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

Schrock, T.B.

6 Case

The description of Ik 'case' is placed here between nouns and verbs because as a meta-categorial system, it applies to both these major word classes. Case is the backbone of Ik grammar. It permeates nearly every grammatical subsystem, such that a good grasp of it is key to knowing the language. Thus, beyond giving an overview of the case system (§6.1), this chapter's aim is to lay out the details of case in the nominal system (§6.2-6.3) and grammaticalized 'case' in other systems, particularly that of verbs (§6.4).

As far as case languages in Africa go, Ik is a magnificent specimen. The following artificially elicited (but fully grammatical) sentence illustrates this by making use of all eight morphological cases: Nominative[1], Copulative[2], Accusative[3], Ablative[4], Dative[5], Genitive[6], Instrumental[7], and Oblique[8]:

(1) *Benia ntsa amoo noo cea inwaa*

beni-a nts-a ámó-o=noo cɛ-a ínó-a

not.be-REAL he-NOM[1] person-COP[2]=REL.SG.PST3 kill-real animal-ACC[3]

He is not the person who killed the animal

rɨjaakoo sedee ntsie ɓiso nda nc.

ríɲá-aƙɔ-ɔ séde-e ntsí-é ɓɪs-ɔ ńda ɲc[i]

forest-inside-ABL[4] garden-DAT[5] he-GEN[6] spear-INS[7] with I[OBL][8]

from the forest in his garden with a spear with me.

A complex sentence like this one embodies the language's full-fledged morphological case-marking system. In addition to word order and connectives like *ńda* 'with', Ik uses this case system to mark grammatical relations and encode semantic roles in an integral and efficient manner.

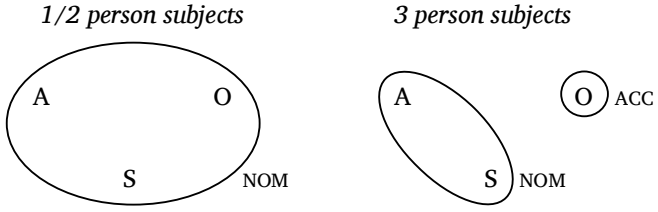
6.1 Case overview

> "The case marking typology of a language is surely its most central typological parameter, since almost all other parts of the grammar must interact with it."—Talmy Givón, quoted by Serzisko (1992:50)

All Ik nominals must be inflected for case, and formal parallels of nominal case markers are found in other diverse parts of the grammar. Due to its grammatical centrality, the Ik case system has already been the subject of several works (e.g. Heine 1990, König 2002, König 2008, and Schrock 2014). As König defines it, "a case system is an inflexional system of marking nouns or noun phrases for the type of relationship they bear to their heads… expressed by affixes, tone, accent shift, or root reduction…" (2008:5). Out of the above list, Ik uses a combination of affixes and stem reduction to encode case relations. The affixes are suffixes, and stem reduction means the stem-final vowel is deleted before some case suffixes.

Ik employs eight cases to encode grammatical relations between verbs and their arguments, or between arguments and modifiers (genitive). In König's African case typology, Ik is a *Type 2 split-accusative* system in which both the nominative and accusative cases are marked (2008:10). It is 'accusative' in that when core clausal arguments are marked differently from each other, S and A take the nominative case, while O takes the accusative case. And it is 'split' in that this accusativity only occurs when the subject (A) is third person. The objects (O) of first and second person subjects (A/S) take the nominative case. And when a subject (A/S) is preposed before the verb, for example in most types of subordinate clauses, it also takes the accusative.

(2)



Blake defines case as a typical system of "marking the relationship of a noun to a verb at the clause level or of a noun to a preposition, postposition or another noun at the phrase level" (1994:1). True to this definition, Ik case encodes the grammatical relations between a verb and its core arguments and any non-core arguments. And though in Ik the genitive case can mark arguments for some verbs, its main function is to mark the relationship between a noun phrase and a possessive nominal modifier.

