á</i> (NEG) L...H	<i>bò...á</i> (NEG) L...H

**8.2. Dependent clauses.** A dependent clause is defined as one which cannot stand alone in semantic terms, that is, it makes sense only in relation to an independent clause which it expands or modifies in some way.

Most of the pronoun forms listed in (35) remain unchanged in dependent clauses. In certain dependent clause types, however, the subject pronominal complex in the imperfective and future tenses carries a L-H tone pattern throughout, as seen in (36).

## (36) Tone patterns on the subject pronominal complex in some dependent clause types

A TNS/ASP	B PERSON	C SG	D PL
IMPV/F	1	<i>mà-á</i> L-H	<i>bà-á</i> L-H
	2	<i>à-á</i> L-H	<i>bì-á</i> L-H
	3	<i>tà-á</i> L-H	<i>bô-ô</i> L-H

Note that tense P2/P pronoun forms, which are homophonous with imperfective forms in independent clauses, do not carry a L-H pattern in dependent clauses, where they may thus be readily differentiated from the imperfective pronoun forms. On the other hand, the overlay L-H pattern neutralizes the distinctions between imperfective and future pronominal forms.

The L-H tone pattern on the subject pronominal complex is restricted not only to imperfective and future constructions but also to those imperfective and future constructions in a limited set of dependent clause types. In (37), column A lists the clause types where the independent tone patterns occur and column B lists clause types where the L-H pattern is found.<sup>4</sup>

Note that the L-H tone pattern coincides with the presence of the clause-final subordinator *la* in all but the last three clause types listed in column B of (37). The subordinator *la* is absent, however, from all the clause types listed in column A. This distribution indicates that the L-H pattern in imperfective and future clauses may be regarded, with *la*, as a feature of subordination.

Adverbial clauses of time and circumstance, antecedent clauses in conditional sentences, and interrogative clauses are not marked by the subordinator *la*, but their subject pronominal complexes do exhibit the L-H pattern in the imperfective and future forms. If, as we have suggested, the L-H pattern is a feature of grammatical subordination, it would appear that these three clause types are regarded as subordinated, at least to a degree, to some neighboring clause (which in the case of an interrogative would presumably be the response to the question being asked).

<sup>4</sup>Some minor tonal differences between independent clauses and relative clauses have been noticed in tense P3, the before-yesterday past tense. These tonal differences affect the main verb. They are described in an appendix to Parker 1985b. Further research is needed to discover if such tonal changes occur on the main verb of other dependent clause types.

## (37) Tone patterns on the subject pronominal complex in different clause types

A (tone varies) independent	B L-H dependent
All true independent clauses	
Clauses introduced by <i>nê</i>	Clauses introduced by <i>ndi</i>
	Clauses introduced by <i>na</i>
Clauses introduced by any marker that is a compound of <i>nê</i> — <i>ngu-nê</i> , <i>m̃bi?i-nê</i> , or <i>nkàà-nê</i>	Clauses introduced by any marker that is a compound of <i>ndi</i> or <i>na</i> — <i>ndi-wu</i> , <i>ngu-ndi</i> , <i>wu-ndi</i> , <i>nkàà-ndi</i> , <i>m̃bi?i-ndi</i> , <i>m̃bi?i-na</i> , or <i>nkàà-na</i>
	Relative clauses
Purpose clauses introduced by <i>m̃bi?i</i> or <i>nê</i>	Adverbial clauses introduced by <i>m̃bi?i</i>
	Adverbial clauses of time or circumstance (other than those introduced by <i>m̃bi?i</i> )
Consequence clauses in conditional sentences	Antecedent clauses in conditional sentences
	Interrogative clauses

The absence of *la* and the L-H tone pattern causes various clause types to fall into the same category as independent clauses (column A).

In the case of the consequence clause in a conditional sentence, this categorization is not surprising. The marker *ko* or *m̃bə*, although appearing immediately before the consequence clause, does not seem to be an essential part of it. Speakers pause not only before this marker but also (although less emphatically) after it, and the marker is, in any case, optional. For these reasons, we have labelled *ko* and *m̃bə* not as consequence markers, but rather as markers of the conditional relationship (COND) existing between the antecedent and consequence clauses. The consequence clause, then, can stand on its own. The antecedent clause, on the other hand, cannot normally stand alone, and it is this clause that has the subordinate L-H tones on its subject pronominal complex in the imperfective and future.



A complement clause introduced by *nê* falls into the independent category. Unlike the complementizer *ndi*, *nê* is separated from the following complement clause by a noticeable pause (by a comma in written texts). This fact suggests that the marker is not actually considered a part of the complement clause at all and that, in semantic terms, the latter can function as an independent clause in its own right. In other words, *nê* links two independent clauses in a compound relationship and can be called a compound marker.

The other clause types in column A of (37) seem to be classified as independent chiefly by virtue of their connections with *nê*. Some are introduced by a compound marker that has *nê* as one of its components; others are purpose clauses introduced by either *nê* or *m̃biʔi*. Most of these clause types are semantically dependent, but the influence of the compound marker *nê* seems to account for the fact that this seeming semantic dependency is not reflected in the grammatical structure.

