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A grammar of Ik (Icé-tód) : Northeast Uganda's last thriving Kuliak language

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9 Phrases and Clauses

Now that phonemes and morphemes (words and affixes) have been described, the present chapter takes up the topic of basic syntax. It begins with a discussion of noun phrases (§9.1), followed by simple main clauses (§9.3-§9.6), a variety of subordinate clauses (§9.7-§9.9), and several other noteworthy syntactic constructions (§9.10-§9.16). In many regards, this chapter only scratches the surface of Ik syntax, but it is hoped that the topics covered here will provide impetus for further investigation.

9.1 Noun phrase structure

Noun phrases (NP) fill core or peripheral argument slots in clause structure. Their phrasal heads can be made up of a solitary noun (including nominalized verbs), pronoun, or compound. Noun phrases may also include one or more modifiers such as: demonstratives, quantifiers, possessive phrases, or relative clauses. In other words, a given NP may consist of just the head or of multiple embedded phrases and/or clauses.

Any modifiers within an Ik noun phrase follow the phrasal head they modify. This conforms to expectations for VSO languages (Creissels 2000:252), of which Ik is one. For example, in (1) below, the possessive NP *ńci* 'my' follows the noun *dakwitína* 'trees', as do the plural demonstrative *=ni* in (2) and the numeral quantifier *ad*^{e} 'three' in (3):

(1) *dakwitina nci*

[dakw-itín-á	[ńci-∅]$_{NP:POSS}$]$_{NP}$
tree-PL-NOM	I-GEN
my trees	

(2) *dakwitina ni*
[dakw-itín-á = ni]$_{NP}$
tree-PL-NOM = DEM.PL
these trees

(3) *dakwitina ad*
[dakw-itín-á ad^{e}]$_{NP}$
tree-PL-NOM three
three trees

More than one type of demonstrative may modify a noun in the same noun phrase. When all three types of demonstrative cooccur, they do so in the following order: anaphoric-temporal-spatial. An example of this is in (4):

(4) *ama dee sina ne*
[ám-á = ʻdéé = sɪna = ne]$_{NP}$
person-NOM = ANPH.SG = PST2.DEM.SG = DEM.SG.MED
that person there (of yesterday, already mentioned)

Ik speakers have a penchant for using spatial demonstratives more than once in a single noun phrase (see also §8.2.1). It seems to add a bit of rhythmic balance to one's speech. (5) shows an example of this:

(5) *ama ke naa ke*
[ám-á = ke = náa = ke]$_{NP}$
person-NOM = DEM.SG.DIST = DEM.SG.PST1 = DEM.SG.DIST
that person over there (of earlier today)

If a modifier NP is selecting its head from a group rather than merely qualifying it, it trades places: It becomes the NP head and the modified noun becomes a possessive NP. This happens, for example, with the indefinite pronoun *saí-* 'some more, some other' and the interrogative pronominal compound *ńté-éní-* 'which?'. In (6), the noun *awika-* 'homes' is

bumped into an embedded genitive possessive phrase modifying the indefinite *saa.* And in (7), the same thing happens to *awá*^{e} 'home':

(6) *saa awikae*
[sa-a [aw-ika-^{e}]$_{NP:POSS}$]$_{NP}$
other-NOM home-PL-GEN
some other homes

(7) *Nteena awae?*
[ńtɛ́-ɛ́n-á [awá-^{e}]$_{NP:POSS}$]$_{NP}$
which-PSSM-NOM home-GEN
Which home?

If a quantifier cooccurs with either a possessive phrase or a demonstrative in an NP, the quantifer comes last in the sequence, for example:

(8) *ŋokitina ncie gai*
[ŋók-ítín-á [ɲ́ci-e]$_{NP:POSS}$ ˈgáí]$_{NP}$
dog-PL-NOM I-GEN both
both my dogs

(9) *ŋokitina ni gai*
[ŋók-ítín-á = ni ˈgáí]$_{NP}$
dog-PL-NOM DEM.PL both
both these dogs

And if all three types of modifers are present, the following order obtains:

(10) *ŋokitina ncie ni gai ni*
[ŋók-ítín-á [ɲ́ci-e]$_{NP:POSS}$ = ni ˈgáí = (ni)]$_{NP}$
dog-PL-NOM I-GEN = DEM.PL both = DEM.PL
both these dogs of mine (these)

Noun phrase heads may be modified by relative clauses (see §9.8 for a more detailed treatment). These clauses also follow the NP head. They tend to fall at the end of the NP, but quantifiers may optionally follow them:

(11) *dakwitina ncie gai ni dunaaket*
[dakw-itín-á [ɲ́ci-e]$_{NP:POSS}$ ʻgáí = [ni dun-aak-et-$^{a\acute{}}$]$_{RC}$]$_{NP}$
tree-PL-NOM I-GEN both = REL.PL old-DISTR-INCH-REAL
both of my old trees

(12) *dakwitina ncie ni dunaaketa gai*
[dakw-itín-á [ɲ́ci-e]$_{NP:POSS}$ = [ni dun-aak-et-a]$_{RC}$ ʻgáí]$_{NP}$
tree-PL-NOM I-GEN = REL.PL old-DISTR-INCH-REAL both
both of my old trees

And when multiple adjectival verbs are used to describe a clausal argument, only one relative clause structure is used. After the relative pronoun come the two or more adjectivals, demarcated with a pause (‖) between each one:

(13) *dakwitina ncie ni dunaaket,*
[dakw-itín-á [ɲ́ci-e]$_{NP:POSS}$ = [ní dun-aak-et-∅ ‖
tree-PL-NOM I-GEN = REL.PL old-DISTR-REAL

zikibaakat, iliɓaakata muŋ
zikíb-aak-át-∅ ‖ ılíɓ-aak-át-a]$_{RC}$ muŋ]$_{NP}$
tall-DISTR-3PL-REAL green-DISTR-3PL-REAL all
all my old, tall, green trees

9.2 Possession

The following overview of ‘possession’ in Ik covers not only the possessive constructions within in noun phrases, but also some of the broader issues surrounding how ‘possession’ is syntactically encoded in the language.

From a syntactic point of view, Ik employs three types of possessive construction: 1) A possessee NP head followed by a possessor NP in the genitive case, 2) a possessor noun and a possessee noun joined in a compound, in that order. Ik speakers claim there is no difference in meaning between these two types. 3) The third type of possessive construction is complex. It consists of a compound with the possessor as the N_1 and the possessum morpheme *ɛní-* as the N_2. These two elements alone comprise a possessive noun phrase, as in *ɲj-én* 'mine'. But then the possessee can be specified by putting it in a genitive phrase after the NP head. This construction can be termed 'pertensive' (Dixon 2010b:268), given that the possessee bears the traditional marking for possessor (the genitive case):

(14) *NP possessive constructions*

1	awa ɲ́ci	home I:GEN	'my home'
2	ɲ́ci-aw	I:OBL-home	'my home'
3	ɲj-ɛ́ná awá^{e}	I[OBL]-PSSM home:GEN	'my home'

The types of semantic relationships that Ik possessive constructions can express include those in (15)-(21). According to Dixon (2012b:263), Ik would fall into that group of languages worldwide that shows a comparatively wide range of such relationships:

(15) Ownership: *nkaka nti*

ŋkáká ńtí-∅

food-NOM they-GEN

their food

(16) Whole-part: *rijaakw*

ríjá-akw-^{a}

forest[OBL]-inside-NOM

the inner (part of the) forest

(17) Kinship: *ŋjini-liaat*
ŋjíní-liaát-[a]
we.INC[OBL]-brother-NOM
our brother

(18) Attribute: *ɪɓaaŋasa wice*
ɪɓááŋ-as-a wicé-∅
foolish-ABST-NOM children-GEN
the foolishness of children

(19) Orientation: *koo kwaro awae*
kɔ́ɔ́ kwar-ɔ awá-[e]
there mountain-INS home-GEN
there by the upper side of the home

(20) Association: *mucea taŋaikini*
muce-a taŋá-ík-ɪnɪ-∅
path-NOM cohort-PL-POSS.PL-GEN
the path of their companions

(21) Nominalization: *arutetona ebae*
arút-ét-on-a ɛ́ba-[ɛ]
sound-INCH-INF-NOM gun-GEN
the sound of a gunshot

Ik also uses verbal means to express possession. For example, the verbs *tír-és* ‘to hold’, *i-on* ‘to be’, and *i-ona ńda* ‘to be with’ are all common verbal alternatives alongside the NP possessive constructions in (14). These verbs used in this way often translate as ‘to have’. The first, *tír-és*, is a transitive verb whose subject would be the possessor and object the possessee. Due to its high degree of agency, this verb is restricted to human possessors:

(22) *Tirida ɲakalama?*
tír-íd-a ɲákalám-a
hold-2SG-REAL pen-NOM
Do you have a pen (lit. ‘Are you holding a pen’)?

(23) *Biraa koroɓaa tiri.*
bıra-a kɔ́rɔ́ɓá-a tír-í-∅
not.be-REAL thing-NOM hold-1SG-REAL
I have nothing (lit. ‘There is nothing I am holding’).

The second ‘have’-verb—*i-on* ‘to be’—is the language’s locative/existential copular verb. Used in a possessive way, this verb takes the possessee as its subject and the possessor as a peripheral argument in the dative case, e.g.:

(24) *Iya ɲakalama ncik.*
i-a ɲákalám-a ɲci-k^{e}
be-REAL pen-NOM I-DAT
I have a pen (lit. ‘There is a pen to me’).

To negate the kind of possessive clause in (24), one has to substitute the negative locative copula (*bırá-* ‘not be there’) and put the possessor (or more precisely, the ‘un-possessor’) in the ablative case:

(25) *Biraa ɲakalama ncu.*
bıra-a ɲákalám-a ɲcu-∅
not.be-REAL pen-NOM I-ABL
I have no pen (lit. ‘A pen lacks from me’).

The third verb, *i-ona ńda* ‘to be with’, combines the locative/existential copula *i-* with the preposition *ńda* ‘and/with’. The possessor is the subject of the verb, and the possessee is a peripheral argument in the oblique case. When negated with the verb *bırá-* ‘lack’ the oblique-case possessee is marked on the subordinated verb *i-* ‘be’ with the dummy pronoun enclitic {=ɛ́dɛ}:

(26) *Iyida nda ɲakalamu?*
i-íd-a ń‘da ɲákalámʊ
be-2SG-REAL with pen[OBL]
Do you have a pen (lit. ‘Are you with a pen’)?

(27) *Biraa ɲakalama iyiaad.*
bɪra-a ɲákalám-a i-í-á = dᵉ
not.be-REAL pen-NOM be-1SG-REAL = DP
I don’t have a pen (lit. ‘A pen is lacking that I am with’).

The Teso-Turkana languages bordering Ik, like Karimojong and Turkana, also convey possession by means of locative/existential copulae. In the following examples (from Mantovani 1963:9, though morpheme glosses are my own), the verb *ayakau* ‘to be (there)’ has the meaning of ‘to have’:

(28) *Eyai iyong aite.*
eyaí íyoŋ áite
be:3SG you:DAT cow
You have a cow (lit. ‘A cow is to you’).

(29) *Eyakasi iyong ŋgaatuk.*
eyakási íyoŋ ŋáâtuk
be:3PL you:DAT cows
You have cows (lit. ‘Cows are to you’).

9.3 Basic clause structure

The 'clause' is defined here as the minimal unit of syntactic organization that includes a verbal element, finite or non-finite. Thus it encompasses the 'verb phrase' (predicate and any modifiers) and any 'noun phrases' (nouns and any modifiers) needed to fill the predicate's argument slots. The notion of 'verb phrase' *per se* will not be dealt with further since the 'clause' includes the verb phrase by definition. Having discussed noun phrases in the last section, this one takes up the topic of basic Ik clauses: unmarked main clauses, subordinate clauses, and various types of marked main clauses. Other specific topics covered in later sections of this chapter include questions, reported speech, comparative constructions, and negation.

Ik exhibits a strict VSO constituent order in basic unmarked main clauses. This puts it in a 'word-order' typological category with Ancient Egyptian, a few Chadic languages, much of Eastern Sudanic (notably Eastern Nilotic), and possibly some Berber and other Afroasiatic languages (Creissels 2000:252). It distinguishes it from other regional languages like Dhaasanac (SOV) and Dime (SOV). Though Teso-Turkana languages are classified as VSO, a VOS order is also common (Dimmendaal 1983:68). But VOS is not attested in Ik. Like some of the controversially analyzed VSO languages in Africa, Ik exhibits both VSO and SVO constituent orders. However, in Ik, SVO is restricted to subordinate clauses, which are described below in §9.4.

Ik's VSO constituent order along with its total lack of synchronically functional prefixes is one of its 'remarkable' typological properties (Heine & König 1996:123). This property, along with the subordinate clause SVO contituent order, suggests that VSO may be a wholesale syntactic structure replicated from the historically influential Eastern Nilotic languages.

A 'basic clause' is defined here is a simple, declarative statement with a 3SG subject, realis modality, and positive polarity—in other words, functionally and semantically unmarked. As noted above, the order of core constituents

in an Ik basic clause is VSO, or more precisely, VS in intransitive clauses and VAO in transitive clauses. In (30) below, the noun *ŋók*^{a} 'dog' is functioning as the subject of the intransitive predicate *ep-* 'sleep'. And in (31), the same noun is acting as the subject of the transitive predicate *áts'-* 'gnaw' with *ɔká-* 'bone' as its object. Note how the subject follows the verb in each example, and how the object follows the subject in (31):

(30) *Epa ŋok.*
ep-a$_{V}$ ŋók-$^{a}{}_{S}$ Intransitive = VS
sleep-REAL dog-NOM
The dog is asleep.

(31) *Ats'a ŋoka oka.*
áts'-á$_{V}$ ŋók-á$_{A}$ ɔká-k$^{a}{}_{O}$ Transitive = VAO
gnaw-REAL dog-NOM bone-ACC
The dog gnaws a bone.

Tense clitics fall between the main verb and its first overt argument, as in:

(32) *Epa bee ŋok.*
ep-á$_{V}$ = bee ŋók-$^{a}{}_{S}$
sleep-REAL = PST2 dog-NOM
The dog slept (yesterday).

(33) *Ats'a noo ŋoka oka.*
áts'-á$_{V}$ = noo ŋók-á$_{A}$ ɔká-k$^{a}{}_{O}$
gnaw-REAL = PST3 dog-NOM bone-ACC
The dog gnawed the bone (a while ago).

When peripheral arguments and other adjuncts like adverbs are put in a clause, these fall after any core constituents. For example, if the peripheral argument *kurú* 'in the shade' is added to (32) from above, it comes after both the verb and the subject, as in (34) below:

(34) *Epa ŋoka kuru.*

ep-a$_{V}$	ŋók-á$_{S}$	kurú-∅$_{PERIPHERAL}$
sleep-REAL	dog-NOM	shade-ABL

The dog is sleeping in the shade.

And if an adverb like *híɰjˀ* 'slowly' is added to (33), it comes after the verb, tense clitic, subject, and object, as in:

(35) *Ats'a naa ŋoka okaa hiiɰ.*

áts'-á$_{V}$ = naa	ŋók-á$_{A}$	ɔká-á$_{O}$	híɰjˀ$_{ADJUNCT}$
gnaw-REAL = PST1	dog-NOM	bone-ACC	slowly

The dog gnawed the bone slowly (earlier today).

If the arguments, core or peripheral, have modifiers, these modifiers directly follow the NP heads they modify. The next three examples are variations of (34), showing where respective NP modifiers occur:

(36) *Epa ŋoka ncie kuru.*

ep-a$_{V}$	[ŋók-á	ɲci-e]$_{S}$	kurú-∅$_{PERIPHERAL}$
sleep-REAL	dog-NOM	I-GEN	shade-ABL

My dog is sleeping in the shade.

(37) *Epa ŋoka na ɓets'a kuru.*

ep-a$_{V}$	[ŋók-á = na	ɓets'-a]$_{S}$	kurú-∅$_{PERIPHERAL}$
sleep-REAL	dog-NOM = REL.SG	white-REAL	shade-ABL

The white dog is sleeping in the shade.

(38) *Epa ŋoka kuruo na kwats.*

ep-a$_{V}$	ŋók-á$_{S}$	[kurú-ó = na	kwáts-∅]$_{PERIPHERAL}$
sleep-REAL	dog-NOM	shade-ABL = REL.SG	small-REAL

The dog is sleeping in the small shade.

Ik clauses may be intransitive, transitive, or distransitive. At the notional level, intransitive clauses minimally require a subject (S) as an argument. Transitive clauses minimally require an agent (A) and object (O), while ditransitives requires an agent (A), object (O), and extended object (E). However, in Ik, some or all core arguments may be omitted (left implicit) in the surface structure. As such, Ik is not just a pro-drop language (which it is) but also an 'argument-drop' language. Consider these examples:

(39) *Makotia naa kaudza ntsik.*

ma-ƙot-í-a$_{VA}$=naa	kaúdz-a$_{O}$	ntsí-k$^{e}_{E}$
give-AND-1SG-REAL=PST1	money-NOM	s/he-DAT

I gave the money to him.

(40) *Makotia naa kaudz.*

ma-ƙot-í-a$_{VA}$=naa	kaúdz-$^{a}_{O}$	∅$_{E}$
give-AND-1SG-REAL=PST1	money-NOM	

I gave the money (to someone).

(41) *Makotia naa ntsik.*

ma-ƙot-í-a$_{VA}$=naa	∅$_{O}$	ntsí-k$^{e}_{E}$
give-AND-1SG-REAL=PST1		s/he-DAT

I gave (something) to him.

(42) *Makotia nak.*

ma-ƙot-í-a$_{VA}$=nak^{a}	∅$_{O}$	∅$_{E}$
give-AND-1SG-REAL=PST1		

I gave (something) (to somebody).

These four examples show progressively the omission of one or the other—and then all—core arguments from the surface structure (though of course the clause subject is always cross-referenced on the main verb).

