

Clause linkage in Ts'ixa (Kalahari Khoe)

1. Introduction

1.1 Language and speech community



Map: Geographical distribution of Ts'ixa and Khwe speech community in and around the Okavango Delta (Brenzinger 2013)

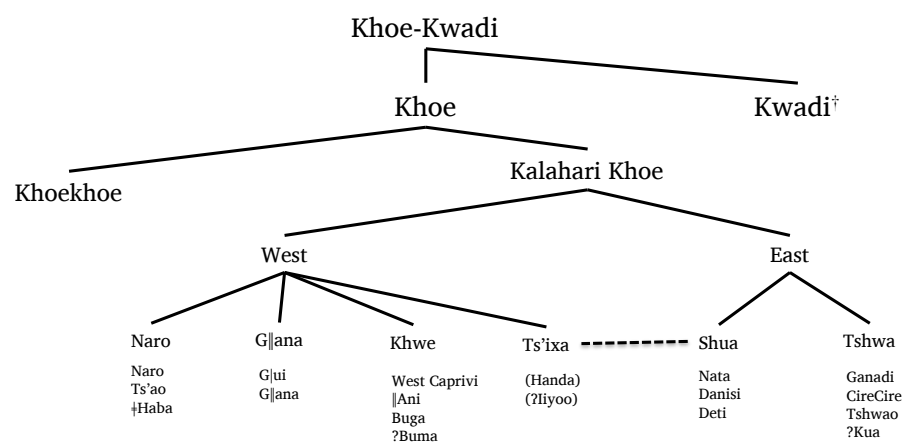


Figure 1: Genealogical position of Ts'ixa within the Khoe-Kwadi family (based on Güldemann & Vossen 2000, Güldemann, forthc.)

1.2 Theoretical approaches to clause linkage:

Lehmann (1988): Clause linkage as continuum

Haspelmath (1995, 2004): Distinctive features of coordination and subordination

Van Valin & La Polla (1997): Juncture and nexus types

Bickel (1991): Typology of clause chaining

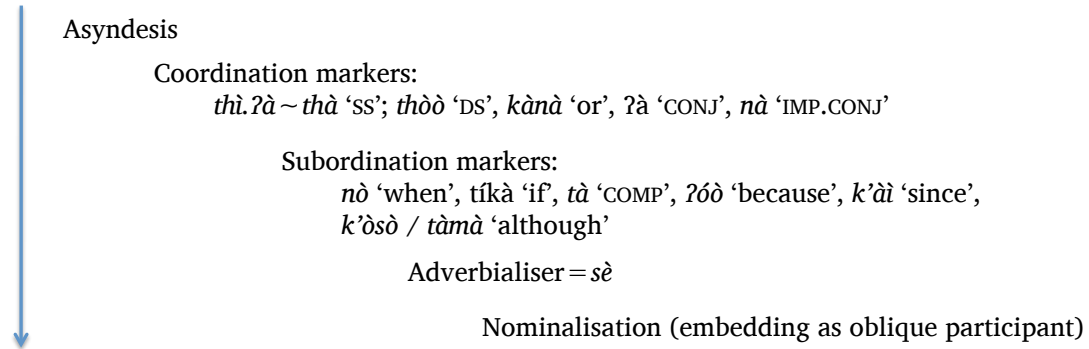


Figure 2: Continuum of syntactic dependency in Ts'ixa clause linkage constructions

2. Coordination

2.1 Conjunction

2.1.1 Juxtaposition

- (1) [*khoe* = *nè* *k'oxú* *ká* *k'úú-nà-hà*] [*k'áo* = *dzi* *kà* *guni-nà-hà*
person = PL.C:I meat MPO live-J-PST3 arrow = PL.F:I MPO hunt-J-PST3
/áo = *dzà* *ʔà*].
animal = PL.F:II ACC
'The people lived on meat and hunted buffalos with arrows.'

The conjunction of juxtaposed clauses may be reinforced by the focus particle *ʔùè* 'also':

- (2) [*thà* *nè* *xúú*, *góè* = *sà*], [*khoe* = *sì* *nè* *ʔùè* *xúú*].
and.then SEQ get.pregnant cow = SG.F:II person = SG.F:I SEQ also get.pregnant
'[It] got pregnant, the cow, and the woman got also pregnant.'

2.1.2 *thì.ʔà~thà*: Switch reference and discourse continuity

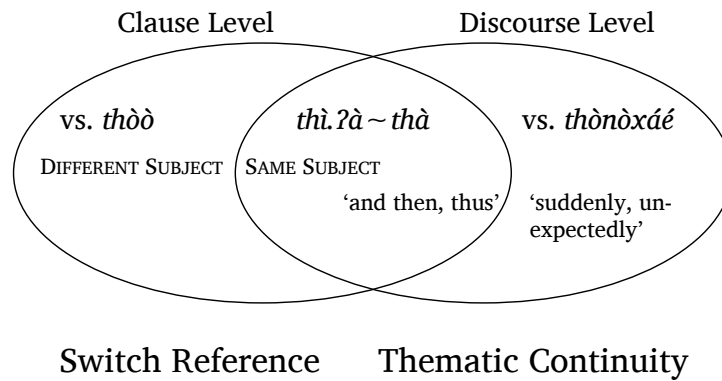


Figure 3: Contrastive functions of the conjunction *thì.ʔà~thà*

thì.ʔà~thà vs. *thòð*

- (3) a. [úúkhòè k'aa khudì-nà-tà tshaá=mà ʔà] [**thà** k'oró
 someone drink:J end-J-PST1 water = SG.M:II ACC SS eat.meat:J
 khudí k'oxú=m̐ ʔfiyè ʔà].
 finish meat = SG.M:I all ACC
 'Someone drank all the water and then ate all the meat.'

- b. [g/aàkhòè=sì kyí-nà-hà k'áàkhòè] [**thòð** nè àà ʔà
 woman = SG.F:I call-J-PST3 man DS SEQ come CONJ
 k'oró khudì k'oxú=mà ʔà].
 eat.meat:J end meat = SG.M:II ACC
 'The woman called a man and then [he] came and ate all the meat.'

thì.ʔà~thà vs. *thòðxáé*

- (4) a. [xam̐=m̐ péè-nà-hà ʔé.mà ʔà] [**thì.ʔà** ʔé.m̐ nè //ʔóó].
 lion = SG.M:I chase-J-PST3 3SG.M:II ACC and.then 3SG.M:I SEQ die
 'The lion chased him and then he died.'