The use of the subordinate tone pattern in different clause types is seen in (38)–(46). The clauses concerned are closed by *la* in examples (38)–(43); in (44)–(46) *la* is absent.

(38) Clause introduced by *ndi*

*Tà bakà ko ndi tà-á ghĩ la.*  
 3sS PFV^NEG know COMP^how 3sS^SUB-F do SUB  
 She doesn't know what (lit. how) she will do.

(39) Clause introduced by a compound of *ndi*

*Wā wu ka fā? àfā? yu ale,*  
 c1^child c1^DEF NEG HORT^work c7^work c7^DEF thus  
*ñ-gù-a ñkàà-ndi tà-á ñ-gòḡn-a la.*  
 FACT-be-IMPV since 3sS^SUB-IMPV FACT-be^sick-IMPV SUB  
 The child should not do the work, since he is sick.

(40) Clause introduced by *na*

*Me ko awê, na à-á kpene aberne ebi la.*  
 SIM take^care 2sO because 2sS^SUB-F fall inside hole SUB  
 Take care because you may fall into a hole!

(41) Clause introduced by compound of *na*

*Ka n̄-ga anele tò, m̄bì?i-na tà -á n̄-gì-a*  
 NEG FACT-go beside 3sPO because 3sS^SUB-IMPV FACT-do-IMPV

*a kàbòŋ la.*  
 c1^O evil SUB

Don't go near him because he does bad things!

## (42) Relative clause

*Bɔ ni atɛ n̄-gà adzi? a*  
 3sS PFV^take chair FACT-go c7^LOC^place c7^morning

*bò-ɔ e-lò?ɔ e-ghǎ e-lia la.*  
 [3sS^SUB-F NFACT-F1 NFACT-go NFACT-end SUB]

They took a chair to the place where they would end (the race).

(43) Adverbial clause introduced by *m̄bì?i*

*Ghia wu m̄bì?i tà-á Ø-sù-a awê la.*  
 IMP^do only as 3sS^SUB-IMPV IMPV-tell-IMPV 2sO SUB  
 Do exactly as he is telling you!

## (44) Adverbial clause of time or circumstance

*À-á e-lò?ɔ e-ki?i,*  
 2sS^SUB-F NFACT-F1 NFACT-come

*à na èghi bu abua tò.*  
 2sS HORT^give c8^things c8^DEF to 3sPO

When you come (later today), you should give the things to him.

## (45) Antecedent clause in a conditional sentence

*Tà-á e-sà?a e-ghǎ ewen,*  
 3sS^SUB-F NFACT-F NFACT-go market

*ko tá-ā e-yuy èghi bi.*  
 COND 3sS-F NFACT-buy c8^things c8^3sREF

If she goes to market (tomorrow), she will buy her things.

## (46) Interrogative clause

*Bàa mbɔŋ bà-á ghě na â?*  
 1p EMPH 1pS<sup>^</sup>SUB-F DO how INT  
 And we, what shall we do?

## 9. Conclusion

In Mundani, the complex sentence can take a variety of forms—a series of consecutive marked verbs, a series of independent clauses that are juxtaposed without any overt indication of the relationship between them, or a cluster of two or more clauses whose semantic relations are formalized by various markers. Apart from the markers of contrastive and conditional relations, there are four markers that can be considered basic—*nê*, *ndi*, *na*, and *mbi?*. Various compounds of these basic markers permit a whole range of semantic relations to be formalized.

In addition to marking semantic relations, grammatical dependency or subordination may be signalled in certain clauses by means of the particle *la* in final position, a L-H tone pattern on the subject pronominal complex in the imperfective aspect or in future tenses, or by the occurrence of both *la* and a L-H tone pattern. The coincidence of these markers of grammatical subordination with semantic dependency is almost, but not quite, complete. An area of discrepancy exists in circumstance or reason clauses introduced by a compound form of *nê* and in purpose clauses introduced by *mbi?*. These clauses are dependent in semantic terms, but they are not subordinated grammatically. One possible explanation of this discrepancy is the influence of *nê*, which usually marks the relationship between two clauses that are both semantically and grammatically independent of each other.

## References

- Beekman, John, John Callow, and Michael Kopesec. 1981. The semantic structure of written communication. Dallas: Summer Institute of Linguistics.
- Marchese, Lynell. 1976. La subordination en godié. Abidjan: Institut de Linguistique Appliquée/Société Internationale de Linguistique.
- Parker, Elizabeth. 1985a. Mood, tense, and aspect in Mundani. ms.
- . 1985b. Relative clauses in Mundani. ms.

- . 1986. Mundani pronouns. In Ursula Wiesemann (ed.), *Pronominal systems*, 131–65. Continuum Schriftenreihe Zur Linguistik 5. Tübingen: Gunter Narr Verlag.
- . 1991. Conditionals in Mundani. In this volume.