A 'core argument' in Ik is generally defined as any verbal argument that cannot be represented by the dummy pronoun (§5.10). Normally such arguments are encoded with the nominative, accusative, or copulative cases, but as explained below, various complications occur. And as its label suggests, the 'oblique' case straddles the simple divide between 'core' and 'non-core' cases: It actually encodes all core arguments in imperative and optative clauses, as well as a variety of peripheral argument roles in other types of clauses, but it cannot be represented by the dummy pronoun. The basic case-marking scheme for clausal arguments in Ik is presented in (3):

(3) *Basic case-marking scheme on clausal arguments*

Core	NOM, ACC, COP, (OBL)
Non-core	INS, ABL, DAT, GEN, (OBL)

Subjects (A/S) of indicative clauses always bear the nominative case suffix:

(4) *Epa ŋok.*
ep-a ŋók-$^{a}_{S}$
sleep[3SG]-REAL dog-NOM
The dog is sleeping.

(5) *Ats'a ŋoka okak.*
áts'-á ŋók-á$_{A}$ ɔká-k^{a}
gnaw[3SG]-REAL dog-NOM bone-ACC
The dog is gnawing a bone.

Subjects (A/S) of conditional/hypothetical subordinate clauses with a sequential verb form are also marked with the nominative case. (This is because the syntax is interpreting the conjunction *na* as filling the verbal slot; indeed it can be followed by both tense and adverbial enclitics as any typical verb would. For more on subordinate clause syntax, see §9.9):

(6) *Na bia iryameiduo kaudzoe,…*
na = bi-a$_S$ iryám-é-idu-o kaúdzo-e
CONJ = you.SG-NOM get-VEN-2SG-SEQ money-DAT
If you come across money,…

(7) *Na feta nketoo bia,…*
na = fet-a$_A$ ŋk-ét-ɔ-ɔ bi-a
CONJ = sun-NOM eat-INCH-3SG-SEQ you.SG-ACC
If you get thirsty,… (lit. 'If the sun starts eating you,…)

But subjects (A/S) of all other types of subordinate clauses take the accusative case. In such clauses, the constituent order is SV/AVO, a deviation from the language's unmarked VS/VAO order. For yet unknown reasons, Ik syntax marks preverbal subjects (with the above exceptions of sequential subordinate clauses) with the accusative case, as in:

(8) *Noo ncia kwatsiyaad,…*
noo ɲci-a$_S$ kwáts-í-í-a = d^e
CONJ.PST3 I-ACC small-PLUR-1SG-REAL = DP
When I was small,…

(9) *Naa oŋoria wetetie koinia,…*
náa oŋori-a$_A$ wét-ét-i-e kɔíná-a
CONJ elephant-ACC drink-VEN-3SG-SIML scent-ACC
When the elephant catches the scent,…

However, the subjects (A/S)—or ‘vocatives’ if one prefers—of imperative and optative clauses take the oblique case:

(10) *Kae bi ɗemus!*
ƙa-é bi$_S$ ɗɛmʊs
go-IMP.SG you.SG[OBL] quickly
You go quickly!

(11) *Goƙaaketano ɲjin!*
goƙ-aak-ét-ano ɲjín$_S$
seated-DISTR-INCH-OPT we.INC[OBL]
Let us be seated!

The direct object (O) of a transitive clause in the indicative mood, with a first or second person subject, also takes the nominative case:

(12) *Ats’uƙotima naa ŋur.*
áts’-úƙɔt-ím-á = naa ŋʊr-^a_O
eat-COMP-1PL.EXC-REAL = PST1 cane.rat-NOM
We ate the cane rat up.

(13) *Rebida nk.*
réb-id-a ŋk-^a_O
deny-2SG-REAL I-NOM
You’re denying me (i.e. witholding sth. from me).

But the direct object (O) of 1) any clause with a third-person subject or 2) any transitive subordinate clause takes the ccusative case:

(14) *Ats’a kweta ɲcik.*
áts’-á kwɛt-a ɲci-k^a_O
eat[3SG]-REAL arm-NOM I-ACC
My arm is hurting me.