- b. [tí tè g/aro-khabì //ádì] [**thòðxáé** mágéim̐=//ù nè
 1SG NEAR.PST ostrich-egg find suddenly wildlife.guard = PL.M:I SEQ
 àà].
 come
 'I found an ostrich egg, [but] suddenly the wildlife guards came.'

Co-occurrence of *thòð* and *thòðxáé*

- (5) a. [[súú.súú=sè n/gè k'oo] [[//ũ̀-à=dzi gére àà tà]
 fast:INT = ADV SEQ eat.meat parent-ASSOC = PL.F:I FUT come COMP

[*thì.ʔà n/gè ʔaí ʔóò*]].

see SEQ think because

‘[The hyena] ate very fast because [she] thought that the mothers (and their associates) would come.’

- b. [[*thòò n/gè ʔé.sì tè k’oró khudì=sè thòòxáé mǔù-à ʔǎǎ*]
 DS SEQ 3SG.F:I NEAR.PST eat.meat:J end=ADV suddenly see-J know
 [*ǎǎ.ǎǎ kà ǎǎ=sì káu-a-tà tà*]].

child ATTR one.of=SG.F:I stay.behind-J-PST1 COMP

‘When she was done eating, [the mothers] realised one of the young ones had stayed behind.’

thì.ʔà~thà conjoining verbal predicates:

- (6) a. *lebótǎì=nèn ʔéé thì.ʔà ʔue-re-tà.*

bottle=SG.M:I fall SS break-J-PST1

‘The bottle fell and broke.’

- b. *xarí=m kò péè thì.ʔà xóó k’ará.*

lion=SG.M:I IPFV chase SS hold impala

‘The lion chases and catches an impala.’

- c. *tí balà-nà-hà buká=sà ʔà thì.ʔà kǔũ-a ǎǎé.*

1SG read-J-PST3 book=SG.F:II ACC SS go-J sleep

‘I read the book and then I went to sleep.’

thì.ʔà~thà may be replaced by the conjunction *ʔà*:

- (7) a. *xarí=m kò péè ʔà xóó k’ará.*

lion=SG.M:I IPFV chase CONJ hold impala

‘The lion chases and catches an impala.’

- b. *ʔé.sì kò séè ʔà tshumá-xù-nà-tà sýò=mà ʔà.*

3SG.F:I IPFV take CONJ hide:J-COMPL-J-PST1 cigarette=SG.M:II ACC

‘She took and hid the cigarette.’

- c. *thà ìì=mà [...] xúu-a-tà ʔà kyúù=mà xóó.*

SS pole=SG.M:II let.go-J-PST1 CONJ head=SG.M:II hold

‘[The boy] lets go of the pole and grabs his head.’

In imperative clauses, predicates are conjoined by *nà*:

- (8) *gáò nà mǔù!*

look IMP.CONJ see

‘Look and see!’

ʔà and nà vs. juncture-verb constructions (JVC)

- (9) a. *tí tè /'eé //óé.*
 1SG NEAR.PST fall:J lie.down
 'I fell into a lying position.'
- b. *tí tè /'eé ʔà //óé.*
 1SG NEAR.PST fall:J CONJ lie.down
 'I fell and lay down.'
- c. *tó k'uí-á kúù tít, nà kyée.kyèè!*
 2PL.C talk-J go IMP.NEG IMP.CONJ listen
 'Don't you (pl) walk talking and listen!'

Does *thì.ʔà~thà* conjoin clauses or verbal predicates?

- (10) a. *Tlótóló=m̐ kò ná=m̐ kà kolót=sà ʔà yábà.*
 PN = SG.M:I IPFV DEM.REF = SG.M:I POSS car = SG.F:II ACC love
 'Tlotlo loves his car.'
- b. *ʔuá.ká.tshéè ʔé.mà tí mūù-nà-hà ʔé.m̐ kò sámbà=sè*
 yesterday 3SG.M:II 1SG see-J-PST3 3SG.M:I IPFV wash = ADV
thì.ʔà n̐amí-káxù=sè thì.ʔà //áú.//aù=sè ʔé.sà ʔà.
 SS shine-CAUS = ADV SS repair = ADV 3SG.F:II ACC
 'Yesterday, I saw him while he was washing, then polishing, then repairing it.'

Compare:

- (11) *múù.thà ʔé.n̐ kò //ʔūù kúù=sè*
 thus 3PL.C IPFV return:J go = ADV
g//óé=sì ʔám̐ ngùà thòndòxáé /úú=sà ʔà nè ʔŋ.
 tortoise = SG.F:I top ABL suddenly child = SG.F:II ACC SEQ kick
 'When they return, [the toad] suddenly kicks the child off the tortoise.'

thì.ʔà~thà and *thòdò* do not require argument sharing:

- (12) *xam̐=m̐ pèè-nà-hà ʔé.mà ʔà thì.ʔà ʔé.m̐ nè //ʔóó.*
 lion = SG.M:I chase-J-PST3 3SG.M:II ACC and.then 3SG.M:I SEQ die
 'The lion chased him and then he died.'

A shared subject may be expressed (cf. (13)a), just like a different subject may be omitted if deemed accessible from the context (cf. (13)b):

- (13) a. *[//xáà ʔà tí Mǎú ʔò kúù-a-hà] [thì.ʔà*
 morning LOC 1SG GN ALL go-J-PST3 SS

ʔùì ʔà tí //ʔũǎ-nà-tà].
 evening LOC 1SG return-J-PST1

‘I went to Maun in the morning and I returned in the evening.’

- b. [g//aàkhòè=sì kyũ-nà-hà k’áàkhòè] [thòò ø nè àà ʔà
 woman=SG.F:I call-J-PST3 man DS SEQ come CONJ
 k’oró khudì k’oxú=mà ʔà].
 eat.meat:J end meat=SG.M:II ACC

‘The woman called a man and then [he] came and ate all the meat.’

thì.ʔà~thà and the sequential marker n/gè~nè:

- (14) [ʔé.//ù nè xúù n//gáè kò=sè kúm]
 3PL.M:I SEQ thing sing IPFV=ADV hear

[thà nè g//ái-kù //ʔáé=m ʔò].
 SS SEQ run-PL home=SG.M:I ALL

‘They heard something singing and ran home together.’