9.4 Causative clauses

Syntactically, the Ik causative suffix {-ɪt-} (§7.9.1) changes the valency of the verb by adding a new argument: the causer in the form of the agent (A). For intransitive verbs, the original intransitive subject (S) now becomes the object (O) in the causative construction, for example:

(43)

Fekiaa nk.		*Fekitetaa ncik.*	
fek-í-a-a	[ŋk-^{a}]$_{S}$	fek-it-et-á-á	[ɲ́ci-k^{a}]$_{O}$
laugh-1SG-REAL-PRF	I-NOM	laugh-CAUS-INCH-REAL-PRF	I-ACC
I'm laughing.		She's made me laugh.	

In (43), the S of the first clause (*ŋk^{a}*) becomes the O of the second clause (*ɲ́cik^{a}*). This is reflected in the case-marking change from the nominative in the first clause to the accusative in the second (due to the fact that 3rd person agents in Ik always take direct objects in the accusative case).

For transitive verbs, the original transitive agent (A) becomes the direct object (O) of the new agentive causer which is now (A). And the original direct object becomes an extended object (E) marked with the dative case:

(44) *Ŋabia nka ɲokoti.*

ŋáb-i-a	[ŋk-a]$_{A}$	[ɲókóti-∅]$_{O}$
wear-1SG-REAL	I-NOM	coat-NOM

I'm wearing a coat.

(45) *Ŋabitieeta ncia ɲokotiik.*

ŋáb-it-i-et-a	[ɲ́ci-a]$_{O}$	[ɲókótií-k^{e}]$_{E}$
wear-CAUS-PLUR-INCH-REAL	I-ACC	coat-DAT

He makes me wear a coat.

Lastly, for extended transitive verbs, the original transitive subject (A) becomes the direct object (O), while the original direct object becomes the

first extended object (E_1) marked with the dative case. And the original extended object (E_1) becomes the second extended object (E_2), also in the dative case. This construction puts Ik in the company of the relatively few languages worldwide—like Japanese, Turkish, and Kamaiurá—that allow more than one dative noun phrase in the same clause (Dixon 2012:264):

(46) *Maƙotiaa nka kaudza konie amae.*
ma-ƙot-í-a-a [ŋk-a]$_A$ [kaúdz-a]$_O$ [kɔnɪ-ɛ ámá-^{e}]$_{E1}$
give-AND-1SG-REAL-PRF I-NOM money-NOM one-DAT person-GEN
I have given the money to another person.

(47) *Maƙitiiƙota ncia kaudzoe konie amae.*
maƙ-it-i-iƙot-a [ɲ́ci-a]$_O$ [kaúdzo-e]$_{E1}$ [kɔnɪ-ɛ ámá-^{e}]$_{E2}$
give-CAUS-PLUR-AND-REAL I-ACC money-DAT one-DAT person-GEN
He makes me give money to another person.

9.5 Auxiliary verbs

Two different constructions are here being called ‘auxiliary’. One type involves a small subset of verbs that carry aspectual meaning paired with a main verb that carries the lexical semantic content, semantic roles, and argument structure of the whole clause. The second type involves a small set of lexical verbs that, when paired with a nominalized complement, add aspectual meaning to the complement. These are termed ‘auxiliary-like’.

9.5.1 Auxiliary verbs proper

The auxiliary verbs ‘proper’ are lexical verbs in their own right but also double as aspectual auxiliaries. In the Ik auxiliary verb construction, the aspectual auxiliary fills the slot for the main verb and is the only verb marked for subject-agreement, tense, and polarity. The semantic main verb follows in a morphologically defective form. If the clause subject is overt, it comes between the auxiliary and the main verb, making the constituent order of auxiliarized clauses Aux-S-V or Aux-A-V-O, the same order found in

subordinate clauses. The only inflection found on the main verb in an auxiliary construction is the realis suffix {-a}. It remains thus, regardless of the various inflectional suffixes the auxiliary verb may take.

The verbs in (48) form a subset based on the fact that they all aspectually modify a morphologically defective, semantically main verb. The 'anticipative' verb *ŋɔ́r-* 'do early' is most likely related to the proto-Kalenjin verb *ŋɔɔr-* 'foretell' (Rottland 1989). And the verb *sár-* is functionally quite similar to the Turkana auxiliary *-rok-* which Dimmendaal calls the "auxiliary of unexpected state of affairs" in the affirmative (1983:138) and the "unexpected negative perfective" in the negative (1983:457).

(48) *Ik auxiliary verbs*

	Lexical	Aspectual
erúts-	'be new, fresh'	Recentive
ŋɔ́r-	'do early (already)'	Anticipative
sár-	'still, not yet, no longer'	Durative

The following three examples illustrate these auxiliary verbs. First, in (49) the recentive auxiliary *erúts-* modifies the semantic main verb *ats-* 'come'. Since the auxiliary verb fills the syntactic slot for main verbs, the second-position tense clitic *=noo* attaches to it:

(49) *Erutsa noo ɲaɓura ats.*

[erúts-á=noo]$_{AUX}$	ɲaɓur-a$_{S}$	ats-∅$_{V}$
recent-REAL=PST3	maize-NOM	come-REAL

Maize (i.e. as a crop) came in the not-so-distant past.

In the next example, the anticipative auxiliary *ŋɔ́r-* modifies the main verb *cɛ-* 'kill' which is transitive, taking A and O as arguments. The agent A is omitted but is marked with a subject-agreement suffix on the auxiliary verb:

(50) *ŋorata naa cea riyek.*

[ŋɔ́r-át-a = naa]$_{AUX}$	cɛ-a$_{V}$	rié-k$^{a}{}_{O}$
early-3PL-REAL = PST1	kill-REAL	goat-ACC

They already killed the goat (earlier today).

Transitive verbs like *cɛ-* 'kill' take an object in the accusative case only when the subject is 3-person. In (50), though, it is the intransitive auxiliary verb *ŋɔ́r-* that is marked for 3-person, not *cɛ-*. Still, the object of the clause takes the accusative case. This is because the semantic main verb (V), not the auxiliary (AUX), governs the argument structure of the clause.

This third example shows the affirmative durative Auxiliary *sár-* modifying the intransitive verb *kom-* 'be many':

(51) *Sarima koma zuk.*

sár-ím-a$_{AUX}$	kom-a$_{V}$	zuk^{u}
still-1PL.EXC-REAL	many-REAL	very

We are still very many.

9.5.2 Auxiliary-like verbs

Several Ik verbs add aspectual meaning to a clause, even though they are simply lexical verbs taking a nominal(ized) complement. As such, they are technically not auxiliary verbs but rather auxiliary-like in their semantics:

(52) *Ik auxiliary-like verbs*

	Lexical	Aspectual
bɛ́ɗ-	'want'	Proximative
itsyák-ét-	'begin'	Inchoative
isé-ét-	'begin'	Inchoative
toɗó-	'land, arrive'	Inchoative
ŋáb-ʊkɔt-	'finish, end'	Completive
cɛm-	'fight, struggle'	Occupative

The first five verbs in (52) are ambitransitive. But in their auxiliary-like role, they take an object in the nominative or accusative case, depending on the identity of the subject and the syntactic environment. The sixth verb, *cɛm-*, is intransitive, but in the 'occupative' usage, takes a peripheral argument in the instrumental case (see next section). The objects of these verbs can be nouns or nominalized verbs, though in their auxiliary-like function, they are usually nominalized verbs. Here are some examples:

(53) Proximative: *Bedîa naa rumanon!*
bɛ́ɗ-í-a = naa rumán-on-∅
want-1SG-REAL = PST1 fall-INF-NOM
I almost fell!

(54) Inchoative: *Itsyaketaa ɲeryaŋa atsonik.*
itsyak-et-á-á ɲeryaŋ-a ats-oni-k[a]
begin-INCH-REAL-PRF modernity-NOM come-INF-ACC
Modernity has started coming.

(55) Inchoative: *Iseetataa waanak.*
ise-et-át-a-a wáána-k[a]
begin-INCH-3PL-REAL-PRF prayer-ACC
They've started to pray.

(56) Inchoative: *Toɗoyuo roɓa ats'esia jejeikae.*
toɗó-í-o roɓ-a áts'-ɛ́sɪ-a jéje-ika-[e]
land-3SG-SEQ people-NOM chew-INF-ACC mat-PL-GEN
And people began to eat leather mats.

(57) Completive: *Ŋjabuƙotima bee zikesa ɗeretsae.*
ŋáb-ʊƙɔt-ím-á = bee zík-és-a ɗɛrɛtsa-[ɛ]
finish-COMP-1PL-REAL = PST2 tie-INF-NOM kindling-GEN
We finished tying kindling (yesterday).

9.5.3 Occupative aspect

Lastly, Ik has a construction whose function approximates the progressive aspect of many languages (if English translations are any indication). It consists of the intransitive verb *cɛm-* 'fight, struggle' plus a nominal word as a peripheral argument in the instrumental case. This aspect is called 'occupative' here because, in addition to implied progressive activity, it communicates an ethnosemantic nuance of intensity (Serzisko 1992:79) and struggle (hence *cɛm-* 'struggle')—that is, of being engaged or 'occupied'.

Examples of the occupative aspect include the following sentences:

(58) *Cemia hoeso inoe na.*
cɛm-í-á ho-és-ó ínó-e = na
struggle-1SG-REAL cut-INF-INS animal-GEN = DEM.SG
I am busy dressing this animal.

(59) *Cemesoo ŋwaata terego nda babat.*
cɛm-és-ɔ́-ɔ ŋw-áát-a terég-o ńʰda báb-atⁱ
fight-IPFV-3SG-SEQ mother-3SG-NOM work-INS with father-3SG[OBL]
And his mother was busy working along with his father.

(60) *Itelisina wika cematikee waak.*
itél-ísin-a wik-a cɛm-áti-ké = e wáák-ᵒ
watch-1PL.INC-REAL children-NOM fight-3PL-SIML = DP play-INS
We're watching children busy playing (with toys).

(61) *Cemeese koto tsaŋeso ceki.*
cɛ́m-é-ɛsɛ = kɔ́tɔ́ tsáŋ-és-o cekí-∅
fight-SPS = then annoint-INF-INS woman-GEN
And then they got busy annointing the woman.

9.6 Copula clauses

Ik has three verbs that qualify as copula verbs in that they have relational rather than referential meanings. One is *mɪt-*, a copula verb that covers the semantic relations of identity and possession (Dixon 2010:159). In Serzisko's analysis, *mɪt-* also denotes 'ascription/description' (*Zuschreibung*) versus the 'specification' (*Spezifizierung*) handled by the copulative case (1992:55ff). The second copula is *ir-*, a verb with a narrow expression of attribution, and the third is *i-*, a Copula verb that covers existence and location. All three copula verbs can take two arguments, the copula subject (CS) and the copula complement (CC). Although *i-*, when used for the existence relation, takes only a copula subject. The following sentences exemplify these verbs (underlined in the data) and the semantic relations they encode:

(62) Identity: *Mitima ɲot.*

mɪt-ím-á	ŋgw-a$_{CS}$	ɲɔtᵓ$_{CC}$
be-1PL.EXC-REAL	we.EXC-NOM	men[OBL]

We are men.

(63) Possession: *Mita ɗa nci.*

mɪt-á	ɗ-a$_{CS}$	ɲci-∅$_{CC}$
be-REAL	one-NOM	I-GEN

This one is mine.

(64) Attribution: *Ira ntsa tiye.*

ir-a	nts-a$_{CS}$	tíyé$_{CC}$
be-REAL	it-NOM	like.this

It's like this.

(65) Location: *Iyata nta awak.*

i-át-a	ńt-á$_{CS}$	awá-kᵉ$_{CC}$
be-3PL-REAL	they-NOM	home-DAT

They are at home.

(66) Existence: *Iya Nakuj.*
i-a ŋakuj-$^{a}_{CS}$
be-REAL God-NOM
God is (there).

Examples (62)-(66) show that the suject (CS) of Ik copula clauses is treated syntactically like a typical S or A subject: 1) It takes the nominative case; 2) though explicitly mentioned in these example, the CS can be omitted, leaving its trace in the form of subject-agreement suffixes; and 3) it fills the canonical syntactic slot for a subject, just after the main verb.

As for the CC, the case it takes depends on the relation the copula is encoding. In the 'identity' relation, the CC is in the oblique case. In the 'possession' relation, it is in the genitive case. (The copula *ir-* expressing attribution is a special case: Its CC is an adverb like *ńtí* 'how' or *tíyé* 'like this' instead of a noun phrase.) In the 'location' relation, the CC takes the dative case, while in the 'existence' relation, no CC is present. The following table captures how these copular relations are mapped onto copular arguments and the respective nominal cases they assume:

(67) *Case marking in copula constructions*

	Copula	CS	CC
Identity	mɪt-	NOM	OBL
Possession	mɪt-	NOM	GEN
Attribution	ir-	NOM	adverb
Location	i-	NOM	DAT
Existence	i-	NOM	—

The three copulae behave like typical intransitive verbs in terms of the type of inflectional and derivational augmentations they can undergo. Between the three, though, they do differ in what suffixes they can cooccur with. For example, *mɪt-* can be causativized into the transitive *mɪt-ɪt-és-úkɔt´* 'to cause to become', while the other two cannot. The completive suffix {-ʊkɔtí-} can

modify *mɪt-* and *ir-* (*mɪt-ɔn-ʊkɔtˊ* 'to become' and *ir-on-ukotˊ* 'to become like') but not to *i-* (***i-on-ukotˊ*). The impersonal passive suffix {-aní-} is commonly found with *i-* but not with the other two. Otherwise, none of the three Ik copulae have any irregular forms in their paradigms. Neither do they have other functions or homonymns in the grammar.

The three Ik copula verbs can be negated in the standard way, using the realis negating verbs *ńt-* and *ma-* or the sequential negator *moo*, for example:

(68) *Nta miti abaŋ.*
ńt-á mɪt-ɪ abáŋ
not-REAL be-3SG my.father[OBL]
He is not my father.

(69) *Maa bee iri nti.*
má-á=bee ir-i ńtí
not-REAL=PST2 be-3SG ADV
It wasn't like that.

(70) *Moo iyidi koo ke.*
mo-o i-ídi kɔ́ɔ́=kɛ
not-SEQ be-2SG there=DEM.SG.DIST
And then you'll not be over there.

In terms of etymology, Ehret links the copula *mɪt-* (which is *mɛt-* in the Kuliak language So; Carlin 1993:65) to the Proto-Nilo-Saharan root **méːy* 'to do, make' (2001:281). But how that may have developed into a copula is not obvious. Also unexplained is the link between *i-* and the Proto-Central-Sudanic **ngwi* 'to be (somewhere)' > Central Sudanic **-i* (Ehret 2001:371). In neighboring Teso-Turkana languages, two of the three Ik copula verbs have what appear to be close cognates: Ik *i-* ↔ Teso-Turkana *(a)yákáᵘ̀* 'to be somewhere' and Ik *ir-* ↔ *(a)rakaᵘ* 'to be something/ somehow'.

Ik also has a pair of negative copula verbs: *benɨ́-* 'not be (something)' and *bɪrá-* 'not be (somewhere)'. The first negates *mɪt-* and *ir-*, while the second negates *i-*. Both verbs have other, lexical meanings. The verb *benɨ́-* can mean 'be unique', while *bɪrá-* can mean 'lack'. In their capacity as negative copula verbs, these two verbs take complements with a variety of cases:

(71) *Negative copula verbs*

	Copula	CS	CC
Identity	benɨ́-	NOM	COP/OBL
Possession	benɨ́-	NOM	GEN
Attribution	benɨ́-	NOM	adverb
Location	bɪrá-	NOM	ABL/ACC
Existence	bɪrá-	NOM	(ABL)

And the following examples illustrate actual usage of the negative copulae:

(72) *Mita bi.*
mɪt-a bi
be-REAL you.SG[OBL]
It's you.

Benia buk.
beni-á bu-k^{o}
not.be-REAL you.SG-COP
It's not you.

(73) *Ira ti.*
ir-a tí
be-REAL like.this
It's like this.

Benia ti.
beni-a tí
not.be-REAL like.this
It's not like this.

(74) *Iya nee na.*
i-a néé=na
be-REAL here=DEM.SG
She's here.

Biraa nee na.
bɪra-a néé=na
not.be-REAL here=DEM.SG
She's not here.

9.7 Subordinate clause structure

Subordinate (dependent) clause structure differs from that of unmarked main clauses. How it differs depends on the type of clause involved. Conditional and hypothetical subordinate clauses contain sequential verbs that, by definition, must follow in sequence from a preceding verb (see §10.2). This condition is satisfied in subordinate clauses by the subordinating conjunction being placed in the clause-initial verbal slot, followed by a subject in the nominative case, followed by the sequential verb which is actually the main verb of the subordinate clause.

In (75), the conjunction *na=* 'if' fills the syntactic verbal slot (V), while *cɛɪɔ*, the clause's real verb, is 'co'-subordinate to it (V2). In this way, sequential subordinate clauses attempt to preserve surface-level VSO order, although there is a mismatch between deep and surface structure. This analysis tries to account for why an otherwise preverbal subject is in the nominative case, when all other preverbal subjects in the language take accusative case:

(75) *Na soreima ceyoo poposaa...*

[na=]$_{V}$soré-ím-a$_{A}$	cɛ-ɪ-ɔ$_{V2}$	pɔpɔsa-á$_{O}$
CONJ=boy-child-NOM	kill-3SG-SEQ	lizard-ACC

If a boy kills a lizard,...