(15) *Isio rebidee ɲcik?*
isi-o [réb-id-e = e ɲci-k$^{a}_{O}$]$_{SUBORD}$
what-COP deny-2SG-REAL = DP I-ACC
Why are you denying me?

Direct objects (O) of imperative or optative clauses take the oblique case:

(16) *Duƙwee mese ni ɟakak.*
d-uƙo-e mɛse$_{O}$ = ni ɟáká-k^{e}
take-AND-IMP.SG beer[OBL] = DEM.PL elders-DAT
Take this beer to the elders.

(17) *Ogoe ziiƙoti riy.*
ógo-e zí-íƙɔt-ɪ ri$_{O}$
let-IMP.SG tie-COMP-3SG[OPT] goat[OBL]
Let him tie up the goat.

The subject of a copula clause (CS) is also marked with the nominative case. For a full list of examples, see §10.4. And the complement of a copula-of-identity clause (CC) is marked with the oblique case:

(18) *Mitima ŋgwa ɲot.*
mɪt-ím-á ŋgw-a$_{CS}$ ɲɔtᵊ$_{CC}$
be-1PL.EXC-REAL we.EXC-NOM men[OBL]
We are men.

Lastly, in copula clauses, the copula subjects (CS) are marked with the nominative and the copula complements (CC) with the copulative case:

(19) *J'akamoo nk.*
ɟák-ámo-o$_{CC}$ ŋk-$^{a}_{CS}$
elders-SING-COP I-NOM
'An elder am I.'

Thus are the core clausal arguments marked with case in Ik. When it comes to non-core (peripheral) arguments, their relations to the verb are encoded by five different cases (including the oblique). A representative example for each non-core case is provided in the next sentences, with an indication of some of the prototypical semantic roles they express. More detailed treatments of each non-core (and core) cases follow in the sections below.

(20) Oblique: *Cemata waako nda fek.*

cɛm-át-a	wáák-o	ŋ́da	fek$^{i}_{\text{ADDITION}}$
fight-3PL-REAL	play-INS	and	laughing[OBL]

They are playing and laughing.

(21) Instrumental: *Ɗalute ŋoki sew.*

ɗalút-e	ŋ́ókí	sɛw-$^{ɔ}_{\text{INSTRUMENT}}$
hit-IMP.SG	dog[OBL]	stick-INS

Hit the dog with a stick.

(22) Ablative: *Atsima awao.*

ats-ím-á	awá-$^{o}_{\text{SOURCE}}$
come-1PL.EXC-REAL	home-ABL

We're coming from home.

(23) Genitive: *Beɗa ɗawaa ntsi.*

bɛ́ɗ-á	ɗaʊ-a	ntsí-$\varnothing_{\text{POSSESSION}}$
want[3SG]-REAL	knife-ACC	s/he-GEN

He's looking for his knife.

(24) Dative: *Meesia bitik.*

me-es-í-á	biti-k$^{e}_{\text{RECIPIENT}}$
give-INT-1SG-REAL	you.PL-DAT

I will give (it) to you.

The following table presents a grammatical summary of the eight cases:

(25) *Ik case summary*

Case	Grammatical relation(s)	Semantic role(s)
NOM	1) Subject (A/S) of indicative main clauses and sequential subordinate clauses	Agent Donor Speaker Cogitator Perceiver Experiencer Theme Patient (passive)
	2) Object of indicative clauses with 1-2 person subjects	Patient Stimulus Complement
INS	Non-core argument	Instrument Path Manner Comitative Time Progressive
ABL	Non-core argument	Source Location Cause Stimulus
GEN	1) Modifier of noun phrase head	Possession
	2) Complement of similative clause	Stimulus
DAT	Non-core argument	Recipient Beneficiary...