- (15) thà nè góè=sì kò góè kà /úú=dzà ʔà /úú-/ùì.
 and.then SEQ cattle=SG.F:I IPFV cattle ATTR other=PL.F:II ACC collect

‘Then the cow would collect the other cattle.’

2.2 Disjunction

2.2.1 kàná ‘or’

- (16) a. ʔé.m kò sũ rè kàná //ʔúm rè?
 3SG.M:I IPFV work Q or sleep Q

‘Is he working or sleeping?’

- b. k’aro=//ù kò //qání kyũũ.à.xù rè kàná kyũũ rè?
 boy=PL.M:I IPFV raisin sell Q or buy Q

‘Are the boys selling or buying raisins?’

No omission of shared arguments:

- (17) a. [[ʔé.m g//ai-a-xù-nà-tà rè /úú=nà ʔà] [kàná ʔé.m
 3SG.M:I run-J-COMPL-J-PST1 Q other=PL.C:II ACC or 3SG.M:I
 g//ai-a-xù-è-tà] ʔarú=m ngùà]?
 run-J-COMPL-PASS-PST1 game=SG.M:I LOC

‘Did he win or lose the game?’ [Did he outrun the others or was he outrun in the game?]

Omission of S and O:

- b. *xàwèè* *ʔé.sì* *kò* *k'óó* *rè* *k'oxú=mà* *ʔà* *kàná*
 still 3SG.F:I IPFV eat.meat Q meat = SG.M:II ACC or
k'oró-tà?
 eat.meat:J-PST1
 'Is she still eating the meat or has [she] eaten [it already]?'

Omission of S (but not O):

- c. *ʔabá=mà* *thúũ* *ʔé.ñ* *garo-tà* *rè* *kàná* *xàwèè* *kò*
 dog = SG.M:II already 3PL.C:I look:J-PST1 Q or still IPFV
ʔé.mà *ʔà* *gádò?*
 3SG.M:II ACC look
 'Have they already looked at the dog or are [they] still looking at it?'

2.2.2 *xaré...xaré...xaré.ká* 'either... or'

- (18) *xaré* *ʔxáà* *ʔà* *kũũ-a-tà* *rè* *xaré* *thuú* *ʔà* *kũũ-a-tà* *rè* *xaré.ká*.
 DISJ morning LOC go-J-PST1 Q DISJ night LOC go-J-PST1 Q DISJ
 '[They] either went in the morning, or they went at night.'

3. Subordination

Form	English gloss	Clause type
<i>tà</i>	complementiser	complement clauses
<i>k'òsò</i> / <i>tàmà</i>	'but, although'	concessive / adversative clauses
<i>(kó)nò</i>	'when'	temporal / conditional clauses
<i>(n/í)...tíkà</i>	'if'	conditional clauses
<i>ʔ(y)óò</i>	'because'	causal clauses
<i>k'àì</i>	'since'	temporal clauses

Table 1: Subordination markers of Ts'ixa

<i>V=sè</i>	'while'	temporal clauses
<i>V-tà=sè</i>	'instead of'	concessive / adversative clauses
<i>xàwèè V-tà=sè</i>	'before'	temporal clauses

Table 2: Constructions with the adverbialiser =sè as marker of clausal subordination

	Independent clauses	Subordinate clauses
SOV	50%	60%
SVO	43,3%	13,3%
OSV	6,7%	26,7%

Table 3: Constituent order of transitive clauses
(Sample: 60 clauses (30 each), randomly chosen from three narrative texts)

3.1 Complement clauses

3.1.1 Direct and indirect speech:

mũ-a ‘say-J’ as a quotative marker:

- (19) *thà ʔé.ʔù nè mũũ ʔé.sà ʔà ʔáé=m di=m*
 and.then 3PL.M:I SEQ see 3SG.F:II ACC village=SG.M:I POSS=SG.M:I
nè mũ.a: sá t'ũũ ʔè.
 SEQ QUOT: 2SG.F beautiful COP
 ‘They saw her and the headman [lit. the village’s] said: “You are beautiful.”’

tíí ‘be thus’ as a finite verb:

- (20) a. *[ʔé.sì mũ-a [ù=sì ʔ'aró khúm-é-tà] tíí-nà-tà].*
 3SG.F:I say-J tree=SG.F:I chop:J cut-PASS-PST1 be.thus-J-PST1
 ‘She said that the tree was cut down.’
- b. *|úá=m kòrè ʔabá=m xàè kòrè g|óé=sì xàè*
 child=SG.M:I CONJ dog=SG.M:I CONJ CONJ tortoise=SG.F:I CONJ
kò ʔaí-á ní=m kò hũ-sí ɣxúa |xè tíí.
 IPFV think-J: what=SG.M:I IPFV do-REFL here LOC be.thus
 ‘The boy, the dog and the tortoise think: “What is happening here?”’
- c. *ʔáé.m.xà=m kò mũ-a*
 headman=sg.m:i ipfv say-J
ʔáé-kù gére háà tíí ʔuá.ká.tshéè.
 meet-RCPR FUT be.there be.thus tomorrow
 ‘The headman says that there is going to be a meeting tomorrow.’

The quotative suffix *-tì* (< *tíí* ‘be thus’)

- (21) a. *dué=sì mũ-a tí ʔ'áá-tì-nà-tà súbára=dzà ʔà*
 my.mother=SG.F:I say-J 1SG wash-QUOT-J-PST1 clothes=PL.F:II ACC
k'òsò tí ʔ'ána-tà ʔíté.
 but 1SG wash:J-PST1 NEG
 ‘Mother told me to wash the clothes but I have not washed them.’

- b. *dué=sí tí kà mǔ-a tí ʔà bè nguú=mà*
 my.mother = SG.F:I 1SG POSS say-J 1SG ACC EMPH house = SG.M:II
heélà-tì-nà-tà k'òsò tí hǔ-à-tà ʔíté.
 sweep-QUOT-J-PST1 but 1SG do-J-PST1 NEG
 'My mother told me to sweep the room, but I did not do it.'

The complementiser *tà*:

- (22) a. *thà /úú=m kò ʔóà-sì:*
 and.then child = SG.M:I IPFV ask-REFL
nǐ=m kùè hǔ-sí tà xúà=sì í=sì ʔà?
 what = SG.M:I PROG do-REFL COMP place = SG.F:I DEM.REF = SG.F:I LOC
 'Then the boy asks himself: "What is happening in this place?"'
- b. *ʔé.mà tí boódì-nà-tà ʔé.m ts'áà tà.*
 3SG.M:II 1SG tell-J-PST1 3SG.M:I steal COMP
 'I told him that he steals.'
- c. *thà k'aro=ù sǐ-a boódì khoe=nà ʔà*
 SS boy = PL.M:I proceed-J tell person = PL.C:II ACC
ná=ù tè kúm xúu kò nǐgáè=sè tà.
 DEM.REF = PL.M:I NEAR.PST hear thing IPFV sing = ADV COMP
 'The boys proceeded to tell the people that they had heard something singing.'