Apart from ones with sequential verbs like in (75), all other subordinate clauses in Ik have an SVO consituent order—SV for intransitive and AVO for transitive. This SVO order recalls the Surmic language Tennet which also has a VSO order in main clauses but SV in intransitive subordinate clauses (Dimmendaal 2010:33). And like in Dhaasanac (Tosco 2001:14) and Teso-Turkana languages, many subordinate clauses in Ik have the structure of a relative clause, with the subordinating conjunction being based on relative pronouns. For example, in the next two sentences, the conjunction *noo* introducing them is identical to the remote past relative pronoun. Note the respective constituent orders in these two temporal dependent clauses:

(76) *Noo ŋokia epad,…*
[noo ŋókí-a_S ep-á=$d^e{}_V$]$_{TEMP}$… INTRANSITIVE=SV
CONJ.PST3 dog-ACC sleep-REAL=DP
When the dog was sleeping,…

(77) *Noo ŋokia ats'ee okak,…*
[noo ŋókí-a_A áts'-é=$ɛ_V$ ɔká-$k^a{}_O$]$_{TEMP}$… TRANSITIVE=AVO
CONJ.PST3 dog-ACC gnaw-REAL=DP bone-ACC
When the dog gnawed the bone,…

Complement clauses (§9.13.1), though subordinate themselves, make another exception to the SVO order. Since they are embedded main clauses, they retain the VSO constituent order of non-embedded main clauses. Such clauses are introduced by the complementizer *toimɛna/toimɛn-* 'that', which, since it is a noun and argument of the matrix clause, takes case suffixes:

(78) *Hyeiyaa toimena epa ŋok.*
ɦiye-í-á toimɛn-a [ep-a_V ŋók-$^a{}_S$]$_{COMPL}$
know-1SG-REAL COMPL-NOM sleep-REAL dog-NOM
I know that the dog is sleeping.

(79) *Hyeiyaa toimena ats'a ŋoka oka.*
ɦiye-í-á toimɛn-a [áts'-$á_V$ ŋók-$á_A$ ɔká-$k^a{}_O$]$_{COMPL}$
know-1SG-REAL COMPL-NOM gnaw-REAL dog-NOM bone-ACC
I know that the dog is gnawing the bone.

Another defining property of Ik subordinate clauses is that all core arguments (A/S/O) are marked with the accusative case. Again, this is similar to Tennet, where main clauses have a nominative-accusative case-marking system, while in dependent clauses, this switches to ergative-absolutive (Dimmendaal 2010:33). Also in this connection, the Saharan language Tubu, which has Differential Object Marking, an object is more likely to be marked accusative if not expressed in its normal position (König

2008:40, cited in Dimmendaal 2010:32). In other words, accusative case is reserved for pragmatically marked positions. So in Ik, the accusative marking on subjects (A/S) may have something to do with the subject being in a pragmatically marked slot, that is, before the verb. The next two examples illustrate this with intransitive (80) and transitive (81) clauses:

(80) *Noo ncia epiaade kuru,...*
[noo ɲci-a$_S$ ep-í-á=de$_V$ kurú-∅]$_{TEMP}$
CONJ.PST3 I-ACC sleep-1SG-REAL=DP shade-ABL
When I slept in the shade,…

(81) *Noo ncia ats'iaade emek,...*
[nóó ɲci-a$_A$ áts'-í-a=de$_V$ emé-k$^a{}_O$]$_{TEMP}$
CONJ.PST3 I-ACC gnaw-1SG-REAL=DP meat-ACC
When I gnawed on the meat,…

The type of case-marking neutralization exhibited in (80)-(81) violates König's typological prediction #7 for African languages with case: "If the language is verb-initial or verb-medial, then the 'no case before the verb' rule applies" (2008:281). The Surmic language Tennet, spoken not far from Ik in South Sudan, also violates this prediction, but only partially. But as hinted at above, normal case marking is retained in Ik subordinate clauses with sequential aspect verb forms. Note that in the following example, all core arguments bear the nominative case suffix (including the object):

(82) *Na nka ats'ia ema,...*
[na=ŋk-a$_A$ áts'-ɪ-a$_V$ em-a$_O$]$_{COND}$
CONJ=I-NOM gnaw-1SG-SEQ meat-NOM
If I gnaw on meat,…

9.8 Relative clauses

Because many Ik subordinate clauses are based on the relative clause construction, relative clauses need to be discussed without further delay. To begin with, Ik exhibits a canonical relative clause construction having the following characteristics (the first four drawn from Dixon 2010:314):

1. The relative clause (RC) is embedded in a main clause (MC), making up one full sentence.
2. The underlying structure of the RC and MC share a common grammatical argument (CA).
3. The RC functions as syntactic modifier of the CA in the MC.
4. The RC has the basic structure of a clause, with a predicate and the required nominal arguments (as well as peripheral arguments).
5. All core arguments in the RC are marked in the accusative case, just as in all other subordinate clauses (except sequential ones).

In view of these characteristics, compare the following two sentences. The first is a simple MC in the past tense; the second is the same MC but modified by an RC:

(83) *ŋabiya noo tukak.*
[ŋáb-i-a = noo tuka-k^{a}]$_{MC}$
wear-PLUR-REAL = PST3 feather-ACC
He used to wear a feather.

(84) *ŋabiya noo tukaa na buɗam.*
[ŋáb-i-a = noo tuka-a = [na buɗám-∅]$_{RC}$]$_{MC}$
wear-PLUR-REAL = PST3 feather-ACC = REL.SG black-REAL
He used to wear a black feather (lit. ‘a feather which is black’).

The common argument (CA) shared between the MC and RC in (84) is *tuka-* ‘feather’. In the MC, the CA is an object marked in the accusative case, while

in the RC, it is the implied 3SG subject of the adjectival predicate *buɗám-ón* ‘to be black’. The RC modifies *tuka-* in the MC by specifying or restricting the reference of that argument (i.e., it is no longer just any feather; it is a feather *which is black*).

Ik only has restrictive relative clauses, the kind illustrated in (84) above. As such, they can only provide information about the CA that helps restrict its reference to an individual entity. Non-restrictive relative clauses that simply provide more information about an already known CA are not grammatical in the language. In the situation where a proper noun is modified by an RC in Ik, it implies that there are two or more people, places, or things with that particular proper name. Compare the following examples:

(85) *Atsaa ama na mita ncieebam.*
[ats-á-á ám-á = [na mɪt-a ɲci-ebám]$_{RC}$]$_{MC}$
come-REAL-PRF person-NOM = REL.SG be-REAL I[OBL]-friend[OBL]
Here comes the guy that is my friend.

(86) *Atsaa Lotuka na mita ncieebam.*
[ats-á-á lotuk-a = [na mɪt-a ɲci-ebám]$_{RC}$]$_{MC}$
come-REAL-PRF Lotuk-NOM = REL.SG be-REAL I[OBL]-friend[OBL]
1) **Here comes Lotuk, who is my friend.
2) Here comes the (particular) Lotuk that is my friend.

9.8.1 Common argument

The fullest statement of the common argument (CA) in an Ik RC construction is found in the main clause (MC). There it occurs as a noun phrase: noun, pronoun, or demonstrative. The following examples illustrate the CA as a noun, demonstrative pronoun, and a locative adverbial demonstrative, respectively. In (87), the CA is the noun *ínó-* ‘animal(s)’, while in (88), it is the demonstrative pronoun *kidîásaí-* ‘others’. In (90), the CA is the deictic locative adverbial demonstrative *naí-* ‘(t)here’:

(87) *Inoa ni Icea ƙaƙiya ntuo ɗa:*
[ínó-á$_{CA}$ = [ni icé-á ƙaƙ-í-á]$_{RC}$ ńtú-o ɗ-a]$_{MC}$
animal(s)-NOM = REL.PL Ik-ACC hunt-PLUR-REAL they-COP ones-NOM
The animals that the Ik hunt, these are they:

(88) *Nda kiɗiasai ni moo imaarosat.*
ń^{ɬ}da kiɗiásai$_{CA}$ = [ni mó-o ɪmaar-ɔs-át^{i}]$_{RC}$
and others[OBL] = REL.PL not-SEQ count-PASS-3PL
And others who are not counted.

(89) *Ƙaa tsabo nayee noo itsyaketad.*
[ƙa-a tsábo naí-é$_{CA}$ = [noo itsyak-et-á = d^{e}]$_{RC}$]$_{MC}$
go-REAL probably where = REL.SG.PST3 begin-INCH-REAL = DP
He is probably going to where he started from.

The CA in the main clause can have any grammatical function, being either a core argument (S/A/O) or any peripheral argument. As a result, the CA can take any case required by the clause syntax. (90) below presents the CA *ɟákáma-* 'elder' as the intransitive subject of the verb *ats-* 'come'. And (91) shows the peripheral CA *kaní-* 'year' in the instrumental case since it is giving the time setting for the main clause in which it is found:

(90) *Atsuo ɟakama noo ntanee taa ndo…*
[ats-u-o ɟákám-a$_{CA}$ = [noo nt-an-é = e taa ndo]$_{RC}$]$_{MC}$
come-3SG-SEQ elder-NOM = REL.SG call-IPS-REAL = DP QUOT who[OBL]
And then came the elder who was called um, who…

(91) *Kaino noo iyiaade atik,…*
kaɪn-ɔ$_{CA}$ = [nɔɔ i-í-á = de átí-k^{e}]$_{RC}$
year-INS = REL.SG be-1SG-REAL = DP FILL-DAT
The year in which I was at the, uh…

Likewise, in the relative clause itself, the CA can also have any core or peripheral function. Since the CA is only stated in the MC and not in the RC, it is not relevant to comment on the nominal case in which the CA in an RC may occur. If it is the subject of the RC, the CA is cross-refenced on the verb with subject-agreement pronominals. If it is the object, then it is inferred from the grammatical context. If it is a peripheral argument, it is cross-referenced on the verb with the dummy pronominal {=ˊdɛ}. But regardless of what type of argument the CA is in the RC, it is represented by one of the relative pronouns which are the topic of the next section, §9.8.2.

The following three examples show the CA in relative clauses functioning as subject, object, and peripheral argument, respectively. The CA in (92), *ámá-* 'person', acts as the subject of the verb *iwák-* 'holler' in the MC, while in the RC, it is the agent of the causativized verb *tsídz-it-ét-* 'flush out':

(92) *Ama na tsamu tsidziteta inoa iwakuk.*
[ám-á =[na tsídz-it-et-a ínó-a]$_{RC}$ iwák-ú-k^{o}]$_{MC}$
person-NOM = REL.SG carry-CAUS-VEN-REAL animal-ACC holler-3SG-SEQ
The person who flushes out an animal hollers an alarm.

By contrast, the CA in (93) is a core argument marked with the dative case in the main clause (*dakú-é*) but the object of the transitive verb *kam-ʊkɔt-* 'take hold of' in the relative clause. The non-CA agent of the RC, *buɗámóniicéá*, takes the accusative case as would any core argument:

(93) *…dakwee sina Buɗamoniicea kamuƙota na.*
dakú-é = [sɪna buɗám-óni-icé-á kam-ʊƙɔt-a]$_{RC}$ = na
stick-DAT = PST2.REL.SG black-INF-AGT.PL-ACC hold-COMP-REAL = DEM.SG
[Beware of] this stick that Africans have taken hold of (i.e. guns).

Lastly, the noun phrase in (94), introduced by the preposition *kóteré* 'because of', marks the CA *kaɱí-* 'year' as peripheral argument in the oblique case. In the relative clause, this CA is would also be a peripheral

argument but one marked with the instrumental case (since it is a time concept). Because of that, its absence in the relative clause is marked with the dummy pronoun on the transitive verb *kʊp-ʊkɔt-* 'burn up':

(94) *Kotere kaini noo fetia kupukotee edîk.*
kóteré kaɪnɪ = [nɔɔ fetí-á kʊp-ʊkɔt-é = ɛ edí-k^{a}]$_{RC}$
because year[OBL] = REL.SG sun-ACC burn-COMP-REAL = DP grain-ACC
Because of the year in which the sun burnt up the grains.

9.8.2 Relative pronouns

Relative clauses in Ik can be recognized by three criteria: 1) the intonation contour in which the MC and RC are treated as one sentence prosodically, 2) the presence of relative pronouns at the beginning of the RC, and 3) the non-canonical constituent order within the RC. The particles introducing relative clauses are treated here as relative 'pronouns' instead of 'markers' since they are not invariable and do communicate some information, namely the grammatical number of the common argument and the tense of the relative clause. These Ik relative pronouns are already discussed in §5.6 but warrant further mention here as well. The table below presents the relative pronouns according to number and tense:

(95) *Ik relative pronouns*

	Singular	Plural
NON-PAST	= na	= ni
PST1	= náa	= níi
PST2	= sɪna	= sini
PST3	= nɔɔ	= nuu

The relative pronouns are analyzed as enclitics because they form a phonological word with the preceding noun (evidenced by the post-lexical vowel harmony they participate in). And based on the forms in (95), it is evident that the Ik relative pronouns are closely related to the temporal

nominal demonstratives (see §8.2.2). Quite so, they are identical in form, the only difference being that since relative pronouns never appear clause-finally, they consequently do not have final forms. Like the demonstratives they originate from, the relative pronouns communicate number and tense.

For example, in (96) below, the relative pronoun *=na* conveys two bits of information about the RC construction's common argument *ŋkáḱá-* 'food': 1) It is viewed as singular, and 2) the state predicated of it in the RC is in the present time or in general (gnomic). Likewise, in (97), the relative pronoun *=nuu* communicates about the CA *roɓa-* that 1) it is plural, and 2) the action predicated of it took place in the remote past:

(96) *Mita daŋa nḱaḱa Icee ne efa zuk.*
[mɪt-a dáŋ-á ŋḱáḱá icé-é=[na ɛf-∅]$_{RC}$]$_{MC}$
be-REAL white.ants-NOM food[OBL] Ik-GEN=REL.SG tasty-REAL
White ants are an Ik food that is tasty.

(97) *Atsaa roɓa nuu ḱa.*
[ats-á-á roɓ-a=[nuu ḱa-∅]$_{RC}$]$_{MC}$
come-3SG-PRF people-NOM=REL.PL.PST3 go-REAL
The people who went have come.

9.8.3 Relative clause structure

Relative clauses in Ik always immediately follow the CA in the main clause, regardless of constituents before the main clause or after the relative clause. Normally, the order of constituents in a main clause is VS or VAO, but when the CA is the subject of the main clause, it can be fronted and then followed by the relative clause and the main verb, making the constituent order SV or AVO. This can be seen in (92) above as well as in the following:

(98) *Ama na cea basaurek, isokuk.*
[ám-á = [na cɛ-a basaúré-k^{a}]$_{RC}$ ‖ isók-ú-k^{o}]$_{MC}$
person-NOM = REL.SG kill-REAL eland-ACC go.early-3SG-SEQ
The person who kills an eland goes early (i.e. before others).

The sentence in (98) is a version of (99) below in which the subject has been put into special focus for pragmatic or stylistic reasons. (99) represents the unmarked constituent order for the same proposition.

(99) *Isokuo ama na cea basaurek.*
isók-ú-o ám-á = [na cɛ-a basaúré-k^{a}]
go.early-3SG-SEQ person-NOM = REL.SG kill-REAL eland-ACC
The person who kills an eland goes early.

The constituent order within the relative clauses themselves also departs from that of unmarked main clauses. After the relative pronoun, then comes the subject (if mentioned) and the verb followed by any other overtly mentioned core arguments, peripheral arguments, adverbs, etc., making the RC constituent orders as follows: (rel)(S)V for intransitive clauses and (rel)(A)V(O) for transitive clauses.

Core arguments (A/S/O) can only be overt in an RC if they are not the CA of the whole RC construction. For example, in (100), the CA *tuka-* 'feather' is recapitulated in the RC as *ntsí-* 'it', resulting in an ungrammaticality:

(100) ***ŋabiya noo tukaa na ntsia buɗam.*
**[ŋáb-i-a = noo tuka-a = [na ntsí-á buɗám-∅]$_{RC}$]$_{MC}$
**wear-PLUR-REAL = PST3 feather-ACC = REL.SG it-ACC black-REAL
**He used to wear a black feather (lit. 'a feather which it is black').

Likewise, in (101), the CA *ínó-* 'animals' is recapitulated in the RC as *ńtí-* 'they' with the resulting structure being ungrammatical:

(101) ***Inoa ni Icea ƙaƙiya ntik.*
**ínó-a = [ni icé-á ƙaƙ-i-a ńtí-k^{a}]$_{RC}$
**animals-NOM = REL.PL Ik-ACC hunt-PLUR-REAL they-ACC
**The animals that the Ik hunt them.

Ik relative pronouns are omissable but only in the non-past. In the three past tenses, they are retained because they encode the tense of the RC. This is similar to Turkana where the full form of relative markers are used only in past tenses, a truncated form being used in the non-past (Dimmendaal 1983:308). Further conditions for the omission of Ik relative pronouns include: 1) When the CA in the MC is a demonstrative pronoun (§5.5), 2) when the CA in the MC is the head of a verbless clause, or 3) when the CA in the MC is followed by an anaphoric pronoun. In (102), an RC modifies the demonstrative pronoun *ɗa*; note the absence of a relative pronoun:

(101) *Tabiduo ɗa taba tasapetik.*
táb-idu-o ɗ-a [táb-a tasapetí-k^{a}]$_{RC}$
touch-2SG-SEQ one-NOM touch-REAL initiation-ACC
And (you) touch upon those (i.e. stories) that are about initiation.

In the next example, the MC is a verbless clause whose head is a noun marked with the copulative case. This noun is functioning as the CA. Here again, no relative pronoun is present:

(102) *Ntsuo atsimee awak.*
ntsú-ó [ats-ím-é = e awá-k^{e}]$_{RC}$
it-COP come-1PL.EXC-REAL = DP home-DAT
It's (the hour) (when) we come home.

In this third and final example, the singular anaphoric pronoun =ˈ*déé* comes between the CA and the RC, with no intervening relative pronoun:

(103) *ama dee bara*
ám-á = ˈdéé [bar-a]$_{RC}$
person-NOM = ANPH.SG rich-REAL
that rich person (lit. 'that person (who is) rich')

The number of verb-form types allowed in an Ik relative clause is restricted. For positive polarity, only realis forms are allowed. For negative polarity, only irrealis forms are allowed. Other forms, like sequential, simultaneous, and optative, cannot function as the predicate of a relative clause.