		Location Goal Purpose
ACC	1) Object of indicative transitive clauses with 3SG or 3PL subjects	Patient Stimulus Complement
	2) Subject (A/S) of all but sequential subordinate clauses	(Same as NOM)
COP	1) Complement of Identity copula clauses	Identity
OBL	1) Non-core argument	Addition
	2) Complement of quotative clause	Message Thought
	3) Complement of Indentity copula clause	Identity
	3) Subject of imperative and optative clauses	(Same as NOM)
	4) Object of imperative and optative clauses	(Same as ACC)

6.2 Case suffixes

Ik case morphemes are suffixes that consist of a single vowel (-V), a -CV sequence, or a zero realization (Ø). These morphemes are analyzed as suffixes rather than clitics because they always attach directly to the head and not the edge of the noun phrase. And they are analyzed as suffixes rather than postpositions or compound N_2s because a) they are highly eroded and b) cannot take any suffixes themselves.

The case suffixes have L tone but undergo tone changes coming from the stem to which they attach. Though there are eight cases, only six are distinct suffixes. Two other case suffixes (the instrumental and the ablative) are identical in form but differ in whether they subtract the stem-final vowel. This difference creates the seventh case marker. Finally, an eighth case (the oblique) is zero-marked. The eight case suffixes are given in (26):

(26) *Ik case suffixes*

Case	Abbreviation	Case suffix	Stem reduction
Nominative	NOM	-a	Yes
Instrumental	INS	-ɔ	Yes
Ablative	ABL	-ɔ	No
Genitive	GEN	-ɛ	No
Dative	DAT	-kɛ	No
Accusative	ACC	-ka	No
Copulative	COP	-kɔ	No
Oblique	OBL	-Ø	No

6.2.1 Case allomorphy

The Ik case suffixes undergo intricate morphophonological variations that have confounded earlier attempts to analyze and describe the case system as a whole. From Crazzolara 1967 all the way to Schrock 2014, the literature reveals a progressing understanding of Ik case. Some of these tricky morphophonological variations include pre-pause devoicing (§2.3.1), inter-

vocalic consonant deletion (§2.9.3), vowel assimilation (§2.9.4), and vowel harmony (§3.1). A good way to become familiar with the variations is to look at the case declensions of several nouns, starting with *ŋókí-* 'dog':

(27) *Case inflection of ŋókí- 'dog'*

Case	Non-final (/___...#)	Final (/____#)
NOM	ŋók-á	ŋók-^{a}
INS	ŋók-ó	ŋók-^{o}
ABL	ŋókú-o	ŋókú-∅
GEN	ŋókí-e	ŋókí-∅
DAT	ŋókí-e	ŋókí-k^{e}
ACC	ŋókí-a	ŋókí-k^{a}
COP	ŋókú-o	ŋókú-k^{o}
OBL	ŋókí	ŋók^{i}

As shown in (27), Ik case suffixes have non-final and final forms. This division entails different things for different groups of case suffixes. First, all suffixes undergo devoicing in final, pre-pause environments (§2.3.1). Suffixes that consist of vowels only (NOM, INS, ABL, GEN) are devoiced or deleted, depending on the preceding consonant or vowel (see §2.3.1). For suffixes that consist of a -CV sequence (DAT, ACC, COP), their final vowel is also devoiced or deleted under the same conditions. For the one case that is zero-marked (OBL), the final vowel of the noun root or stem is devoiced. Second, all the suffixes that contain the segment /k/ (DAT, ACC, COP) lose the /k/ in their non-final forms. This deletion of /k/ is part of a larger, language-wide tendency to delete consonants in non-final positions (§2.9.3).

All case suffixes undergo vowel harmony (§3.5). Though the underlying forms of the case suffixes are posited as [-ATR], all the suffixes but NOM in (27) are [+ATR] because they have been harmonized by the [+ATR] *ŋókí-* 'dog'. Also, when a case suffix involving back vowels /ɔ, o/ follows a root with a high front vowel /ɪ, i/, the high front vowel is backed to /ʊ, u/. Vowel harmony and assimilation occur whether a /k/ intervenes or not.