3.1.2 Complement clauses with the complementiser *tà*

- (23) a. *ʔám-kù thǐ.ʔà ná=ù gére ʔǐ.thà hǔ tà.*
 agree-RCPR SS DEM.REF = PL.M:I FUT thus do COMP
 '[They] agreed that they would do thus [like discussed]'
- b. *tsá ʔaná-hà rè maá ʔà tí kò nǐgóa-mà tà?*
 2SG.M know:J-PST3 Q who ACC 1SG IPFV cook-BEN COMP
 'Do you know whom I am cooking for?'
- c. *tí ʔà boódì-nà-hà maá ʔà ná=m gǐarà-nà-mà-nà-hà tà.*
 1SG ACC tell-J-PST3 who ACC DEM.REF = SG.M:I write-J-BEN-J-PST3 COMP
 '[He] told me whom he wrote to.'

tà following O of the subordinate clause:

- (24) a. *ná=m xà /úí=sè /'úú /áò=mà ʔà tà*
 DEM.REF = SG.M:I SUBJ one = ADV kill buffalo = SG.M:II ACC COMP

ʔé.m̩ ʔyaŋ-nà-hà k'òsò ʔé.m̩ ʔà kyáá-kàxù-nà-tà.
 3SG.M:I think-J-PST3 but 3SG.M:II ACC wound-CAUS-J-PST1
 'He thought he could kill the buffalo all by himself but was wounded.'

tà following IO of the subordinate clause:

b. tí /ʔurù-nà-tà maá ʔà tí kyũũ-à-mà-nà-hà kuú=ɾí kà tà.
 1SG forget-J-PST1 who ACC 1SG buy-J-BEN-J-PST3 dress=SG.M:I MPO COMP
 'I forgot for whom I bought the dress.'

Backward anaphora:

(25) tí ʔà boódì-nà-hà ná=sì kò ʔÀmériká mũũ-kàà tà.
 1SG ACC tell-J-PST3 DEM.REF=SG.F:I IPFV GN see-VOL COMP
 '[She] told me that she wants to see America.'

tíí ʔà → tà ?
 be.thus LOC COMP

No sharing of illocutionary force:

(26) dué=sí tí kà mũũ-a ná=sì dí=mà tsóò
 my.mother=SG.F:I 1SG POSS say-J DEM.REF=SG.F:I POSS=SG.M:I medicine
 kà tí ʔà bè k'áà-tí-tí-nà-tà
 ATTR 1SG ACC EMPH drink-IMP.NEG-QUOT-J-PST1
 k'òsò tí ʔé.sì dí=mà ʔà k'aa-tà.
 but 1SG 3SG.F:I POSS=SG.M:II ACC drink-J-PST1
 'Mother told me not to drink her medicine, but I drank hers.'

Tswana xòrè:

(27) ʔʔarí.sè k'áo.thuí ʔà kò kúũ k'oxú ʔé kò kámà
 usually early.morning LOC IPFV go animal 1PL.M IPFV track
 ʔé ʔaná-hà ʔyóò xòrè ʔé gérè sí-a saó.ʔéè
 1PL.M know-J-CR because COMP 1PL.M FUT arrive-J catch.up
 'An animal that passed early in the morning we usually track, because we know that we will be able to catch up.'

3.1.3 Manner: 'how to'

maá.thà 'how' + complementiser tà:

(28) a. tí ʔǎǎ-tǎ maá.thà tsé xà ʔé.ngùà síí tà.
 1SG know-IPFV.NEG how 1PL.C SUBJ there arrive COMP
 'I don't know how to get there.'

- b. *tí kò Gyéménì ?ò kúù nò tí gérè khoe = nà ?à ?ǎǎ-káxù*
 1SG IPFV Germany ALL go when 1SG FUT person = PL.C:II ACC know-CAUS
maá.thà tí kà k'uí = sí kò k'uí-é tà.
 how 1SG POSS language = SG.F:I IPFV speak-PASS COMP
 'When I go to Germany I will teach people how to speak my language (lit. how my language is spoken).'

Repetition of main verb, acting as nominaliser:

- (29) *tí kò [Ts'ixà-dàṁ kò g/arà-é ?é = g/àrà] ?ǎǎ-kà.*
 1SG IPFV T.-MANNER IPFV write-PASS PASS = writing know-CAUS
 'I teach the way of writing Ts'ixadam (lit. 'Ts'ixadam being written'-writing).'

Nata-Shua:

- (30) *tá ke [Cúá ke kúálá-é = kùàlà] n/gaé.n/gàè.*
 1SG IPFV Shua IPFV write-PASS = writing teach
 'I teach the way of writing Shua (lit. 'Shua is being written'-writing).'

ngòrè 'how':

- (31) *g/aàkhòè = sì kò /úǎ = sà ?à n/gáú [ngòrè khobá*
 woman = SG.F:I IPFV child = SG.F:II ACC show ?how porridge
kò n/góá-é ?è = n/gòà].
 IPFV cook-PASS PASS = cook
 'The woman shows the girl how to cook porridge (lit. 'porridge is cooked'-cooking).'

The suffix *-dàṁ* (< *dám* 'tongue'): deriving nouns 'the way of X':

- (32) a. *tí kò [Ts'ixà-dàṁ g/arà-dàṁ] ?ǎǎ-kà.*
 1SG IPFV T.- MANNER write-MANNER know-CAUS
 'I teach the way of writing Ts'ixadam.'
- b. *tí kò [xòrò-é kò xòrò-dàṁ xúúkhoe dĩ] ?ǎǎ-kà*
 1SG IPFV dance-PASS IPFV dance-tongue San POSS know-CAUS
 'I teach the San's way of dancing (lit. how the San's dance is danced).'

3.2 Causal clauses

?óò ~ ?yóò (< **†?óò* ???)

- (33) a. *tí xà kyúù ?íté kolóí tí /?áò-xà ?íté ?óò.*
 1SG SUBJ buy NEG car 1SG money-ASSOC NEG because
 'I can't buy a car because I have no money.'