Relative causes can be negated. To negate one, the sequential negator *moo* (and allomorph *noo*) is used just after the relative pronoun. If the subject of the relative clause is overt, then it follows the negator. Being negated, the main verb of the RC then appears in its negative (irrealis) form, as in:

(104) *jejeika dii nuu moo epanid*
jéje-ik-a = ˈdíí = [nu-u mo-o ep-aní = dᵋ]$_{RC}$
skins-PL-NOM = ANPH.PL = REL.PL not-SEQ sleep-IPS = DP
those sleepings skins that were not slept on

(105) *Iya kona iresie na moo ɲotoa ɦyeat.*
i-a kɔn-a írési-e = [na mo-o ɲɔtɔ́-á ɦye-átⁱ]$_{RC}$
be-REAL one ceremony-GEN = REL.SG not-SEQ men-NOM know-3PL
There is one ceremony that men do not know.

9.9 Adverbial clauses

Besides relative clauses that modify noun phrases, several other types of subordinate clause are used adverbially to modify other, main clauses. These adverbial clauses include the following nine types: temporal, simultaneous, manner, purpose, result, reason, conditional, hypothetical, and concessive clauses. The following sections discuss each type briefly.

9.9.1 Temporal

Main clauses in Ik may be modified by a subordinate temporal clause preceding or following it. Such clauses locate the proposition of the main clause in time, which is reflected grammatically in tense. Past and non-past tense are encoded by tensed subordinating conjunctions. Non-past tense is encoded by the conjunction *nέέ* and optionally with non-past adverbs.

Ik temporal clauses have the same structure as relative clauses and thus seem to be an adaptation from them. As a whole, the temporal clause stands in place of what would be a specific time word like 'last year', 'today', or 'next week', all of which would be peripheral arguments marked with the instrumental case. So temporal clauses have the structure of 'the [X time unit] in which…', better translated as 'when…'. Because time concepts are peripheral arguments in Ik, their absence leaves a trace on the verb in the form of the dummy pronoun enclitic {=ˊdɛ}. The verb in a temporal clause is a realis form with the dummy pronoun which indicates that the relative pronoun *qua* subordinating conjunction stands for a time concept.

(106) *Ik temporal subordinating conjunctions*

		Past	Past perfect
Non-past	CONJ	(nέέ)	
Recent past	CONJ(.PST1)	náa	nanáa
Removed past	CONJ(.PST2)	sɪna	nábee
Remote past	CONJ(.PST3)	noo	nanoo

In first example sentence below, the removed past temporal conjunction *sɪna* introduces the temporal clause modifying its following MC:

(107) *Sina enuƙotiade ntsia, ŋaxetuk.*

[[sɪna	en-uƙot-í-a=de	ntsí-á]$_{TEMP}$	ŋáʃ-ét-ʊ-kˀ]$_{MAIN}$
CONJ.PST2	see-AND-1SG-REAL=DP	s/he-ACC	startle-INCH-3SG-SEQ

When I saw her (yesterday), she got startled.

In the second example below, the remote past-perfect temporal conjunction *nanoo* introduces the temporal subordinate clause:

(108) *Nanoo ɲamatsarikaa kainie dee itsyaketatee,*
[[nanoo ɲámátsar-ɪka-a kaɪní-ɛ́=ˈdɛ́ɛ́ itsyak-et-át-e=e]$_{TEMP}$
CONJ.PST3.PRF sign-PL-ACC year-GEN=ANPH begin-INCH-REAL=DP

ts'eyoo inw.
ts'e-i-o ínw-^{a}]$_{MAIN}$
die[PL]-3SG-SEQ animals-NOM
When signs of that year had (already) begun, animals died.

Another type of temporal subordinate clause is introduced with the conjunction *nɛ́ɛ́* and follows the main clause. This type of temporal clause has an extra nuance of conditionality, making its meaning 'if/when' rather than strictly 'when'. Examples include the following:

(109) *Mayuo ƙwazikaa ngwee*
[ma-i-o ƙwáz-ika-a ŋgó-é
give-3SG-SEQ clothing-PL-ACC we.EXC-DAT

nee tsamu ŋabuƙotanee teregik.
[nɛ́ɛ́ tsamʊ ŋáb-ʊƙɔt-an-é=e terégi-k^{a}]$_{TEMP}$]$_{MAIN}$
CONJ ADV finish-COMP-IPS-REAL=DP work-ACC
And he gave us clothing, just if/when work was finished.

(110) *...nda koto ima nee fara zeiƙotad.*
ńda=koto ima [nɛ́ɛ́ fara ze-iƙot-á=d^{e}]$_{TEMP}$
and=then child[OBL] CONJ FUT3 big-COMP-REAL=DP
...and then the child, when it gets big in the future.

9.9.2 Simultaneous

A main clause can also be modified by a preposed simultaneous subordinate clause. The predicate of a simultaneous clause is a verb in the simultaneous aspect, marked by the suffix {-kɛ}. Such clauses are introduced with the conjunction *na=* (if in a narrative) or *nάά* (if in a hypothetical/conditional sense). Some examples include the following:

(111) *Na ŋabuƙotie, zikini ntsia deikao.*
[na=ŋáb-ʊƙɔt-ɪ-ɛ]$_{SIML}$ zík-ínɪ ntsí-á dɛ-ɪka-ᵊ
CONJ=finish-COMP-3SG-SIML tie-SEQ s/he-ACC leg-PL-ABL
When he finished, they tied him up by the legs.

(112) *Naa enanie ts'iƙak, gonuo ama dee.*
[náa en-an-í-é ts'ɪƙá-kᵃ]$_{SIML}$ gon-u-o ám-á=ˈdéé
CONJ see-IPS-3SG-SIML bee-ACC look-3SG-SEQ person-NOM=ANPH
When bees are seen, that guy takes a look.

Subordinate clauses with non-finite verbs in the simultaneous aspect are also attested after the matrix clause. In this position, they function in one of the language's two clause-chaining strategies (see §10.2.2). Clause-chaining is a syntactic and discursive operation. At the pragmatic level, chained simultaneous clauses can be construed as having a 'simultaneous' or 'manner' role in modifying the matrix clause. Choosing between the two is really a matter of pragmatic interpretation. Chained simultaneous clauses with a 'manner' interpretation are treated in the next section. Some examples of ones with a 'simultaneous' interpretation are given here below.

But first note that if the subject of a post-posed simultaneous clause is an overt argument in the main clause, it must take whatever case the main clause requires. This differs from the usual situation in subordinate clauses whereby the preverbal subject typically is in the accusative case. In the

following two examples, the subjects of both simultaneous clauses are in the nominative case because the main clause verbs are not 3-person:

(113) *Ogoimaa korobaikwa ts'eatik.*
ógo-ima-a kɔrɔ́b-a-ikw-a [ts'e-áti-kᵉ]$_{SIML}$
leave-1PL.EXC-SEQ calf-SING-PL-NOM die[PL]-3PL-SIML
And we left the calves dying.

(114) *Enuƙotia bee bia cemidie tokob.*
en-uƙot-í-á = bee bi-a [cɛm-ídɪ-ɛ tɔkɔb-ᵊ]$_{SIML}$
see-AND-1SG-REAL = PST2 you.SG-NOM fight-2SG-SIML farming-INS
I saw you farming yesterday.

9.9.3 Manner

'Manner' adverbial clauses add some detail about the way the state or activity expressed by the main clause is actualized. Ik employs two types of manner clauses: 1) A post-posed clause with a simultaneous verb form, and 2) a clause introduced by the morphologically complex conjunction *naítá* 'since, how' followed by a realis verb with the dummy pronoun {=ˊdɛ}.

The following two illustrate the first type of manner clause. In (115), the addressee of the imperative is directed to eat some things in such a manner that they be one-by-one. Then in (116), the person being spoken of is described as going somewhere in a limping manner. Note that while both subordinate clauses indicate an action simultaneous to that in the matrix clause, an overall 'manner' interpretation seems most appropriate:

(115) *Nƙe koniatik.*
ŋƙ-e [kón-í-áti-kᵉ]$_{MANNER}$
eat-IMP.SG one-PLUR-3PL-SIML
Eat (them, they being) one-by-one.

(116) *Kaa naa itsoɗik.*
ƙa-a = náa [itsóɗ-í-k^{e}]$_{\text{MANNER}}$
go-REAL = PST1 limp-3SG-SIML
He went limping.

In many instances what appear to be adverbs in Ik are actually post-matrix-clause simultaneous clauses with an impersonal 3SG subject. For example, in (117), the subject of the simultaneous verb *maráŋík^{e}* is neither the person giving nor receiving the command. The impersonal 3SG subject instead expresses the favorable circumstances desired in the command to 'hold well'. Similarly, the subject of the simultaneous verb *hábie* in (118) cannot also be the subject of matrix clause. It could, however, be either the adjunct *terégo* or an impersonal 3SG subject. Either the whole process of getting to work is 'very hot', or the work itself is 'hot':

(117) *Tire maraŋik!*
tír-é [maráŋ-í-k^{e}]$_{\text{MANNER}}$
hold-IMP.SG good-3SG-SIML
Hold it (it being) well!

(118) *Cemetataa terego habie pun!*
cɛm-ɛt-át-a-a terég-o [háb-i-e pʊn]$_{\text{MANNER}}$
fight-INCH-3PL-REAL-PRF work-INS hot-3SG-SIML IDEO
They have gotten busy working really hard (lit. 'hot')!

The second type of manner clause more precisely conveys the notion of 'manner'. It does this through the use of the conjunction *naítá* 'how, as', followed by verb bearing the dummy pronoun clitic {=ˊdɛ} which represents a missing argument within the subordinate clause.

In the first example (119), the speaker intends to do something in the same manner as the addressee. Then in (120), the addressee is encouraged to wait and see the manner in which some issues will become resolved:

(119) *Itiyeesia naita bia itiyaidad.*
[itíyé-és-í-a [naítá bi-a itíyá-íd-a = d^{e}]$_{MANNER}$
do-INT-1SG-REAL how you.SG-ACC do-2SG-REAL = DP
I will do (it) like you do.

(120) *Ene naita menaa dii ikasiimetesatad.*
en-e [naítá mɛná-á = ʻdíí ikásí-im-et-és-át-a = d^{e}]$_{MANNER}$
see.IMP.SG how issues-ACC = ANPH do-MID-INCH-INT-3PL-REAL = DP
See how these issues will turn out.

9.9.4 Purpose

The notion of purpose is expressed primarily through nominalized verbs acting as complements (see §9.12.2). However, two other types of subordinate clause can also convey purpose: 1) one with a sequential verb, or 2) one introduced by the Teso-Turkana conjunction *(í)koteré*, which in this instance means something akin to 'so that…'. Moreover, these two types can be combined so that a sequential clause is introduced by *(í)koteré*.

In the first example below, the verb is marked grammatically only with the sequential impersonal passive suffix. But semantically, it implies that when the thing in question becomes a certain way, it is for a certain purpose.

(121) *Irese koto nti?*
[ir-ese = kótó ŋtí]$_{PURPOSE}$
be-SPS = then how
So that it's like how?

In this second example, the conjunction *(í)koteré* introduces a third person negative imperative whose expressed purpose is that people do not laugh:

(122) *Taa kotere maa roɓa fek.*
taa [kóteré má-á roɓ-a fek-^{a}]$_{\text{PURPOSE}}$
QUOT so.that not-REAL people-NOM laugh-REAL
(That) so that people don't laugh.

The last example shows *(í)koteré* introducing a purposive sequential clause:

(123) *Kotere ikautoo cikam.*
[kóteré ɪkáút-ɔ-ɔ cɪkám-∅]$_{\text{PURPOSE}}$
so.that cool-3SG-SEQ women-NOM
So that the women cool it (i.e. food).

9.9.5 Result

Result clauses are formed with sequential verbs and the dummy pronoun {=ˊdɛ}. While the sequential aspect inherently indicates the logical and/or temporal follow-up of the preceding main clause, the dummy pronoun further emphasizes that something in the main clause yielded a particular result. It does this by marking a syntactically displaced peripheral argument that is located in the preceding clause. In the two examples below, the main clause contains the means or instrument resulting in the circumstances expressed by the second clause. For (124), money results in one being able to buy clothing; for (125), eating honey results in one getting satiated:

(124) *Maraŋa ɟa kaudz, iryameidukwee ƙwazak.*
maráŋ-á=ɟa kaúdz-∅ [iryám-é-ídu-kó=e ƙwaza-k^{e}]$_{\text{RESULT}}$
good-REAL=ADV money-NOM get-VEN-2SG-SEQ=DP clothing-DAT
Money is good, (such that) with it you get clothing.

(125) *Nƙini koto ciaaƙotinii ɟik.*
ŋƙ-ini=koto [cɪ-áá-ƙot-iní=i=ɟɪk]$_{\text{RESULT}}$
eat-SEQ=then sated-DISTR-COMP-SEQ=DP=also
Then they ate (honey), (such that) they also got sated by it.

9.9.6 Reason/Cause

Causal or 'because' clauses in Ik are subordinate clauses introduced with the plural pronominal *dî-* in the ablative case as *dúó*. This pronoun is then followed by either a) a possessive NP (in which case it is not a clause *per se)* or b) a relative clause. Because the common argument (*dúó*) shared between the main clause and relative clause is a peripheral argument in both, the verb in the relative clause is marked with the dummy pronoun. In (79) below, *dúó* is followed by the possessive NP *ńtí* , meaning 'because of them'. This is not a causal clause but rather a causal peripheral argument:

(126) *Gaana kija na duo nti.*

gaan-a	kíj-á = na	[ɗú-ó	ńtí-∅]$_{\text{PERIPHERAL}}$
bad-REAL	land-NOM = DEM.SG	ones-ABL	they-GEN

This country is bad because of them (lit. 'from those of them).

The structure in (126) is expanded in (127) with a relative clause modifying *dúó* instead of a simple possessive NP:

(127) *Gaana kija na*

[gaan-a	kíj-á = na
bad-REAL	land-NOM = DEM.SG

duo roɓaa saɓunosad.

[ɗú-ó	[roɓa-a	sáɓ-únós-á = d^{e}]$_{\text{REL.}}$]$_{\text{CAUSAL}}$]$_{\text{MAIN}}$
ones-ABL	people-ACC	kill[PL]-RECIP-REAL = DP

This land is bad because people kill each other.

As mentioned in §9.8.2, relative clauses that modify the pronouns *dí* (sg.) and *dî* (pl.) are not introduced by a relative pronoun in non-past tenses. However, if a time/tense specification is desired for the relative clause, one of the tensed relative pronouns or tense particles is used, as in (128):

(128) *Cea ɲeƙa wicea*

[cɛ-a	ɲɛƙ-a	wicé-á
kill-REAL	hunger-NOM	children-ACC

ɗuo nii nƙaƙaa kwatsad.

[ɗú-ó = [<u>nii</u>	ŋƙáƙá-a	kwáts-á = d^e]$_{REL.}$]$_{CAUSAL}$]$_{MAIN}$	
ones-ABL = REL.PL.PST1	food-ACC	small-REAL = DP	

Hunger is hurting the kids because food was little (earlier today).

The underlined plural tensed relative pronoun in (128) shows that the tense of the relative clause is recent past. Causal clauses can just as well be cast in a future tense, as in (129). Note the intentional suffix {-*ɛ́s*-} on the main and relative-clause verbs, as well as the future tense *fara* just after *ɗúó*:

(129) *Ceesa ɲeƙa wicea*

[cɛ-ɛs-á	ɲɛƙ-a	wicé-á
kill-INT-REAL	hunger-NOM	children-ACC

[ɗú-ó	[fara	ŋƙáƙá-a	kwáts-és-á = d^e]$_{REL.}$]$_{CAUSAL}$]$_{MAIN}$	
ones-ABL	FUT3	food-ACC	small-INT-REAL = DP	

Hunger will hurt the kids because food will be little.

Semantically, what multiple things does the plural pronominal *ɗúó* substitute for in these causal clause constructions? It is not entirely clear, but it could be along the lines of words, thoughts, or actions on the part of the animate or inanimate entities from which the causality is emanating.

The pronominal phrases *ki = ɗúó = nii* or *ki = ɗúó = n* (see §5.5) can also be found at the beginning of main clauses instead of as a peripheral argument at the end. In this usage, the phrases have more the meaning of ‘because of that’, or more literally, ‘from those words’ or ‘from those actions’.

9.9.7 Conditional

Conditional sentences consist of a subordinate conditional clause ('protasis') and a main clause ('apodosis'). Three types of conditional clause exist in Ik: 1) one introduced by the subordinating conjunction *na´*= 'if' followed by a sequential verb, 2) one introduced by the conjunctive phrase *na=mɪsɪ* 'if whether' followed by a realis verb, and 3) one introduced by *dɛmʊsʊ* 'unless/until' followed by either a realis or a subjunctive verb.

The first type of conditional clause always comes before the main clause and is first of all recognized by the conjunctive proclitic *na´*= 'if'. If the subject of the conditional clause is made explicit, it takes the nominative case. The verb in the conditional clause is in the sequential aspect:

(130) *Na atsiduk, maiduo ɲcik.*

[[ná=áts-idu-k^{o}]$_{COND}$	ma-idu-o	ɲci-k^{e}]$_{MAIN}$
CONJ=come-2SG-SEQ	give-2SG-SEQ	I-DAT

If you come, give (it) to me.

(131) *Na oǰa iyuo nebuk, iyee bats'.*

[[na=ɔ́ǰ-á	i-u-o	nébu-k^{e}]$_{COND}$i-é=e	báts'-^{a}]$_{MAIN}$
CONJ=sore-NOM	be-3SG-SEQ	body-DAT	be-REAL=DP pus-NOM

If a sore is on the body, there is pus in it.

With the conjunction *na´*=, the type of conditional clauses shown above have a present, gnomic, or even future tense. But they may also be put in the past tenses with the addition of the past tense particles, as in:

(132) *Past-tense conditional clauses*

na=ƙáyuk^{o},…	'If she goes,…'
na=náá ƙayuk^{o},…	'If she had gone (earlier today),…'
ná=bee ƙayuk^{o},…	'If she had gone (yesterday),…'
na=noo ƙáyuk^{o},…	'If she had gone (a while ago)…'

Conditional clauses may be negated through the use of the sequential negating verb *moo/noo* following the conjunction *na´=*. And whereas affirmative conditional clauses contain verbs in the sequential aspect, negated conditional clauses contain the bare negative (irrealis) verb form:

(133) *Naa noo ƙai, iryametima ŋitsanik.*

[na=nó-ó	ƙa-^{i}]$_{COND}$	iryám-ét-ima		ŋítsaní-k^{ɛ}
CONJ=not-SEQ	go-3SG[IRR]	get-VEN-1PL.EXC[SEQ]		problems-DAT

If he doesn't go, we'll get into trouble.

The second type of conditional clause is introduced by the conjunctive phrase *na=mısı*, a combinaton of *na´=* 'if' and *mísı* 'whether'. This type of conditional clause may precede or follow the matrix clause. Its verb is in the realis modality, while that of the matrix clause depends on the discourse context but is often in the sequential apsect as it is below:

(134) *Na misi tsidzuƙota ti, duƙotuo ti.*

[na=mısı	tsídz-uƙot-a	tí]$_{COND}$	d-uƙot-u-o		tí
CONJ=whether	carry-AND-REAL	ADV	take-AND-3SG-SEQ		ADV

If he rushes out this way, he'll then take it this way.

(135) *Ƙwaatetiaa bita na misi tudit,*

ƙwaat-et-í-a-a	bit-a	[na=mısı	tud-ít-^{a}
bear-INCH-1SG-PRF	you.PL-NOM	CONJ=whether	five-2PL-REAL

na misi leɓetsit, na misi aɗit.

na=mısı	leɓets-ít-^{a}	na=mısı	aɗ-ít-^{a}]$_{COND}$
CONJ=whether	two-2PL-REAL	CONJ=whether	three-2PL-REAL

I've born all of you, whether you are five, two, or three.

The third type of conditional clause is introduced by the conjunction *ɗɛmʊsʊ* 'unless, until'. Instead of a sequential verb, this conjunction takes a verb in either in the realis modality or subjunctive mood. Because *ɗɛmʊsʊ* also can

mean ‘before’, context must determine how it is interpreted. In the next two sentences, it is interpreted as having a temporal-conditional sense:

(136) *Biraa mena nesibetii ɗemusu toida ncik.*
bɪra-a mɛn-a nesíb-et-í^{i} [ɗɛmʊsʊ tó-id-a ɲci-k^{e}]$_{COND}$
lack-REAL issues-NOM hear-INCH-1SG unless tell-2SG-REAL I-DAT
There is nothing I can hear unless you tell me.

(137) *Nta ƙoii ɗemusu atsidi nda nc.*
ńt-á ƙo-íí [ɗɛmʊsʊ ats-ídi ńda ɲc^{i}]$_{COND}$
not-REAL go-1SG unless come-2SG with I[OBL]
I’m not going unless you come with me.

9.9.8 Hypothetical

Like conditional clauses, hypothetical subordinate clauses are also introduced by the subordinating conjunction *na´=* and contain sequential verb forms. But in addition to this, they involve the following tensed hypothetical auxiliary particles between *na´=* and whatever follows:

(138) *Hypothetical auxiliaries*

	Non-final	Final
PST1	ƙá-naa	ƙá=nak^{a}
PST2	ƙá=samu	ƙá=sam
PST3	ƙá=noo	ƙá=nok^{o}

In simple, independent hypothetical clauses, the hypothetical auxiliaries occur once in the second position of the clause, for example:

(139) *Atsia ƙanaa baratso nak.*
ats-í-a ƙa=naa barats-o=nák^{a}.
come-1SG-REAL HYPO-PST1 morning-INS=DEM.SG.PST1
I would have come this morning.

But in complex hypothetical clauses—the kind involving a subordinate clause—the hypothetical auxiliaries in (138) first introduce the protasis and are then repeated at the end of the main clause, or apodosis:

(140) *Na ƙanaa ɲarema birayuk,*
[[na = ƙá = naa ɲárɛ́m-a bɪra-ʊ-kᵊ]$_{HYPO}$
CONJ = HYPO = PST1 insecurity-NOM not.be-3SG-SEQ

ƙaiisina ƙanak.
ƙa-í-ísin-a ƙa = nakᵃ]$_{MAIN}$
go-PLUR-1PL.INC-REAL HYPO = PST1
If insecurity were not there, we would go regularly.

9.9.9 Concessive

Concessive, or 'even though' adverbial clauses consist of the particles *áta* (from Swahili *hata* 'even') or *toni* 'even', plus a simultaneous clause, as in:

(141) *Toni ƒiyetuƙodik!*
[toni ƒiyɛt-ʊƙɔ́-ídɪ-kᵋ]$_{CONCESSIVE}$
even fierce-COMP-2SG-SIML
Even though you grow fierce!

(142) *Ata ts'iƙaa ɟoliaakatie, efesuƙot.*
[áta ts'ɪƙá-á ɟol-i-aak-áti-e]$_{CONCESSIVE}$ ɛf-és-úƙɔt-ᵃ
even bees-ACC tasteless-PLUR-DISTR-3PL-SIML tasty-INT-COMP-REAL
Even if the honey (lit. 'bees') is tasteless, it will become tasty.

9.10 Verbless clauses

Changing gears now from subordinate back to main clauses: Two kinds of main clause are verbless: 1) the verbless copulative clause (§9.10.1) and 2) the verbless dative/genitive clause (§9.10.2). These are described next.

9.10.1 Verbless copulative clause

Verbless copulative clauses—covered in this section—are 'verbless' in the sense that they put a nominal marked with the copulative case in the predicate slot. This construction differs from the verbless dative/genitive clauses which are 'verbless' in the sense that they exhibit no predicate slot at all in the surface structure. In verbless copulative clauses, the predicative nominal can consist of a noun, pronoun, or nominalized verb. What allows a noun phrase to function as predicate is none other than the copulative case (described in detail in §6.3.8). In the copulative case, the copulative suffix {-kɔ} affixes to the underlying form of the nominal stem:

(143) *Copulative predicates*

Lexical			Copulative	
cekí-	'woman'	→	cekú-kº	'It's a woman'
ntsí-	's/he/it'	→	ntsú-kº	'It's she.'
dód-oni-	'to hurt'	→	dód-onu-kº	'It's pain.'

The copulative case enables a verbless grammatical alternative to the copula of identity *mɪt-*. Though *mɪt-* expresses both identity and possession, the copulative case expresses strictly identity. Serzisko further qualifies the meaning of *mɪt-* as one of ascription/description' compared to that of the copulative which expresses 'specification' (1992:55ff).

Just as *mɪt-* takes a copula subject (CS) and copula complement (CC), verbless clauses with nominal heads take a verbless clause subject (VCS) and verbless clause complement (VCC; Dixon 2010:160). Ik being an eminently argument-dropping language, the VCS is often omitted, leaving only the VCC in the copulative case. When the VCS is present, it takes the nominative case as would an S or A subject under most other conditions. In the following examples, the first clause represents a standard copular construction, while the second illustrates the verbless copula clause:

(144) *Mitia nka ɟakam.* *J'akamoo nk.*

mɪt-í-á	ŋ̀k-a$_{CS}$	ɟákám$_{CC}$	ɟákámó-ó$_{VCC}$	ŋ̀k-^{a}$_{VCS}$
be-1SG-REAL	I-NOM	elder[OBL]	elder-COP	I-NOM
I am an elder.			An elder am I.	

(145) *Mita ata ŋok.* *Ŋokuk.*

mɪt-a	át-á$_{CS}$	ŋók^{i}$_{CC}$	ŋókú-k^{o}$_{VCC}$
be-REAL	FILL-NOM	dog[OBL]	dog-COP
The thing is a dog.			A dog the thing is.

Though the propositional meaning of the copular and verbless copulative pairs in these examples is the same, fronting the complement argument does have the effect of bringing it into greater focus. So pragmatically and stylistically, a speaker may choose one mode of expression over the other.

Given that the head of verbless clauses is a noun phrase, there must be limitations on its allowed verblike characteristics. For example, a verbless clause cannot be negated as a verbed clause can be. Instead, the negating copula of identity *bení-* must be used. Also, besides the copulative case ending {-kɔ}, no other verbal suffix can be put on the head of a verbless clause. Nonetheless, verbless clauses do exhibit some verblike qualities. For example, they can be tensed (146) and modified by adverbs (147):

(146) *Buo naa?* *Ncuo nak.*

bu-o = náa	ɲ́cu-o = nák^{a}
you.SG-COP = PST1	I-COP = PST1
Was it you (earlier today)?	It was I (earlier today).

(147) *Amoo tsabo.* *Ntsuo ts'oo.*

ámó-o	tsábo	ntsú-ó	ts'ɔɔ
person-COP	apparently	s/he/it-COP	probably
It's a person apparently.		It's him probably.	

9.10.2 Verbless dative/genitive clause

A second type of verbless clause communicates possession without the benefit of an actual verb in the surface structure. This construction has also been termed 'predicative possessive' (Heine & König 1996:50). It is called 'dative/genitive' here because it is not known which case suffix it involves. That is, in their non-final forms, the dative suffix {-ɛ} and genitive suffix {-ɛ} are identical. And since verbless clauses of this type have to do with possession, either case is theoretically admissible (see discussion in §9.2).

Verbless dative/genitive clauses have a different underlying structure than verbless copulative clauses. Whereas in the latter type, a nominal element functions as the predicate, verbless dative/genitive clauses manifest no overt predicate at all. So rather than being 'verbless' in the sense that something other than a verb fills the predicate slot, they are 'verbless' in the sense that there is no predicate on the surface. In the following examples, nouns marked with {-ɛ} come clause-initially. Either a dative or genitive intepretation of {-ɛ} is possible because both can encode possession:

(148) *Ncie ŋoka na.*
ɲ́ci-e ŋók-á = na
I-DAT/GEN dog-NOM = DEM.SG
This is my dog.

(149) *Roɓee kuruɓaa ni.*
roɓ-e kúrúɓá-a = ni
people-DAT/GEN things-NOM = DEM.PL
These are people's things.

Depending on the analysis of the case marker {-ɛ}, *ɲ́cie* in (148) could mean 'to me' or 'of me', and *roɓee* in (149) could mean 'to people' or 'of people'.

9.11 Focus and topic constructions

Ik uses three syntactic operations to alter the pragmatic status of a clausal argument. To bring a constituent NP into greater focus, a cleft construction is used. To highlight the topic of a particular sentence, a topical argument may bel left-dislocated or 'preposed' before the main clause. And a discourse topic can also be emphasized by simply 'apposing' a noun phrase to a clause. Left-dislocation and apposition both emphasize the topic but differ in this regard: The left-dislocated NP is still also an argument in the main clause, while an apposed NP is not an argument in the main clause.

9.11.1 Cleft construction

Ik cleft constructions consist of a clefted clausal argument in the copulative case followed by the original main clause now in a subordinated form. As indicated by the copulative case marking, the Ik cleft construction takes the form of a verbless copula clause (§9.10.1) in which the copula complement (CC) is the clefted argument and the copula subject (CS) is the original, now subordinate main clause. It can be formulated as follows:

(150) *Ik cleft construction*: $[\text{NP-COP}]_{\text{CC}}$ $[\text{SUBORD}]_{\text{CS}}$

The following pair of sentences exemplify the Ik cleft construction. The first example is a pragmatically unmarked basic clause with the canonical word order for transitive clauses (VAO). In the second example, the direct object of the clause, *mɛsɛ-* 'beer', gets clefted and put in the copulative case. The original main verb, *bɛ́dîm*, then assumes its role as the predicate in a subordinate clause acting as the subject of the verbless clause *mɛsɔɔ*:

(151) *Bedîma mes.*

bɛ́d-ím-a_{VA}	mɛs-$\varnothing_{O}$
want-1PL.EXC-REAL	beer-NOM
We want beer.	

(152) *Mesoo bedîm.*
mɛsɔ-ɔ$_{CC}$ [bɛ́ɗ-ím-∅$_{VA}$ ∅$_{O}$]$_{CS}$
beer-COP want-1PL.EXC-REAL
It's beer (that) we want.

That the cleft construction involves a subordinate clause is shown by the case marking of any remaining overt arguments in the original clause. For example, the subject of the verb *bédîm* in (153) is in the accusative case, the case all non-sequential subordinate clause subjects are marked with in Ik:

(153) *Mesoo ngwaa bedîm.*
mɛsɔ-ɔ$_{CC}$ [ŋgó-á bɛ́ɗ-ím-∅]$_{CS}$
beer-COP we.EXC-ACC want-1PL.EXC-REAL
It's beer (that) *we* want.

The question remains, however, whether the subordinate clause in (153) is a relative clause. In the Kuliak language So, clefted interrogative words are said to be modified by relative clauses (Carlin 1993:135). But for Ik, a relative clause interpretation for sentences like the one in (153) is ruled out on the basis that any tense markers immediately follow the clefted argument, as in (154). Relative clauses, by contrast, are tensed by the relative pronouns themselves, as in (155):

(154) *Mesoo bee bedîm.*
mɛsɔ́-ɔ́$_{CC}$ = bɛɛ [bɛ́ɗ-ím-∅]$_{CS}$
beer-COP = PST2 want-1PL.EXC-REAL
It was beer (that) we wanted (yesterday).

(155) *Mesoo sini bedîm.*
mɛso-o$_{CC}$ = [sini bɛ́ɗ-ím-∅]$_{CS}$
beer-COP = PST2.REL.PL want-1PL.EXC-REAL
a) It is the beer that we wanted (yesterday).
b) **It's beer (that) we wanted (yesterday).

Cleft constructions are very common in Ik discourse, giving it a particular structural texture characteristic of the language as a whole, for example:

(156) *Woo noo nƙian.*
wɔ-ɔ$_{CC}$ = nɔɔ [ŋƙ-í-án-∅]$_{CS}$
greens-COP = PST3 eat-PLUR-IPS-REAL
It was greens (that were) eaten.

(157) *Ntsuo naa atsiaad.*
ntsú-ó$_{CC}$ = naa [ats-í-á = d^{e}]$_{CS}$
it-COP = PST1 come-1SG-REAL = DP
It's why I came.

(158) *Ts'edoo koto kaitatee nƙaƙak.*
ts'ɛ́ᶩdɔ́-ɔ́$_{CC}$ = kɔtɔ [kait-át-e = e ŋƙáƙá-k^{a}]$_{CS}$
there-COP = then taste-3PL-REAL = DP food-ACC
So there is (where) they taste food.

(159) *Pakoicoo bee itsuŋƙota awikak.*
pakó-íce-o$_{CC}$ = bee [ɪtsúŋ́-ƙɔt-a aw-ika-k^{a}]$_{CS}$
cave-AGT.PL-COP = PST2 burn-COMP-3PL-REAL home-PL-ACC
It was the Turkana who burned down the homes.

9.11.2 Left-dislocation

Another way the language alters the pragmatic status of an argument is to left-dislocate it before the main clause. Doing so highlights the topicality of that argument. Ik left-dislocation can be formulated as follows, where S stands for the main clause and S´ stands for the sentence encompassing the main clause and preposed argument (notation from Payne 1997:274):

(160) *Ik left-dislocation*: [NP-NOM S]$_{S'}$

The left-dislocated constituent may be a simple noun or a complex NP with modifiers like relative clauses. Unlike clefted constituents which take the copulative case, left-dislocated arguments take the nominative case. Besides being left-dislocated, the highlighted argument is set apart from the main clause by a clear pause. It may also receive solicitive intonation which consists of a rising boundary tone at the end of the NP (see §3.3.5).

In the first example below, the main clause subject *roɓa* 'people', along with its modifying relative clause, gets dislocated leftward. As predicted typologically (Payne 1997:275), the preposed agent NP is recapitulated in the main clause by means of the 3PL subject-agreement suffix {-át(i)-}:

(161) *Roɓa ni uga ɲogolidîaa, dzigwata atik.*
roɓ-a = ni úg-a ɲɔ́gɔ́lɪdɪ-aá ‖ dzígw-at-a átí-k[a]
people-NOM = REL.PL dig-REAL gold-ACC buy-3PL-REAL FILL-ACC
People who dig for gold, they buy um…

In the next example, it is the object of the main clause (*komos*) that is left-dislocated. It is further highlighted by a substantial pause, which can be discerned in the example by the presence of final form (no final vowel). Note, however, that the left-dislocated object is not recapitulated in the main clause. This is not surprising for two reasons: 1) Direct objects are not cross-referenced on verbs like subjects are, and 2) Ik tends to drop subjects and objects in all types of clauses (where they are understood contextually).

(162) *Komos, duƙesuƙoida ceŋetiaamak.*
komos-∅ ‖ duƙ-és-úƙó-íd-a ceŋetí-áma-k[e]
hindquarter-NOM take-INT-AND-2SG-REAL inlaw-AGT.SG-DAT
The hindquarter, you will take (it) to your in-law.

Peripheral arguments can also be left-dislocated. In this last example below, the preposed argument *cua* 'water' has the semantic role of 'means' in the main clause. It is recognized as topic here by the nominative case and

solicitive intonation consisting of a low-rising boundary tone. And it is recapitulated in the main clause through the dummy pronoun {-ˊdɛ} which indicates that a non-core (instrumental) argument has been relocated:

(163) *Cua dii nii, taa ntsuo epesuƙotanad.*
cu-a = ˈdíí = nií ‖ taa ntsú-ó ep-és-úƙot-an-á = dᵉ
water-NOM = ANPH = DEM.PL QUOT it-COP sleep-INT-COMP-IPS-REAL = DP
That water there, okay, that's what people will go to sleep on (i.e. having drunk it to satisfy their thirst).