- b. *tí /ʔádò-xà ʔíté ʔódò tí xà kyũũ ʔíté kolóí=sà ʔà.*
 1SG money-ASSOC NEG because 1SG SUBJ buy NEG car=SG.F:II ACC
 ‘Because I have no money, I cannot buy the car.’

Subordinate clause interrupting matrix clause:

- (34) *[thòdò /úú=sà n/gè [tshéè=sà ʔŋyè ʔà séè-kàà-nà-hà ʔódò]*
 DS one.of=SG.M:I SEQ day=SG.M:I all ACC take-be.about-J-PST3 because
habí=sí kà /úú=sè ʔé.mà ʔà //áo k'áo=sà kà /ám-ʔoro.kù
 breast=SG.F:I MPO be.near=ADV 3SG.M:II ACC shoot arrow=SG.M:I MPO two-times
ʔéxùà ʔà].
 there LOC
 ‘Because it was about to take all day, one (of them) shot it twice with an arrow, in a place near the breast.

Argument sharing:

Omission of S:

- (35) a. */úú=sà kò t'ũũ //ʔorá kò ʔódò.*
 child=SG.F:I IPFV beautiful grow.up IPFV because
 ‘This girl is becoming beautiful because she is growing up.’

O becomes S and is omitted:

- b. *tí k'oo-tà k'oxú=sà ʔà ts'oró-hà ʔyódò.*
 1SG eat.meat-IPFV.NEG meat=SG.M:II ACC rot:J-PST3 because
 ‘I don't eat the meat because [it] is rotten.’

No omission of shared arguments:

- c. *ʔé.mà kò kyíí ʔódò ʔé.mà àa-ta ʔíté sũũ=sà ʔò.*
 3SG.M:I IPFV be.sick because 3SG.M:I come:J-PST1 NEG work=SG.M:I LOC
 ‘Because he was sick he didn't go to work.’

Backward anaphora:

- (36) *kyxoà=sà kò //ʔóó nò /'án.sè n/gè yábà ná=//ù tè*
 elephant=SG.M:I IPFV die SUB very SEQ be.happy DEM.REF=PL.M:I NEAR.PST
/'ũũ ʔé.mà ʔà ʔódò.
 kill 3SG.M:II ACC because
 ‘When the elephant died [they] were very happy because they had killed it.’

Tswana *kaxórè*:

- (37) *kárlí ʔíté xúù kaxórè ʔé.mà ʔùè tí //ũũ ʔè.*
 be.hard NEG thing because 3SG.M:I also 1SG parent COP
 ‘It is not a problem [a hard thing] because he is also my father.’

Co-occurrence of *kaxórè* and *?ódò~?yódò*:

- (38) *thuí ?à kũũ-a-tà kónò //é kámà-tà*
 night LOC go-J-PST1 when 1PL.M track-IPFV.NEG
kaxórè //é géré sũ-a hitérà ?íté tà //é ?aná-hà
 because 1PL.M FUT arrive-J find NEG COMP 1PL.M know:J-CR
?yódò.
 because
 ‘When [the animals] passed at night, we do not track [them], because we know that we will not find them.’

3.3 Conditional clauses

Gram	Category	TAM restrictions
(<i>kó</i>) <i>nò</i>	real conditions	<i>kò</i> ‘IPFV’ and <i>géré</i> ‘FUT’, but other TAM may occur
(<i>n/ĩ</i>)... <i>tíkà</i>	irreal conditions	<i>xà</i> ‘SUBJ’ (+ other TAM) in matrix clause

Table 4: Two types of conditional clauses

3.3.1 Real conditions

- (39) a. *tí géré kolóf-xà nò tí géré Namíbià ?ò kũũ.*
 1SG FUT car-ASSOC when 1SG FUT GN ALL go
 ‘When I have a car, I will go to Namibia.’
- b. *túú kónò tí géré nguú=m ?à nyũũ.*
 rain when 1SG FUT house = SG.M:I LOC stay
 ‘When it rains I will stay in the house.’
- c. *tí géré ?yũũ sá ?ò khaà sá kà tshaú=sérà sá kò*
 1SG FUT food 2SG.F LOC give 2SG.F POSS hand = DU.F 2SG.F IPFV
sámbà kònò.
 wash when
 ‘I will give you food when you wash your (two) hands.’

3.3.2 Irreal conditions

tíkà:

- (40) a. *tí kolóf-xà tíkà Namíbià ?ò tí xà tè kũũ.*
 1SG car-ASSOC if GN ALL 1SG SUBJ ?NEAR.PST go
 ‘If I had a car, I would go to Namibia.’

- b. *tí kolóí-xà tíkà ti xà tè Namíbià ʔò kúù.*
 1SG car-ASSOC if 1SG SUBJ ?NEAR.PST GN ALL go
 ‘If I had a car, I would go to Namibia.’

xà ‘SUBJ’ in the matrix clause:

- (41) a. *nyúní=sì kyũí-í-hà tíkà tí xà tè k’oó.*
 mouse = SG.F:I roast-PASS-PST3 if 1SG SUBJ ?NEAR.PST eat.meat
 ‘If the mouse had been roasted, I would have eaten it.’

xà ‘SUBJ’ in subordinate and matrix clause:

- b. *xam̐=m̐ /xòà tí xà //’dé-kù-nà-tà tíkà*
 lion = SG.M:I COM 1SG SUBJ meet-RCPR-J-PST1 if
tí xà ʔé.mà ʔà /ũí-á-tá.
 1SG SUBJ 3SG.M:II ACC kill-J-PST1
 ‘If I had met the lion, I would have killed it.’

n/í...tíkà:

- (42) a. *n/í ʔé.sì xà dàro-hà ʔíté tíkà ìì=sì xà //ʔorá*
 COND 3SG.F:I SUBJ burn:J-PST3 NEG if tree = SG.F:I SUBJ grow
ntshéè kà.
 today MPO
 ‘If it had not burned down, the tree would be grown today.’
- b. *n/í ʔé.si xà kyíí-nà-hà ʔíté tíkà ʔé.sì xà t’úù.*
 COND 3SG.F SUBJ be.sick-J-PST3 NEG if 3SG.F:I SUBJ beautiful
 ‘If she had not been ill, she would have become beautiful.’
- c. *n/í ʔé.sì xà //ʔóó-nà ʔíté tíkà ʔoré=sè*
 COND 3SG.F:I SUBJ die-STAT NEG if young = ADV
/úú=sì xà t’úù-nà ntshéè.
 child = SG.F:I SUBJ beautiful-STAT today
 ‘If she had not died young, the girl would be beautiful today.’