9.11.3 Apposition

Finally, an NP can simply be apposed to a following clause in which it has no syntactic or semantic role, though a pragmatic relationship is implied. This type of pragmatic operation can be formulated as follows, where S stands for the main clause (notation borrowed from Payne 1997:274):

(164) *Ik apposition*: [NP] [S]

Apposed noun phrases are also separated from the following clause by a pause and often solicitive intonation. And the head of an apposed NP must take the nominative case. But unlike left-dislocated arguments, apposed NPs are not arguments in the clauses that follow them. As such, they are not recapitulated in those clauses in any way. For example, in the next example, the apposed NP simply expresses the reason for the proposition that follows. It does not figure into the main clause either syntactically or semantically:

(165) *Koroɓaa atsiadee, tawanaa ɲeɗekea imak.*
[kórɔ́ɓá-a [ats-í-á = deé]$_{SUBORD}$]$_{NP}$[tawán-á-a ɲɛɗɛkɛ-a imá-kᵃ]$_{S}$
thing-NOM come-1SG-REAL = DP harm-REAL-PRF illness-NOM child-ACC
What I came for, okay…Illness is harming (my) child.

9.12 Questions

Questions in Ik may be polar (yes/no) questions or content questions. Polar questions add an interrogative overlay to a sentence otherwise in the indicative mood. This overlay consists of a) the non-final form of the final morpheme in the clause and b) an interrogative intonation. Content questions, on the other hand, involve a) interrogative words that substitute for the clausal constituent they question, and optionally b) a topicalized structure where the interrogative word acts as a verbless clause (copula) complement. Each type of Ik question is described in more detail below.

9.12.1 Polar questions

Polar questions generally expect a simple confirmation or denial as a response. The response can be 'yes' (*éé/ee*) or 'no' (*ńtóodó*) or a repetition of the question in the affirmative. Such questions in Ik are recognized by two characteristics: 1) They end with the non-final allomorph of the last morpheme in the question (as opposed to the final form in an Indicative sentence), and 2) the last mora of the question takes a low boundary tone:

(166) *Maraŋa?*
maráŋ-à [– ¯ ˎ]
good-REAL
Is it good?

Maraŋ!
maráŋ-∅ [– ¯]
good-REAL
It's good.

(167) *Maraŋa ʝiki?*
maráŋ-á ʝíkì [– ¯ ¯ ¯ ˎ]
good-REAL totally
Is it totally good?

Maraŋa ʝik!
maráŋ-á ʝíkᵻ [– ¯ ¯ \ ]
good-REAL totally
It's totally good.

Besides the interrogative low boundary tone evident in (166) and (67), one may detect a slightly higher overall pitch level for the polar question. This higher pitch level does not affect tone at the lexical or phrase level but

merely raises the relative pitch of the whole sentence. The degree to which the pitch is raised seems to be tied to the level of emphasis or emotion behind the question. For more on the intonational tunes of indicative, interrogative, and 'solicitive' sentences, refer back to §3.3.5.

Some further examples of Ik polar questions include these below. For each clause-final element, its final form is shown in square brackets to indicate how it would look if the clause were indicative instead of interrogative:

(168) *Maa noo tsitsiikoti jotea?*
má-á = noo tsits-í-íkot-i jɔtɛ́-â$_{\text{INTERROG}}$ [jɔtɛ́-k^{a}]
not-REAL = PST3 roll-PLUR-AND-3SG sisal.root-ACC
Did he not used to roll sisal roots?

(169) *Zekwida koto eda?*
zɛkw-íd-a = koto ɛdâ $_{\text{INTERROG}}$ [ɛdá]
live-2SG-REAL = then only
So then do you live alone?

(170) *Rebana nkako jii?*
réb-an-a ŋkák-ó jìì $_{\text{INTERROG}}$ [jɪk^{ɛ}]
withheld-IPS-REAL food-INS also
Is food also withheld (from him)?

(171) *Bona ɲeryaŋa njinia?*
bon-a ɲéryaŋ-a ɲjíní-â $_{\text{INTERROG}}$ [ɲjíní-k^{a}]
care.for-REAL government-NOM we.INC.-ACC
Does the government care for us?

In principle, any word, phrase, clause, or sentence in the language can be questioned in a way that expects a confirmation or denial. Whatever grammatical category the questioned element belongs to, it will be in its non-final form together with the low boundary tone of interrogative

intonation. In (172) and (173), it is a simple NP that has been questioned, whereas in (174), a simultaneous subordinate clause is under query:

(172) *Ntsa?*
nts-à INTERROG
s/he-NOM
She?

Ee, nts.
ee nts-∅
yes s/he-NOM
Yes, she.

(173) *Awa ne erutsa?*
aw-a = na erúts-à INTERROG
home-NOM = REL new-REAL
A new home?

Ee, awa ne eruts.
ee aw-a = na erúts-a
yes home-NOM = REL new-REAL
Yes, a new home.

(174) *Gaanatie ɲaa?*
gaan-áti-e = ɲáâ INTERROG
bad-3PL-SIML = ADV
They really being bad?

Gaanatik.
gaan-áti-e = ɲák[a]
bad-3PL-SIML = ADV
They being really bad.

When a particular clausal constituent is questioned rather than the whole clause, it is fronted into a cleft construction. In this construction, the focused element acts as a verbless clause complement and takes the copulative case. The rest of the clause then shifts into a subordinate clause structure. This syntax of this construction is the same as is used for content questions. The following examples compare non-focused polar questions (175 and 176) with their respective clefted equivalents (177 and 178):

(175) *Atsia naa kaudzoe?*
ats-íd-a = naa kaúdzo-è INTERROG
come-2SG-REAL = PST1 money-DAT
Did you come for money?

(176) *Kaudzoo naa atsidee?*
kaúdzo-o = náa ats-íd-e = è
money-COP = PST1 come-2SG-REAL = DP INTERROG
Was it money you came for?

(177) *Enita bee boroka?*
en-ít-á = bee borok-à INTERROG
see-2PL-REAL = PST2 bushpig-NOM
Did you see a bushpig (yesterday)?

(178) *Borokuo bee enita?*
boroku-ó = bee en-ít-à INTERROG
bushpig-COP = PST2 see-2PL-REAL
Was it a bushpig that you saw (yesterday)?

The true morphological marker of polar questions in Ik is the final, low boundary-tone comprising the interrogative intonational tune. In this, Ik differs from neighboring Teso-Turkana languages like Turkana which append the invariable question particle *-à* to utterances to make a polar question (Dimmendaal 1983:429). Heine & König posited *-a* as an interrogative particle in Ik too (1996:116), but this must be based on an incorrect analysis of the suffix {-a} which marks both nominative case and realis modality. If either of these morphemes came clause-finally in a polar question, it would definitely resemble the Teso-Turkana question particle.

9.12.2 Content questions

Content questions in Ik involve clauses in which a constituent has been replaced with an interrogative word. Unlike in some languages, only one interrogative word per question is permitted in Ik. Ik Interrogative words—see (179) below—include those corresponding to (and therefore standing in place of) (pro)nouns, adverbs, and verbs. Besides the interrogative words themselves, no other special morphological or intonational means are used.

(179) *Ik interrogative words*

INTERROG	Meaning	Word class
ndo-	'who?'	(pro)noun
ndaí-/ńtá	'where?'	(pro)noun
ńté-éní-	'which (sg.)?'	(pro)noun
ńtí-éní-	'which (pl.)?'	(pro)noun
ńté-éní-/ńt-	'when (+specified unit of time)?'	(pro)noun
isi-	'what?'	(pro)noun
	'why (with DAT or ABL case)?'	(pro)noun
ńtí	'how?'	adverb
kɪtɔ́ós-	'what quality (color, shape, etc.)?'	verb
taná-	'how many?'	verb

As can be seen from (179), most Ik interrogative words are (pro)nouns and thus inflect fully for case. Some others, like *ńté-éní-* 'which (sg)?' are compound nouns. The adverbial interrogative *ńtí* 'how' is an invariable particle, and the words *kɪtɔ́ós-* 'what quality?' and *taná-* 'how many?' are both intransitive verbs.

The word *ndo-* 'who' can be pluralized with the possessive plural suffix making *ndo-íní-* 'who (pl.)?'. In isolation, *ńtá* is the word used for 'where?', while *ndaí-* is used when a case inflection is required. This latter form is likely a combination of the proto-interrogative **nd/nt-* and *aí-* 'side, place' but should probably now be considered lexicalized (see §8.2.4 for a discussion of *aí-*'s role in the formation of locative demonstratives).

The singular and plural forms of 'which' are also based on the proto-interrogative morpheme **nd/nt-* plus the possessum pronominal *-éní-*. The concept of 'when' in Ik is usually expressed through a combination of *ńté-éní-* 'which' plus the appropriate unit of time as its modifier in the genitive case, as in *ńté-énɔ́-ɔ ɲásáatí* 'which hour?' or *ńté-énɔ́-ɔ árágwaní* 'which month?'. A shortened form has arisen alongside *ńté-énɔ́-ɔ ódowi* 'which day?'—*ńtó-odów* 'when (which day)?' (noted by Heine & König 1996:120).

Some paradigmatic similarity can be seen between the interrogative words and specific indefinite pronouns (as predicted by Dixon 2012:401):

(180) *Comparative interrogative/indefinite paradigm*

Interrogative		Indefinite	
nd-aí-	'where?'	kɔ́n-áí-	'somewhere'
ńté-ɛ́ní-	'which (sg.)?'	kɔ́né-ɛ́ní-	'a, some (sg.)'
ńtí-ɛ́ní-	'which (pl.)?'	kíní-ɛ́ní-	'some (pl.)'
ńtó-odów	'which day?'	kón-(i)t-ódoi	'some day'

The main demonstrable difference between the word classes in (180) is that the first term in the interrogatives is the interrogative proto-form **nd/nt-*, while in the indefinite pronouns, it is various forms of the root *kɔní-* 'one'. It should be clear from the table in (180) and these preceding notes that the etymological basis for Ik interrogatives is a proto-form like **nd/nt-* (with variable tone). This fits well with Ehret's lexical reconstruction of proto-Nilo-Saharan in which he posits **nda* and **ndi* as proto-NS roots for 'what?', **ndé* for 'which?', and **ndoː* for 'who?' (2001:310-311). The word *isi-* 'what' is more mysterious in that it has no watertight parallels in Kuliak or Teso-Turkana, nor is it mentioned in Ehret 2001. One possible link may be to the Kuliak So's interrogative particle *ii/ic* 'who?' (Heine & Carlin 2010:17).

The interrogative verbs shown in (180) conjugate fully as an other verb. This is illustrated next with a paradigm of the verb *taná-* 'be how many?':

(181) *Conjugation of the interrogative verb* taná-

1SG	taná-í	'How many am I?'
2SG	taná-íd[a]	'How many are you?'
3SG	taná	'How many is s/he/it?'
1PL.EXC	taná-ít[a]	'How many are you (pl.)?'
1PL.INC	taná-ím	'How many are we (exc.)?'
2PL	taná-ísɪn	'How many are we (inc.)?'
3PL	taná-át[a]	'How many are they?'

The verb *taná-* when used with singular subjects pragmatically conveys a measure of skepticism or even indignation. For instance, if someone is being asked to do too much alone, they might respond with *tanáí* 'How many am I?' Or similarly, if someone is boasting of all he can accomplish, one might rightfully inquire *tanáíd* 'How many are you?'

The (pro)nominal interrogative words from (180) can replace clausal constituents right where they are, whether the clause is structurally unmarked (as in 182) or changed to a verbless clause (as in 183):

(182) *Beɗa isik?* → *Beɗa mesek.*

bɛ́ɗ-á	isi-k^{a}	→	bɛ́ɗ-á	mɛsɛ-k^{a}
want-REAL	what-ACC		want-REAL	beer-ACC
S/he wants what?			S/he wants beer.	

(183) *Isio bed?* → *Mesoo bed*

isi-o	bɛ́ɗ-∅	→	mɛsɔ-ɔ	bɛ́ɗ-∅
what-COP	want-REAL		beer-COP	want-REAL
What does s/he want?			It's beer s/he wants.	

The same is true for other interrogative words like *ndaí-* 'where?':

(184) *Keesa ndaik?* → *Keesa sedak.*

ƙe-es-á	ndaí-k^{e}	→	ƙe-es-á	séda-k^{e}
go-INT-REAL	where-DAT		go-INT-REAL	garden-DAT
She's going where?			She's going to the garden.	

(185) *Ndayuo ƙeesad?* → *Sedoo ƙeesad.*

ndaí-ó	ƙe-es-á = d^{e}	→	sédo-o	ƙe-es-á = d^{e}
where-COP	go-INT-REAL = DP		garden-COP	go-INT-REAL = DP
Where is she going?			It's to the garden that she's going.	

The concept of 'why?' is typically expressed with the word *isi-* 'what?' plus a) the dative case marking the semantic role of 'purpose' or b) the ablative case marking the 'cause/reason' semantic role. In this function, *isi-* acts as a peripheral argument within the clause. Even in this role it can fall in the canonical post-VS or post-VAO position or be fronted:

(186) *Keesida isik?*
ƙe-es-íd-a isi-k^{e}
go-INT-2SG-REAL what-DAT
Why are you going (lit. 'You are going for what (purpose)')?

(187) *Keesida isu?*
ƙe-es-íd-a isu-∅
go-INT-2SG-REAL what-ABL
Why are you going (lit. 'You are going from what (cause)')?

(188) *Isio ƙeesidad?*
isi-o ƙe-es-íd-a = d^{e}
why-COP go-INT-2SG-REAL = DP
Why are you going (lit. 'It is what you are going for/from')?

Another way of expressing 'what?' is with the compound noun *isi-ɛní-k^{ɛ}*. This compound combines *isi-* 'what?' with the possessum suffix *-ɛní-* into a compound marked with the dative case. This form of 'why?' is often used in isolation without other words, as in the stand-alone *isi-ɛní-k^{ɛ}* 'Why?'.

9.12.3 Alternative questions

So-called 'alternative questions' (Dixon 2012:398-400) are made possible in Ik through the use of the disjunctive conjunction *keɗe* 'or'. This conjunction joins noun phrases in a series or whole clauses into a complex sentence. Apart from *keɗe*, Ik alternative questions are not marked by any overt morphological or prosodic means. In the examples below, *keɗe* joins two

clauses that could each constitute polar questions on their own. Together they make up a content question whose answer will be the affirmation of one or the other. Note that the final constituent remains in its final form:

(189) *Maraŋa keɗe gaan?*
[maráŋ-á] keɗe [gaan-∅]
good-REAL or bad-REAL
Is it good or (is it) bad?

(190) *Giriana keɗe dzigwiiƙotan?*
[gir-í-án-a] keɗe [dzígw-i-iƙót-an-∅]
keep-PLUR-IPS-REAL or sell-PLUR-AND-IPS-REAL
Were they regularly kept or regularly sold?

9.12.4 Tags

Ever given to rhetorical flourishes, Ik speakers may use one of several interrogative 'tags' to solicit a response from those listening to their speech. Each of the tags is a negated polar question to which the expected response is in the affirmative. The following two are representative:

(191) *Benia ntia?* *Nti.*
beni-a ńtíâ$_{\text{INTERROG}}$ ńtí
not.be-REAL like.that like.that
Is it not so? (It is) so.

(192) *Nta ƙamatii?* *Ƙamatad.*
ńt-á ƙám-átí = ì $_{\text{INTERROG}}$ ƙám-át-a = d^{e}
not-REAL be.like-3PL = DP be.like-3PL-REAL = DP
Are they (i.e. words) not like that? They are like that.

9.13 Complementation

Complementation—a clause filling a slot in the argument structure of another clause—is handled in Ik in two ways: 1) with a special type of complement clause and 2) with other 'complementation strategies' (Dixon 2010:405). An Ik complement clause has the following five characteristics (the first three of which are definitive according to Dixon 2010:370):

(193) 1) It has the internal structure of a clause.
2) It functions as the core argument of another clause.
3) It describes a proposition: fact, activity, or state.
4) Its complementizer is an argument in the matrix clause.
5) It takes the form of reported speech.

9.13.1 Complement clauses

Complement clauses (CoCl) in Ik are recognized by the initial complementizer *toimɛna-* that introduces them. This complementizer is a lexicalization of two roots: *tód`-* 'speak' and *mɛná-* 'words, issues', resulting in a compound that means something akin to 'saying (that)…'. Despite its verblike meaning, *toimɛna-* behaves grammatically as a noun: a) It fills an argument slot in the matrix clause, and b) it inflects for case.

Ik complement clauses evolved out of reported speech constructions (see §9.14). Technically, it is the quotative complementizer *toimɛna-* 'saying' that functions as the core argument of a matrix clause, while the 'complement clause' itself is treated as a direct quotation, i.e. the complement of *toimɛna-*. So point #2 of (193) is only true insofar as one considers the whole construction to be grammaticalized such that *toimɛna- plus* the direct quotation fill the argument slot of the matrix clause.

In terms of functional possibilities, *toimɛna*-clauses can fill the syntactic slots for object (O), copula subject (CS), copula complement (CC), and oblique peripheral argument. In (194), the complementizer *toimɛna-* is in the

accusative case, indicating that it and the clause it complementizes is the object (O) of the transitive verb *ɦiye-* 'know' in 3SG:

(194) *Nta ɦiyei toimenaa sits'a noo tatatieakwa nti.*
ńtá ɦiye-i [toimɛna-a [síts'-á=noo tátáti-e̱akw-a ńtí]$_{CoCl}$]$_{O}$
not know-3SG COMPL-ACC engage-REAL=PST3 aunt-man-NOM ADV
He doesn't know that (his) uncle got engaged like that.