3.4 Temporal clauses

	Source / literal meaning	English gloss	Section
(kó)nò	n/a	‘when’	§3.4.1
= sè	adverbialiser	‘while’	§3.4.2
asyndesis (iconic) ky’oà ky’oà nò ky’oà ʔà ngyúró ʔà	‘to go out’ + ‘when’ + LOC ‘in the back’	‘after’	§3.4.3
asyndesis (iconic) xàwèè V-tà = sè	‘while X is not happening yet’	‘before’	§3.4.4
k’ài	‘first’	‘since’	§3.4.5
nò /úí (?)	‘only when’ (?)	‘until’	§3.4.6

Table 5: Temporal clauses in Ts’ixa

3.4.1 ‘When’

nò:

- (43) a. tsá hana-hà rè ʔé.m kò /úú nò xam = mà ʔà?
2SG.M be.there:J-PST3 Q 3SG.M:I IPFV kill when lion = SG.M:II ACC
‘Were you there when he killed the lion?’

- b. tsá kò àà nò ʔùù ʔà tsá ʔà tí gère n/góà-mà.
2SG.M IPFV come when evening LOC 2SG.M ACC 1SG FUT cook:J-BEN
‘As soon as you come in the evening I will cook for you.’

- c. /ʔeé = m kò tabù nò xam = dzí gère /úù ʔitè.
fire = SG.M:I IPFV burn SUB lion = PL.F:I FUT get.near NEG
‘While (as long as) the fire burns the lions will not get near.’

kónò~kònò (< kò ‘IPFV’ + nò ‘when’):

- (44) a. àà ʔé.dzì kónò thòò gúà = sì k’oró khudì-nà-tà /úú = sà ʔà.
come 3PL.F:I when DS hyena = SG.F:I eat:J end-J-PST1 child = SG.F:II ACC
‘By the time they came, the hyena had finished eating the child.’

- b. /úú-é kónò tsóó-xò háà
kill-PASS when taboo-NMZ be.there
‘When [the animal] is killed, there is taboo.’

- c. káré tsé kónò kúú-k’èè khoe dí kò //xábà = mà ʔà k’oó
cut.meat 1PL.C when sister person POSS ipfv back = SG.M:II ACC eat.meat
‘As soon as they cut meat, the sisters of the people eat the back-part.’

- (48) *xaró.xàrò-kù* *thì.ʔà* *tsé* *kò* *karé.*
 distribute-RCPR SS 1PL.C IPFV make.biltong
 ‘[We] distribute [the meat] and then we make biltong.’

ky'òà.ʔà (< *ky'òà* 'to exit' + *ʔà* 'LOC'):

- (49) a. *ʔyũũ=ɾ* *ʔà* *ky'òà.ʔà* *khúɾ* *gérè* *kũũ-a sũũ*.
eat = SG.M:I LOC after 1DU.C FUT go-J work
'After eating we will go to work.'
- b. *kyíí.ò=ɾ* *ʔà* *ky'òà.ʔà* *ʔé.sì* *nè* *mũũ-té*.
disease = SG.M:I LOC after 3SG.F:I SEQ see-SEQ.NEG
'Following the disease, she could not see (i.e., went blind).'

ky'òà nò:

- (50) a. *ʔé.dzi* *kò* *tántè=mà* *ʔà* *||áú.||aù=m* *ʔà* *ky'òà nò*
3PL.F:I IPFV tent = SG.M:II ACC maintain = SG.M:I LOC exit when
||ʔaù *nè* *kyãã*.
fish SEQ enter
'After they have cleaned the tent, the whites come in.'

ky'òà:

- b. *xúà=m* *gérè* */'urí* *kyxoà=mà* *ʔé.||ù* *kò*
place = SG.M:I FUT be.dirty elephant = SG.M:II 3PL.M:I IPFV
/áá=m *ʔà* *ky'òà*.
skin = SG.M:I LOC exit
'The place will be dirty after they have skinned the elephant there.'

ngyúró ʔà (< *ngyúró* 'back' + *ʔà* 'LOC'):

- (51) *thà* *ngyúró* *ʔà* *ń=dzì* *n/gè* *mũũ-à ʔãã*
SS back LOC DEM.PROX = PL.F:I SEQ see-J know
thà *||ʔáã-kù=m* *mũũ=ɾ* *gérè khudí ʔité* *tà*
SS fight-RCPR = SG.M:I DEM.DIST = SG.M:I FUT end NEG COMP
xũũ=sè *g||ai-a-hà*.
bad = ADV run-J-PST3
'After these ones [the zebras] realised that fight was not going to end,
(they) ran badly.'

3.4.4 'Before'

- (52) a. */áń.tsãã=sì* *xàwèè* *ky'òà-tã=sè* *tsé* *kũũ-a-tà*.
sun = SG.F:I yet come.out-IPFV.NEG = ADV 1PL.C go-J-PST1
'We went before sunrise.' (lit. When the sun had not risen yet, we went.)
- b. *xàwèè* *tsé* *kũũ-tã=sè* *nguú=mà* *ʔà* *||áú.||aù*.
yet 1PL.C go-IPFV.NEG = ADV house = SG.M:II ACC maintain
'Before we go we clean the house.'

- c. *t'ũ̀-̀nà-hà* *xàwèè* *ʔé.sì* *kyíí-tà=sè*
 be.beautiful-J-PST3 yet 3SG.F:I get.sick-IPFV.NEG = ADV
 ‘She was beautiful before she got sick.’

Shared illocutionary force:

- (53) *kũ̀-̀í* *ʔè* *ʔáé=m̃* *ʔò* *xàwèè* *ngyí.kád-tà=sè*.
 go-IMP EMPH home = SG.M:I ALL yet get.dark-IPFV.NEG = ADV
 ‘Let’s go home before it gets dark.’

3.4.5 ‘since’:

SUB *k’ài* ‘first’ + MV-*ʔũ̀.sì* ‘ITER’:

- (54) a. *ʔé.m̃* *krícén-nà-hà* *k’ài* *keréké=m̃* *ʔò* *kò* *kũ̀-̀a-ʔũ̀.sì*.
 3SG.M:I bec.christian-J-PST3 since church = SG.M:I ALL IPFV go-J-ITER
 ‘Since he became a Christian [he] always goes to church.’
- b. *Áfírikà* *ʔò* *ʔé.sì* *àa-hà* *k’ài* *kyíí-a-ʔũ̀.sì* *kùè*.
 GN ALL 3SG.F:I come:J-PST3 since be.sick-J-ITER IPFV
 ‘Ever since she came to Africa, [she] has been ill.’

3.4.6 ‘until’

nò *|úí* (< *|úí* ‘one, only’):

- (55) *tí* *gérè* *ũ̀-̀mà* *ʔé.nà* *ʔà* *ʔé.̀n* *kò* *àà* *nò* *|úí*.
 1SG FUT stand-BEN 3PL.C:II ACC 3PL.C:I IPFV come when ?only
 ‘I will wait for them until they come.’

3.5 Purpose clauses

Embedding as ALLATIVE (*ʔò*):

- (56) a. *k’áàkhòè=ũ̀* *kò* *guni=m̃* *ʔò* *kũ̀* *nò* *g/aàkhòè=dzì* *kò*
 man = PL.M:I IPFV hunt = SG.M:I ALL go when woman = PL.F:I IPFV
ʔxáá=m̃ *ʔò* *kũ̀*.
 gather = SG.M:I ALL go.
 ‘When the men go to hunt, the women go to gather.’
- b. *k’oxú* *ũ̀* *ʔò* *ʔé.m̃* *kũ̀-̀a-tà*.
 meat buy ALL 3SG.M:I go-J-PST1
 ‘He went to buy meat.’
- c. *thì.ʔà* *ʔũ̀* *àà-kù* *káá=m̃* *ʔò* *|úá=sì* *mĩ́=sì*
 SS return:J come-RCPR search = SG.M:I ALL child = SG.F:I DEM.DIST = SG.F:I

káu-a-tà = sà ?à.

be.long-J-PST1 = SG.F:II ACC

‘[They] came back to search that child which had stayed behind.’

Juxtaposition (?):

(57) a. *?abá = m //abuù-à kùè ʔí boksí = m ?à tee-tà*
dog = SG.M:I jump-J PROG DEM.REF box = SG.M:I LOC stand:J-PST1

?ánì = m ?à gádò.

inside = SG.M:I LOC look

‘It jumped and stood on the box to look inside.’

b. *k’aro-//ùà = m kò /úú = dzà ?à xúù-//ùà kà tshaá = m*
boy-DIM = SG.M:I IPFV some = PL.F:II ACC thing-DIM ATTR water = SG.M:I

ù./óò ?à //?ùà khúí ?à káá /úú = sà ?à.

top LOC return lift CONJ search child = SG.F:II ACC

‘The boy returns to lift little things above the water and search for the child.’ (?)

xàbè ‘so that’:

(58) a. *thì. ?à n/gè /úú = mà ?à tséè ná = m xàbè khoe = nà*
SS SEQ one.of = SG.M:II ACC send DEM.REF = SG.M:I so.that person = PL.C:I

kũũ-a //?áé = m ngùà kyíí.

go-J village = SG.M:I ABL call

‘[They] sent one [of them] so that he would go and call the people from the village.’

b. *?é. //ù nyúú thì. ?à ?é. //ù xàbè sãá tshéè-//ùà.*
3PL.M:I sit.down SS 3PL.M:I so.that rest day-DIM

‘They sit down, so that they can rest for a little while [a small day].’

3.6 Concessive and adversative clauses

3.6.1 Adversative

Juxtaposition:

(59) a. *k’oró-tá ?íté k’oxú = mà ?à tshaá = mà ?à*
eat.meat:J-PST1 NEG meat = SG.M:II ACC water = SG.M:II ACC

k’aa-a-tà.

drink-J-PST1

‘[She] didn’t eat the meat [but] drank the water.’

b. */úú = sì t’úú ?è nítshéè, /’án-nà-hà thuú ká.*
child = SG.F:I beautiful COP today, be.ugly-J-PST3 past MPO

‘The girl is beautiful [now], [but] she was ugly in the past.’

Adversative~concessive: *k'òsò*

- (60) a. */úú=sì t'úú-nà-hà k'òsò kò kyíí.*
 child = SG.F:I be.beautiful-J-PST3 but IPFV be.sick
 'The girl was beautiful, but [she] is sick [now].'
 (or: 'Although the girl was beautiful, [she] is sick [now].')
- b. *xúú=sì /'urí-nà-hà k'òsò //dà-nà-hà.*
 place = SG.F:I be.dirty-J-PST3 but wash-J-PST3
 'The place was dirty, but [they] have washed [it].'
- c. *Mabábè ?ò ?é.m kò kíúú k'ósò Sankóyó ?à*
 GN ALL 3SG.M:I IPFV go but GN LOC
?é.m nyúú-à-?ò.
 3SG.M:I stay-J-PST2
 'He was going to Mababe, but stayed at Sankoyo.'
 (or: 'Although he was going to Mababe, he stayed at Sankoyo.')
- d. *tí kíúú-kàà-nà-?ò k'òsò tí nè líftì mūú téé.*
 1SG go-VOL-J-PST2 but 1SG SEQ lift find NEG.SEQ
 'I wanted to come, but I could not find a lift.'
 (or: 'Although I wanted to come, I could not find a lift.')

Adversative contrast between predicative adjectives: *k'òsò* and *tàmà*

- (61) a. *?é.m ?oré.xà k'òsò /xurí ?è.*
 3SG.M:I young but clever COP
 'He is young but clever.'
- b. *?é.m ?oré.xà tàmà /xurí ?è.*
 3SG.M:I young but clever COP
 'He is young but clever.'

3.6.2 Concessive: *k'òsò* and *tàmà*

- (62) a. *kyíí kò tàmà sékólè=sì ?ò kíúú-a-tà.*
 be.sick IPFV but school = SG.F:I ALL go-J-PST1
 'Although [he] was sick, [he] went to school.'
- b. *àà-nà-hà ná=m kyíí-tutú-m-nà-hà k'òsò.*
 come-J-PST3 DEM.REF = SG.M:I be.sick-INT-J-PST3 but
 '[He] came although he was very ill.'

Tswana *mè*:

- (63) a. *tí tsxāā-hà mè tí nà àà.*
 1SG bec.tired:J-PST3 but 1SG NEAR.FUT come
 ‘I was tired, but I will come now.’