In the next example, a *toimɛna*-clause is functioning as the copula subject (CS) of a verbless clause. The copula complement (CC) of the verbless clause is *ntsí-* 'it' which appears as *ntsú-ó* 'it is…' in the copulative case:

(195) *Ntsuo toimena tezetoo menaicika muŋ.*
ntsú-ó [toimɛn-a [téz-ɛt-ɔ-ɔ mɛná-ícík-á muŋ^{u}]$_{CoCl}$]$_{CS}$
it-COP COMPL-NOM end-INCH-3SG-SEQ issues-PL-NOM all
It's that all the issues have ended.

The next example features a complement clause functioning as the copula complement (CC) of the negative copula verb *benί-*. With this verb, CCs typically take the copulative case, and this sentence is no exception:

(196) *Benia toimenoo mitida ceki na gaan.*
beni-a [toimɛnɔ-ɔ [mɪt-íd-a ceki=ná gaan-∅]$_{CoCl}$]$_{CC}$
not.be-REAL COMPL-COP be-2SG-REAL woman[OBL]=REL.SG bad-REAL
It's not that you are a bad woman.

In the next example, the complement clause is treated morphologically (with the oblique case suffix) and syntactically (noun in a series following *ńda*) as a peripheral argument. The origin of *toimɛna-* as an introducer of reported speech comes out clearly in this example: a) An audience for the reported speech is encoded as the extended object *cɪkámée* 'to the women' which even separates the complementizer from the quotation, and b) the quotative particle *taa*, otherwised used in quotative formulae, is present:

(196) *Nda toimena cikamee taa ƙoyuo koto sedikak.*
ńda [toimɛna cıkámé-e taa [ƙó-yúo = koto séd-ika-k^{e}]$_{CoCl}$]$_{OBL}$
and COMPL[OBL] women-DAT QUOT go-IMP.PL = then garden-PL-DAT
And saying to the women that 'you go then to the gardens'.

Because *toimɛna*-clauses can express either factual or potential propositions, they exhibit a wide range of possible verb and clause types. With some verbs, like *bɛ́ɗ-* 'want', even hortatives and optatives can occur:

(197) *Beɗa toimenaa taa goƙaaketano.*
bɛ́ɗ-á [toimɛna-a taa [goƙ-aak-ét-ano]$_{CoCl}$]$_{O}$
want-REAL COMPL-ACC QUOT seated-DISTR-VEN-HORT
He wants us to all be seated (lit. 'He wants that let's all be seated').

(198) *Beɗîda toimena yumetine ceki?*
bɛ́ɗ-íd-a [toimɛn-a [ɻúm-ét-ınɛ ceki]$_{CoCl}$]$_{O}$
want-2SG-REAL COMPL-NOM engage-VEN-1SG[OPT] woman[OBL]
Do you want me to engage a woman (lit. 'that let me engage…')?

As seen in (196) and (197), the quotative particle *taa* (a phonologically reduced form of *kʊta* 's/he says') often accompanies *toimɛna-*. This particle functions as an optional introducer of reported speech (see §9.14). The Ik 'saying'-words *toimɛna-* and *taa* can be compared to similar forms in neighboring Teso-Turkana languages. For example, in Karimojong, the complementizer *a-tɛmar* is also the verb 'to say' and the quotative particle *ɛbɛ́* is an irregular 3SG form of the verb *ábala,* also meaning 'to say'.

Lastly, complement clauses are negated just like non-complement clauses:

(199) *Nesibia toimena nta zeƙwidi atik.*
nesíb-i-a [toimɛn-a [ńt-á zɛƙw-ídı átí-k^{e}]$_{CoCl}$]$_{O}$
hear-1SG-REAL COMPL-NOM not-REAL live-2SG FILL-DAT
I hear that you don't live in, um…

9.13.2 Complementation strategies

Besides the *toimɛna*-clause types described above, Ik also uses two further complementation strategies: 1) nominalization and 2) clause chaining.

The verbal element of a complement clause can be nominalized instead of appearing as a full finite verb. This is a commonly used complementation strategy in Ik. Nominalized verbal complements can fill any core or non-core argument slot and thus take any required case ending. If the subject of the nominalized verb needs to be specified, for example if it differs from the main clause subject, it directly follows the complement verb in the genitive case. And if the nominalized verb is transitive, then its object also follows it (and the subject) in the genitive case. This means that if the complement clause is transitive and has a different subject than the matrix clause, the nominalized verb may be followed by two nouns in the genitive case.

For example in (200), the nominalized verb *sáɓ-és* 'to kill (pl.)' is the subject (S) of the intransitive verb *gaan-ón* 'to be bad' and therefore takes the nominative case. Within the nominalized complement clause, *sáɓ-és* is a transitive verb with an object marked in the genitive case:

(200) *Gaana saɓesa roɓae.*

gaan-a_V	[sáɓ-és-a_{VA}	[roɓa-^{e}]$_O$]$_S$
bad-REAL	kill[PL]-INF-NOM	people-GEN

Killing people is bad (lit. 'The killing of people is bad').

The next example presents a nominalized transitive clause filling the object slot of a matrix transitive clause. The transitive verb *bol-és-úƙot$^{a'}$* 'to stop (doing something)' has the nominalized clause *ɪmɔɗɛsíá wicé* as its object, with *ɪmɔɗ-ɛs´* marked with the accusative case (since the subject of the main verb in the matrix clause is 3-person). Then, within the complement clause itself, the nominalized verb *ɪmɔɗ-ɛs´* 'to deceive' has its direct object encoded as a possessive modifier in the genitive case:

(201) *Bolukotataa imodesia wice.*
bol-ukot-át-a-a$_{VA}$ [ɪmɔɗ-ɛsí-á$_{VA}$ [wicé-∅]$_{O}$]$_{O}$
stop-COMP-3PL-REAL-PRF deceive-INF-ACC children-GEN
They've stopped deceiving children.

Nominalized verbs can also fill peripheral argument slots. In the next example, the nominalized verb *ɪráb-ɛs* 'to harvest millet' is filling the slot of a peripheral argument in the dative case, denoting purpose:

(202) *Botuo cikama rebeakok, irabesik.*
bot-u-o cɪkám-á rébe-aƙɔ-k^{ɛ} [ɪráb-ɛsí-k^{ɛ}]$_{PERIPHERAL}$
move-3SG-SEQ women-NOM millet-inside-DAT harvest.millet-INF-DAT
And the women moved to the millet for harvesting (it).

The peripheral argument can be a complex complement clause appended to a main clause as if it were the last in series of noun phrases. In this next example, an entire transitive clause is encapsulated in multiple embedded noun phrases that fill an oblique argument slot in a preceding matrix clause:

(203) *...nda ɟa saɓesi ntsie loŋotae.*
ń^{ɬ}da=ɟa [sáɓ-ési$_{V}$ ntsí-é$_{A}$ lɔŋɔ́tá-^{ɛ}$_{O}$]$_{PERIPHERAL}$
and=ADV kill[PL]-INF[OBL] he-GEN enemies-GEN
...and then he killed the enemies ('the killing of him of enemies').

Finally, a nominalized complement clause can occur as a predicative nominal in a verbless copula clause like the one in (204). This clause was uttered to an elder as an explanation for the aches and pains of growing old:

(204) *Dunesio ata dee.*
dún-ési-o át-á=^{ɬ}déé
age-INF-COP FILL-NOM=ANPH.SG
That thing (i.e. feeling ill) is ageing.

A second complementation strategy employed by Ik is clause chaining. After a main verb there may follow a sequential or simultaneous clause acting in a complementary role. If the subordinate clause is sequential, then it expresses an activity occurring after the main verb, either logically or chronologically. If the subordinate clause is simultaneous, then it expresses an activity loosely cooccuring with the main verb (see §10.2).

The deontic verb *ɪtámáán-* 'behoove, necessitate' (cognate with Teso-Turkana *ɪtamakɪna*) serves to illustrate both types of clause chaining since it can occur with either one. In first example (205), *ɪtámáán-* acts as the main verb in the initial main clause, followed directly by the sequential verb *déíduo* 'and you (sg.) bring' which is complementary to it:

(205) *Itamaana deiduo bonitiicika muŋ.*
[ɪtámáán-a [dé-ídu-o boniti-icík-á muŋ]$_{SEQ}$]$_{MAIN}$
behoove-REAL bring-2SG-SEQ kind-PL-NOM all
You must bring all the various kinds.
('It behooves, and you bring all the various kinds.')

The next example involves *ɪtámáán-* again but this time with a simultaneous clause containing the simultaneous verb form *bɛ́ɗétíík^{ɛ}* 'I looking for':

(206) *Itamaana beɗetiike konienia awee bik.*
[ɪtámáán-á [bɛ́ɗ-ɛ́t-íí-kɛ kɔ́ní-ɛ́ní-a awé-é bi-k^{ɛ}]$_{SIML}$]$_{MAIN}$
behoove-REAL want-VEN-1SG-SIML one-PSSM-ACC home-GEN you.SG-DAT
I must look for another home for you.
('It behooves, I looking for another home for you.')

9.13.3 Complement-taking verbs

The table in (207) presents a representative sample of Ik verbs that can take a *toimɛna*-complement as an argument. If any of these verbs uses other complementation strategies as well, these are also shown:

(207) *Complement-taking verbs*

		toimena-	Nominalization	Sequential clause chain	Simultaneous clause chain
bɛ́ɗ-	'want'	✓	✓		✓
en-	'see'	✓	✓		✓
ikoŋ-	'swear'	✓			
ɪtámáán-	'behoove'			✓	✓
fiye-	'know'	✓	✓		
kʊt-	'say'		✓		
nesíb`-	'hear'	✓			✓
tam-	'think'	✓			
tód`-	'speak'	✓			
tɔnʊp-	'believe'	✓			
tópéɗ-úkót-	'be able'		✓		

9.14 Reported speech

The Ik quote formula for reported speech consists of the verb *kʊt-* 'say' with a subject-agreement suffix cross-referencing the speaker. This is then followed by the addressee in the dative case if mentioned. After this may come the quotative particle *taa* (a reduced and grammaticalized form of *kʊta* 's/he says', like the Turkana irregular verb form *ɛbɛ́* used as a quotative; Dimmendaal 1983:470), and then of course the quotation itself:

(208) *Reported speech*: kʊt-SPEAKER (ADDRESSEE-DAT) (taa) S_{QUOTE}

A couple of examples of this quotative formula in context are as follows:

(209) *Kutia ntsie, "Itemat."*

kʊt-ɪa-a	ntsí-é	[itém-át-ª]$_{\text{QUOTE}}$
say-1SG-SEQ	s/he-DAT	befit-3PL-REAL

And I said to her, "They are right."

(210) *Kutata biraa koroɓaa ŋabat.*

kʊt-át-a	[bɪra-a	kɔ́rɔ́ɓá-a	ŋáb-at-ª]$_{\text{QUOTE}}$
say-3PL-REAL	lack-REAL	thing-NOM	wear-3PL-REAL

They say there is nothing they are wearing.

As Serzisko correctly pointed out, both direct and indirect speech can be reported with the direct quote formula given above (1987:72-73). In other words, when the verb *kʊt-* is involved, both types of reported speech are encoded grammatically as if they were direct quotations. An indirectly encoded quotation would require that the quotation be a complemental argument of the verb. But this is not possible with the *kʊt-* formula.

Rather, as expected crosslinguistically (Kroger 2005:226), a quotation found in the formula above is not treated as an argument of the verb *kʊt-*. Instead, it is an extra-syntactic sentential 'complement'. This can be seen in Ik from two angles. First, unlike the complementizer *toimɛna-* (§9.13.1), the quotative particle *taa* is invariable, that is, not inflected for case. Second, when the content of an indirect quotation is the interrogative pronoun *isi-* 'what?' instead of a full sentence, *isi-* takes the oblique case, the case that is used for, well, oblique arguments. This can be seen in the next example:

(211) *Kutana taa isi roɓa?*

kʊt-an-a	táá	[isi]$_{\text{QUOTE}}$	[roɓa]$_{\text{VOCATIVE}}$
say-IPS-REAL	QUOT	what[OBL]	people[OBL]

It is said (that) what, people?

What shall we say, folks?

If a quote in Ik were treated grammatically as an argument of the verb (as in indirect quotes), nominative case (for 1st and 2nd person subjects) and accusative case (3rd person subjects) would have to be indicated somewhere, e.g. on a complementizer or on *isi-* if it was filling the quotation slot. Compare the following grammatical and ungrammatical sentences:

(212)	*Kuta is?*		***Kuta isik?*	
	kʊt-a	[is]$_{\text{QUOTE}}$	**kʊt-a	[ísi-k^{a}]$_{\text{QUOTE}}$
	say-REAL	what[OBL]	**say-REAL	what-ACC
	What does she say?		What does she say?	

From the examples above, it can be seen, then, that a quotation in Ik is not a core argument—nominal or complemental—of the verb *kʊt-*. Nevertheless, both direct and indirect speech can be reported, as the following show:

(213)	*Kuta Lomeria, "Atsesi."*		
	kʊt-a	lomerí-a	[ats-és-í-∅]$_{\text{DIRECT.SPEECH}}$
	say-REAL	Lomeri-NOM	come-INT-1SG-REAL
	Lomeri says, "I'm coming."		

(214)	*Kuta Lomeia atses.*		
	kʊt-a	lomerí-a	[ats-és-∅]$_{\text{INDIRECT.SPEECH}}$
	say-REAL	Lomeri-NOM	come-INT-REAL
	Lomeri says he's coming.		

Both (213) and (214) are directly encoded, though they encode direct and indirect speeches, respectively. Because of this structural ambiguity, both sentences are 'opaque' (Serzisko 1987:72) with regard to the reference of the subjects within each quotation. Without context, it is not known which of the following translations would best represent the data above:

(215)	For (213):	Lomeri$_{A}$ says, "I$_{A}$ am coming."
		Lomeri$_{A}$ says I$_{B}$ am coming.

(216) For (214): Lomeri$_A$ says he$_A$ is coming.
Lomeri$_A$ says he$_C$ is coming.
Lomeri$_A$ says, "He$_C$ is coming."

Serzisko suggests that the quotative particle *taa* is obligatory for indirect quotations (1987:74), but this has not been confirmed in my data. It seems, rather, that its use is optional and flexible. For example, it even shows up before the main verb, as in *taa kʊtaná taa* 'That it is said that…'.

In his 1987 study of the verb *kʊt-*, Serzisko insightfully traces out the various paths of development the verb has taken in Ik. Besides merely reporting speech, it is also used as a verb for thinking, naming, intending, wanting, and communicating a sound or even an event. Each of these developments is given one example in the following sentences:

(217) Thinking: *Kutia keɗe buo nak.*
kʊt-í-á keɗe bu-o=nák[a]
say-1SG-REAL or you.SG-COP=PST1
I thought maybe it was you.

(218) Naming: *Kutana edie ntsie is?*
kʊt-an-a édi-e ntsí-é is
say-IPS-REAL name-DAT s/he-GEN what[OBL]
What is she called/what is her name?

(219) Intending: *Kutia ƙone awak.*
kʊt-í-á ƙó-ne awá-k[e]
say-1SG-REAL go-1SG[OPT] home-DAT
Well, I'm about to go home.

With regard to its intending function, the verb *kʊt-* may have grammaticalized into the So future time marker *kɔ-* (cf. Carlin 1993:58).

(220) Sound: *Kutini wir!*
kʊt-ɪnɪ wir
say-3PL[SEQ] IDEO
And they went *zoom*!

(221) Event: *Kutoo kiɟa lejˌ.*
kʊt-ɔ-ɔ kíj-á lɛj
say-3SG-SEQ land-NOM IDEO
And the land caught on fire.

All the examples above retain the surface structure of a quotative sentence, even though they have developed semantically in various ways. One further development of *kʊt-*, however, takes as an argument a noun or a nominalized verb in the dative case. Perhaps in the surface structure, the nominalized argument takes the slot of an addressee (hence the dative case) instead of the quotation. In this usage, *kʊt-* acts as a sort of modal verb, expressing desire/intention in (222) and action toward something in (223):

(222) Modal 1: *Kutata idzesie…*
kʊt-át-a ídz-esi-e… (Serzisko 1987:82)
say-3PL-REAL shoot-INF-DAT
Then they shot…

(223) Modal 2: *Kwiidoo moɗeripak.*
kʊ(t)-ídɔ-ɔ mɔ́ɗɛ́-ripa-kᵉ (Serzisko 1987:85)
say-2SG-SEQ groud.bee-hole-DAT
And you jumped in the ground-bee hole.

9.15 Comparative constructions

Ik has two types of comparative construction. One is a mono-clausal construction and the other bi-clausal (types A2 and F, respectively, in Dixon's system of classification; 2012:350, 358). The discussion here uses the following terms, borrowed from Dixon (2012:344):

(224) *Comparative construction terminology*

COMPAREE	that which is being compared
STANDARD	what the comparee is being compared to
PARAMETER	the gradable property shared in the comparison
INDEX	degree to which the comparee differs from standard
MARK	marker of the grammatical function of the standard

Accordingly, the following table lays out the components of Ik's two types of comparative construction, each of which are then described below:

(225) *Ik comparative constructions*

	Type A2 (mono-clausal)	Type F (bi-clausal)
COMPAREE	S in NOM case	A in NOM case
STANDARD	NP in ABL case	NP in ACC case
PARAMETER	head of intransitive predicate	head of initial predicate (intrans. or trans)
INDEX	—	transitive medial verb (e.g. *ɪlɔ́-* 'defeat')
MARK	ABL case	ACC case

9.15.1 Mono-clausal comparative construction

The Type A2 comparative construction in Ik is mono-clausal: All its components fall within a simple clause. The comparee is the subject of an intransitive predicate, usually an adjectival verb. The standard against which the comparee is compared is a peripheral argument in the ablative case. In this type of comparative construction, there is no index:

(226) *Zeia nka bu.*
[ze-í-á]$_{\text{PARAMETER}}$ [ŋ̀k-a]$_{\text{COMPAREE}}$ [bu-∅]$_{\text{STANDARD}}$
big-1SG-REAL I-NOM you.SG-ABL
I am older than you (lit. 'I am big from you.').

(227) *Maraŋa ɗa na*
[maráŋ-á] $_{\text{PARAMETER}}$ [ɗ-a = na] $_{\text{COMPAREE}}$
good-REAL one-NOM = DEM.SG

kiɗoo ke.
[kɪ = ɗɔ́-ɔ́ = kɛ] $_{\text{STANDARD}}$
DIST = one-ABL = DEM.SG.DIST
This one is better than that one (over there).

This type of construction is susceptible to some ambiguity. When the head of an intransitive predicate is an adjectival verb followed by a non-core argument in the ablative case, the sentence can have a different meaning than comparison. Note the two possible interpretations of this statement:

(228) *Gaana ncu.*
gaan-a ɲ́cu-∅
bad-REAL I-ABL
a) S/he/it is worse than me.
b) S/he/it is bad to me (according to me).

The ambiguity lies in the fact that the ablative can encode the experiencer role as well as the standard of comparison. The choice between the two interpretations must be made on pragmatic, contextual grounds.

9.15.2 Bi-clausal comparative construction

Type A2 comparative constructions in Ik serve to compare two entities in terms of a gradable property (parameter). Type F constructions can do the same thing, as well as compare in terms of any parameter, be it a state or an action. Type F constructions are bi-clausal. The first clause is the initial clause in a bi-clausal chain, either intransitive or transitive, for example:

(229)	*Kwatsa…*	*Tokobiya edía…*	
	kwáts-á	tokob-i-a	edí-á
	small-REAL	farm-PLUR-REAL	grain-ACC
	It's small…	He farms grain…	

To such simple clauses as these can be added a comparative clause with a medial verb, either sequential or simultaneous. One medial verb Ik uses is *ılɔ́-* 'defeat' which has close parallels in Karimojong (*-lɔ́*) and Turkana (*-lάŋ*). (The Teso-Turkana infinitive form *akɪ-lɔ́* is often used in Ik instead of *ılɔ́-*; besides comparison, it can be used to mean 'instead (of)'.) In this comparative chained clause, the comparee is still the subject as in the main clause but must be A even if it is an S in the main clause. This is because *ılɔ́-* is a transitive verb. Its O then is the standard of the comparison. So the simple clauses in (229) may be extended as follows:

(230) *Kwatsa ntsa iloyee ncik.*

[kwáts-á	nts-a]$_{\text{INITIAL}}$	[ılɔ́-í-é	ɲci-k^{a}]$_{\text{MEDIAL}}$
small-REAL	he-NOM	defeat-3SG-SIML	I-ACC

He's smaller than me (lit. 'He's small, he defeating me').

(231) *Tokobiya edía iloyoo ngwaa muŋ.*

[tokob-iy-a	edí-á]$_{\text{INITIAL}}$	[ılɔ́-í-ɔ	ŋgó-á	muŋ]$_{\text{MEDIAL}}$
farm-PLUR-REAL	grain-ACC	defeat-3SG-SEQ	we.EXC-ACC	all

He farms grain more than all of us (lit. 'and defeats us all').

Some verbs like *kwáts-* ‘small, young’ and *ʒe-* ‘big, old’ can appear in either type of comparative construction but with different meanings. For example, the sentence *kwátsía bu* can only mean either a) ‘I am younger than you’ or b) ‘I am lower than you in status’. To get the meaning ‘I am smaller than you’, a Type F construction must be used: *kwátsía ılɔ́ıaa bi.*

9.15.3 Equative clauses

To compare two equal or nearly equal entities, Ik uses two verbs instead of a special syntactical construction. These verbs are *ikwáán-ón* ‘to be the same, similar in quality’ and *iryáán-on* ‘to be the same, similar in physical characteristics (like size or shape)’. Both of these verbs have Teso-Turkana parallels in *aki-kwaan* and *a-rian* ‘to be equal’ (Barrett 1988:70).

(232) *Ikwaanida nda babo.*
ikwaan-íd-a ńʻda bábo
be.same-2SG-REAL with your.father[OBL]
You resemble your father.

(233) *Nta dakwitina ni iryaanat.*
ńt-á dakw-itín-á = ni iryaan-át^{i}
not-REAL tree-PL-NOM = DEM.PL be.similar-3PL
These trees are not the same.

9.15.4 Superlative clauses

Ik also has no special construction to express superlativeness either. Instead, it simply adds the adjective *muŋu* ‘all’ to modify the standard in Type F comparative constructions, making the standard a universal plural, e.g.:

(234) *Toda maraŋie iloyoo roɓaa muŋ.*
tód-a maráŋ-í-e ılɔ́-í-ɔ roɓa-a muŋ
speak-REAL good-3SG-SIML defeat-3SG-SEQ people-ACC all
He speaks better than everyone else (lit. ‘and defeats all people’).

9.16 Negation

Negation in Ik is signaled by a combination of highly irregular, paradigmless negator verbs (235 below) and irrealis marking on the negated verb. The negator verbs show agreement for an impersonal 3-person subject. One of them, *ńt-*, always appears in the realis modality with a negated complemental main verb in the irrealis modality. The other, *ma-/na-*, can appear in either the realis or irrealis modalities (in the sequential aspect as *moo/noo*). For past and present perfect tenses, its verbal complement is in the irrealis modality, while for prohibitives (negative imperatives), the complement is in the realis modality. Beyond these two negator verbs, two lexical verbs, *bɪrá-* and *bení-*, are used to negate copula of location and copula of identity verbs, respectively. The table in (235) presents the negator verbs with the verb and clause types they can negate:

(235) *Ik negator verbs*

	Verb type	Clause type
ńt-	Non-past realis	Main
ma-/na-	a) Past realis	Main
	b) Present perfect	Main
	c) Imperative	Main
(as *mo-o/no-o*)	d) Irrealis	Subordinate

The negating morphemes presented in (235) are analyzed here as defective verbs rather than merely negating particles for the following reasons:

1. They fill the clause-initial slot, which is reserved for the main verb.
2. They take modal suffixes (e.g. realis {-a} and sequential {-(k)ɔ}).
3. The negator *ma-/na-* can be modified by tense enclitics, which only modify the clause predicate.
4. The irrealis (sequential) negator *moo/noo* can bear the dummy pronominal enclitic {=ˊdɛ}, which otherwise attaches only to verbs.

In terms of etymology, the Ik negator verbs can be traced to ancient proto-Nilo-Saharan forms (Ehret 2001:218-223). The realis-negating verb *ńt-* likely originates in the proto-'Northern Sudanic' suffix **-to* that is believed to have also negated indicative clauses. Though perhaps this ancient negator crossed phyletic boundaries into Afroasiatic, if the Cushitic language Afar's defective negating morpheme *-innio* is any indication (Mahaffy, n.d., p. 33). According to Ehret, the prefix *n-* in the Ik *ńt-* developed as an independent morpheme, though its function may not be reconstructable today.

For its part, the Ik negator verb *ma-/na-* seems obviously related to the proto-'Eastern Sahalian' prefix **má-* that is said to also have negated irrealis clauses (Ehret 2001:218-223). It too has widespread Nilo-Saharan and Afroasiatic reflexes. For example, Turkana's defective negator *mɛɛrɛ́* is believed to consist of the morphological sequence **ma-ɛ-ra-ɪ* of which the first is the negator **ma-* (Dimmendaal 1983:453). A parallel is also found in the Lowland Cushitic languages Afar and Saho: In Afar, the 'principal negator' is *ma-* (Mahaffy, n.d., p. 20), while in Saho, the negator of imperative and imperfective clauses is *ma-* or *mi-* (Banti & Vergari 2005:7).

And although the Ik parallel usually appears with H-tone as *máa* or *náa*, it is analyzed as *ma-/na-* on the hypothesis that it was (is?) used with the present perfect suffix {-ʹka} with its floating H tone. This was first postulated by Heine & König (1996:89) and is corroborated by Ik's sister Kuliak language So's 'perfective negator' that has the form *mak* (Carlin 1993:58). The Ik negator *ma-* together with its present perfect suffix {-ʹka} would produce the final form **má-k^{a}* and the non-final form *má-a*. A form like **má-k^{a}* is preserved in So but lost in Ik because: 1) Negator verbs never occur clause-finally (where the final form of {-ʹka} could appear), and consequently, 2) the /k/ is lost in clause-initial positions leaving only *má-a*. This analysis would also help explain why the sequential form is *mo-o* and not *mó-o*. But because the analysis is still a bit speculative, the form *má-á/ná-á* or *má-a/ná-a* is glossed throughout the grammar as *not-REAL* instead of *not-PRF*.

9.16.1 Indicative and interrogative

Non-past, indicative, realis clauses are negated with *ńt-*, which then takes the morphologically negated verb as a complement in the irrealis modality:

(236)	*Ƙod.*		*Nta ƙod.*	
	ƙó-d-^{a}	→	ńt-á	ƙó-d^{i}
	go-2SG-REAL		not-REAL	go-2SG[IRR]
	You're going.		You're not going.	

Indicative and interrogative clauses are both negated the same way:

(237)	*Nta ƙaat.*		*Nta ƙaati?*	
	ńt-á	ƙá-át^{i}	ńt-á	ƙá-átì$_{\text{INTERROG}}$
	not-REAL	go-3PL[IRR]	not-REAL	go-3PL[IRR]
	They aren't going.		Are they not going?	

The only difference between the two sentences in (237) is phonological: The final vowel of the 3PL suffix is fully voiced in the interrogative mood.

Past tense realis clauses are negated with *ma-/na-* in the realis modality (and/or present perfect aspect?; see last paragraph on p. 583), with the negated verb as a complement in the irrealis modality:

(238)	*Maa naa ƙod.*	
	má-á=naa	ƙó-d^{i}
	not-REAL=PST1	go-2SG[IRR]
	You didn't go (earlier today).	

Subordinate clauses and sequential medial clauses are negated with *moo/noo*, which is analyzed here as the negator verb *ma-/na-* plus the sequential aspect suffix {-(k)ɔ}. As with the realis *máa/náa*, the negated verbal complement of *moo/no* is in the irrealis modality. Examples include:

(239) Relative clause: *ɗa moo ƙodid*

ɗ-a	mó-o	ƙó-di = d^{e}
one-NOM	not-SEQ	go-2SG[IRR] = DP

the one (that) you don't go to

(240) Chained clause: *…moo ƙod.*

mo-o	ƙó-d^{i}
not-SEQ	go-2SG[IRR]

…and you don't go.

An interesting structural feature of Ik negation is that while the negator verbs function as the main verb of the clause and are marked for an impersonal 3SG subject, the subject of the negated verb, if overt, fills the normal syntactic slot for subject. Compare the following sentences:

(241) *Koyaa bee nk.*

ƙó-í-a = bee	ŋk-^{a}
go-1SG-REAL = PST2	I-NOM

I went (yesterday).

(242) *Maa bee nka ƙoi.*

má-á = bee	ŋk-a	ƙó-í^{i}
not[3SG]-REAL = PST2	I-NOM	go-1SG[IRR]

I didn't go (yesterday).

In (241), a normal VS intransitive clause, the removed past tense clitic *=bee* follows the verb and is then followed by the overt subject *ŋk*^{a} 'I'. Then, in (242), the tense clitic follows the negator verb as it would a main verb. The clause's semantic subject, *ŋ́ka*, then follows the tense clitic as if it were the subject of the negating verb. However, it is in fact the subject of the complement verb *ƙóí*^{i} that follows it. It is interesting to note that in most types of subordinate clauses, any overt preverbal subject would take the accusative case. So in (242) there seems to be a mismatch between syntax

and semantics: The syntax treats *ŋ́ka* like the main clause's subject, while semantically, it is the subject of the following complemental verb *ƙóí*[i].

Ik can only negate full dependent and independent clauses. It has no derivational processes for creating negative lexemes. Neither can smaller clausal constituents like noun phrases be negated morphologically. They can be negated syntactically and semanticaly by first being topicalized. To illustrate this, the verb *bɪrá-* 'not be' in the following sentences negates various clausal arguments that are modified by headless relative clauses:

(243) *Biraa ama iya naye na.*
bɪra-a ám-á i-a naí-é=na
not.be-REAL person-NOM be-REAL here-DAT=DEM.SG
Nobody is here (Lit. 'There is no person (who) is here.').

(244) *Biraa ama ntsia iŋaaresad.*
bɪra-a ám-á ntsí-á ɪŋaar-ɛs-á=dᵉ
not.be-REAL person-NOM s/he-ACC help-INT-3SG=DP
He is helping nobody (Lit. 'There is no one he is helping.').

(245) *Biraa keda ƙaad.*
bɪra-a kéd-a ƙá-á=dᵉ
not.be-REAL place-NOM go-REAL=DP
He's going nowhere (Lit. 'There is no place he is going to.').

9.16.2 Prohibitive

The structure of imperative versus prohibitive clauses is quite different in Ik. In an imperative clause, the bare verbal stem is given the singular imperative suffix {-ɛ́} or the plural imperative suffix {-ɪ́ɔ́}. But in a prohibitive clause, no special morphemes are involved. Instead, the prohibitive construction consists of the negator verb *ma-/na-* with a conjugated verbal complement in the realis modality, for example:

(246) *Kae!* → *Maa ƙod!*

ƙa-$^{e\acute{}}$		má-á	ƙ-ód-^{a}
go-IMP.SG		not-REAL	go-2SG-REAL
Go!		Don't go!	

(247) *Ogoe ƙai.* → *Maa ƙa.*

ógo-e	ƙa-i´	má-á	ƙa-∅
let-IMP.SG	go-3SG[OPT]	not-REAL	go[3SG]-REAL
Let him go.		Don't let him go.	

Semantically, these prohibitives are 'irrealis' in the sense that the predication has not happened and is even forbidden from happening. However, grammatically, the Ik prohibitive is marked as 'realis' with the realis suffix {-a} (implying temporal actuality) on both the negating verb and the complemental main verb. This kind of 'polarity reversal'—where negative imperatives occur with realis suffixes—is reportedly only rarely attested in other languages around the world (Dixon 2012:112).

9.16.3 Copula clauses

Although the copula of identity (*mɪt-*) and the copula of cocation (*i-*) can be negated with either negator verb, Ik also has two lexical verbs that function as negative copulae. These negative copulae seem to have been (partly) grammaticalized from the synchronic lexical verbs *bɪrá-* 'lack' and *benɪ́-* 'be unique'. The sentences below illustrate both ways copular verbs can be negated—first with negator verbs and second with negative copulae. Note how morphological case suffixes change going from one type to the other:

(248) *Nta ntsa iyi awak.*

ńt-á	nts-a	i-i	awá-k^{e}
not-REAL	s/he-NOM	be-3SG	home-DAT
She's not at home.			

(249) *Biraa ntsa awao.*
bıra-a nts-a awá-°
not.be-REAL s/he-NOM home-ABL
She's not at home (lit. 'She lacks from home.').

(250) *Nta nka mitii waanaam.*
ńt-á ŋk-a mıt-íí wáána-am
not-REAL I-NOM be-1SG visitor-AGT.SG[OBL]
I am not a visitor.

(251) *Benia nka waanaamak.*
beni-a ŋ́k-a wáána-ama-k°
not.be-REAL I-NOM visitor-AGT.SG-COP
I am not a visitor (lit 'It is not, I am a visitor.').

As described earlier (§9.10.1), Ik verbless copulative clauses consist of nouns inflected with the copulative case suffix {-kɔ}. These clauses are negated with the negative copula *bení-*. When this occurs, the complement of the negative copula can take either the nominative or copulative case.

(252) *Ɲeƙek.*
ɲɛƙɛ-kᵓ
hunger-COP
It's hunger.

Benia ɲeƙek.
beni-a ɲɛ́ƙɛ-kᵓ
not.be-REAL hunger-COP
It's not hunger.

(253) *Ncuk.*
ɲ́cu-k°
I-COP
It's me.

Benia ncuk/nk.
beni-a ɲ́cu-k°/ŋk-ª
not.be-REAL I-COP/I-NOM
It's not me.

In (252), the noun *ɲɛƙɛ-* receives a H tone on its first syllable as a result of high-tone insertion disrupting a sequence of more than three L tones.

9.16.4 Negative tags

Ik has two negative 'tags' that can be used following either positive or negative statements. When they are used, the speaker normally expects a corresponding positive reply. These tags and their replies are as follows:

(254)	*Nta ƙamatii?*	*Ƙamatad!*
	ńt-á ƙám-átì = ì$_{\text{INTERROG}}$	ƙám-át-a = d^{e}
	not-REAL be.like-3PL[IRR] = DP	be.like-3PL-REAL = DP
	Are they (i.e. words) not like that?	They are like that!

(255)	*...keɗe benia nti?*	*Ntia ɟa!*
	keɗe beni-a ńtí	ńtí-a = ɟa
	or not.be-REAL like.that	like.that = ADV
	...or is it not like that?	Just like that!

Finally, Ik has both positive and negative independent polarity particles: *ee/éé* 'yes' and *ńtóodó* 'no'. The particle *ńtóodó* seems to be morphologically complex, though it cannot be fully parsed out. In any case, it seems to incorporate the negator verb *ńt-*. In Ik, contrary to English, a negative reply to a negative question can be preceded by *ee/éé* 'yes', and positive reply to a negative question can be preceded by *ńtóodó* 'no'. Consider the following:

(256)	Negative question:	*Nta beɗidi?*
		ńt-á bɛ́ɗ-ídì$_{\text{INTERROG}}$
		not-REAL want-2SG[IRR]
		Don't you want (it)?

(257)	Possible answers:	
	Ee, nta beɗi.	*Ntoodo, beɗi.*
	ee ńt-á bɛ́ɗ-íᵗ	ńtóodó bɛ́ɗ-í-∅
	yes not-REAL want-1SG[IRR]	no want-1SG-REAL
	Yes, I don't want (it).	No, I want (it).