- b. *tí /'urí-nà-tà mè tí t'úú ʔè.*
 1SG be.dirty-J-PST1 but 1SG clean COP
 ‘I was dirty, but I am clean now.’

3.6.3 ‘Instead of’: -tā = sè

- (64) a. *ʔé.sì táùn = m̃ ʔò kúú-nà-hà tí /xóà sǔ-tā = sè.*
 3SG.F:I town = SG.M:I ALL go-J-PST1 1SG COM work-IPFV.NEG = ADV
 ‘She went to town instead of working with me.’
 (lit.: Not working with me, she went to town.)

- b. *khóè = ñ t'eré ʔè. //ʔúú kúè kúú-a //hará-tā = sè.*
 person = PL.C:I lazy COP sleep IPFV go-J plough-IPFV.NEG = ADV
 ‘People are lazy. [They] sleep instead of going to plough.’
 (lit.: Not going to plough, they sleep.)

- c. *súkà = mà kyúú-tā = sè nè kúú-a gyiráá kyúú.*
 sugar = SG.M:II buy-IPFV.NEG = ADV SEQ go-J dress buy
 ‘Instead of buying sugar, [she] went to buy a dress.’
 (lit.: Not buying sugar, she bought a dress.)

4. Relative clauses

- 1) Attributive strategy: marking of the head by the attributor morpheme *ka* (cf. (65)a-b)
- 2) Appositive strategy: the relative clause follows its head which may, but does not need to be marked by a PGN clitic (cf. (65)c-d)

- (65) a. *k'oxú ká ʔé.//ù xúú-nà-hà = dzi khudí-nà-hà = sè ʔé.//ù kò àà.*
 meat ATTR 3PL.M:I leave-J-PST3 = PL.F:I end-J-PST3 = ADV 3PL.M:I IPFV come.
 ‘When the meat they had left was finished, they would come.’

- b. *g//óé = sì mūú-tā aqám = sí kò hū = sà ʔà xúú kà.*
 tortoise = SG.F:I see-IPFV.NEG toad = SG.F:I IPFV do = SG.F:II ACC thing ATTR
 ‘The tortoise does not see the thing the toad has done.’

- c. *thà //ʔūā àà-kù káá = m̃ ʔò /úú = sì mǔ = sì*
 S.SBJ return:J come-RCPR search = SG.M:I ALL child = SG.F:I DEM.DIST = SG.F:I

kau-à-tà = sà *ʔà.*
 stay.behind-J-PST1 = SG.F:II ACC
 ‘[They] came back to search that child which had stayed behind.’

- d. *khoe mĩxúà nyũ-à = mà tí damàxù ʔè.*
 person there sit-STAT = SG.M:II 1SG y.sibling COP
 ‘The man who is sitting there is my younger brother.’

→ This dichotomy might reflect a distinction between restrictive and non-restrictive relative clauses

Oblique arguments in the relative clause:

ALLATIVE/DATIVE:

- (66) a. *k’áà-khòè kà /ʔádò = sà ʔí ʔò tí khaà-nà-tà = m*
 male-person ATTR money = SG.F:II DEM.REF DAT 1SG give-J-PST1 = SG.M:I
kũũ-à ʔñ.sì-nà-tà /ʔádò = dzì /xòà.
 go-J be.complete-J-PST1 money = PL.F:I COM
 ‘The man whom I gave the money to went away with the money.’

INSTRUMENT:

- b. *ààkà thobóló ká ʔí kà tí gère xam = sà ʔà*
 bring gun ATTR DEM.REF MPO 1SG FUT lion = SG.F:II ACC
//ʔádò = sà ʔà.
 shoot = SG.F:II ACC
 ‘Bring the gun with which I will shoot the lioness.’

POSSESSOR:

- c. *tí k’uí-nà-tà g/aà-khòè kà ʔí kà /úú = ñ nguú = m*
 1SG speak-J-PST1 female-person ATTR DEM.REF POSS child = PL.C:I house = SG.M:I
kà fenstère = dzà ʔà ʔúè-xù-nà-hà = dzì /xòà.
 POSS window = PL.F:II ACC break-CAUS-J-PST3 = PL.F:I COM
 ‘I spoke to the women whose children broke the house’s windows.’

The attributor *ka* also links adjectives, numerals, demonstratives and possessor nouns to their nominal heads:

- (67) a. *aqám ká //ʔorá = sí nè //abuù-à kyãà ʔí kà mokóró = m ʔà.*
 toad ATTR big = SG.F:I SEQ jump-J enter DEM.REF ATTR canoe = SG.M:I LOC
 ‘The big toad jumps into the canoe.’
- b. *//óbé = ñ /úú kà kò kũũ.*
 three = PL.C:I child ATTR IPFV go
 ‘The three children are walking.’

- c. g//ààkhòè kà k'áàkhòè = m̃ dí = sì ?è.
 wife ATTR man = SG.M:I POSS = SG.F.I ID
 ‘She is the man’s wife.’

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Abbreviations

I	gender-number series I	NEAR.FUT	near future
II	gender-number series II	NEAR.PST	near past
1	1 st person	NEG	negation
2	2 nd person	NMZ	nominaliser
3	3 rd person	O	object
ABL	ablative	OBL	oblique
ACC	accusative	PASS	passive (agentless)
ADV	adverbial	PFV	perfective
ALL	allative	PN	personal name
ASSOC	associative	POSS	possessive
ATTR	attributor	PROG	progressive
BEN	benefactive	PROX	proximal
C	common gender	PST1	same day past (anterior)
CAUS	causative	PST2	recent past (anterior)
COM	comitative	PST3	remote/general past (anterior)
COMP	complementizer	PL	plural
COMPL	completive	Q	question marker
COND	conditional	RCPR	reciprocal
CONJ	conjunction	REF	referential
COP	copula	REFL	reflexive
CR	current relevance	S	subject
DEM	demonstrative	SEQ	sequential
DIM	diminutive	SG	singular
DISJ	disjunction marker	SS	same subject
DIST	distal	STAT	stative
DS	different subject	SUBJ	subjunctive
DU	dual		
EMPH	emphatic		
F	feminine		
FUT	future (posterior)		
GN	geographical name		
ID	identification marker		
IMP	imperative		
INT	intensifier		
IO	indirect object		
IPFV	imperfective		
ITER	iterative		
J	junction		
LOC	locative		
M	masculine		
MPO	multi-purpose oblique		