Another variation—total vowel assimilation—occurs when a [-ATR] noun ending in /a/, like *ŋʊrá-* 'cane rat', is inflected for all eight cases:

(28) *Case inflection of ŋʊrá- 'cane rat'*

Case	Non-final (/___...#)	Final (/___#)
NOM	ŋʊr-a	ŋʊr-∅
INS	ŋʊr-ɔ	ŋʊr-ᵓ
ABL	ŋʊrɔ́-ɔ́	ŋʊrá-ᵓ
GEN	ŋʊrɛ́-ɛ́	ŋʊrá-ᵋ
DAT	ŋʊrɛ́-ɛ́	ŋʊrá-kᵋ
ACC	ŋʊrá-á	ŋʊrá-kᵃ
COP	ŋʊrɔ́-ɔ́	ŋʊrá-kᵓ
OBL	ŋʊra	ŋʊr

The data in (28) show how the non-final forms of the ablative, genitive, dative, and copulative cases totally assimilate the root-final /a/ of *ŋʊrá-*. Total assimilation of this type is widespread in the language (§2.9.4) and is an important key to unlocking the case system as a whole.

Finally, the [+ATR] noun *dakú-* 'tree', when inflected for all the cases, brings out a few more morphophonological variations, as discussed below:

(29) *Case inflection of dakú- 'tree'*

Case	Non-final (/___...#)	Final (/___#)
NOM	dakw-a	dakw-ᵃ
INS	dak-o	dak-ᵒ
ABL	dakú-ó (dakw-óó)	dakú-∅
GEN	dakú-é (dakw-éé)	dakú-ⁱ (dakwí-∅)
DAT	dakú-é (dakw-éé)	dakú-kᵉ
ACC	dakú-á (dakw-áá)	dakú-kᵃ
COP	dakú-ó (dakw-óó)	dakú-kᵒ
OBL	daku	dakᵘ

One thing to note from (29) is that in the nominative case, the root *dakú-* 'tree' does not surface **dak-a/dak-*^{a} 'tree-NOM'. This goes against what is normally expected from stem reduction. In fact, a small number of nouns ending in a back vowel retain them as the semi-vowel /w/. To see a list of other such exceptions to the rule, skip ahead to §6.3.1 on the nominative.

A second thing to note is that in the five cases that involve the full underlying noun root and a suffix consisting of a vowel only, a root-final back vowel may be optionally desyllabified to /w/ (§2.4.2). When this happens, the back vowel gives up its mora to the following case suffix, which results in the compensatory lengthening of that suffix.

Lastly, in the final form of the genitive case, when the genitive case suffix {-ɛ,e} follows a high back vowel, the high back vowel may raise it to /ɪ, i/.

6.2.2 Case origins

The precise origin of the Ik case suffixes is not known, but a clue may come from how they affix to nominal stems. As noted earlier, the case suffixes can be grouped according to their suffixation 'strategy'—subtracting or preserving the stem-final vowel. These different suffixation strategies may point to two different origins for the suffixes. Ik syllable structure does not allow consonant clusters, so those case suffixes that begin with /k/ (accusative {-ka}, dative {-kɛ}, and copulative {-kɔ}) require the stem-final vowel to remain to prevent a CC sequence. It seems likely, then, that the ablative {-ɔ} and genitive {-ɛ} may have once contained a consonant as well, since they preserve the stem-final vowel. The nominative {-a} and instrumental {-ɔ} suffixes, though, seem to have originated as single vowels since they do not require the stem-final vowel to break up a CC sequence.

In terms of ultimate origin, according to Heine & Kuteva, there are three known pathways for the evolution of case markers (2007:62, 75, 91):

(30) *Evolutionary pathways for case markers*

1	Noun > (adposition) > case marker
2	Verb > case marker
3	Adposition > case marker

As a working hypothesis, Ik case markers may have originated from N_1-N_2 compounds where the N_2 first desemanticized slightly to become an adposition. The adposition (postposition) then desemanticized further and eroded phonetically to become the language's present-day case morphemes. Even today, compounding is the language's primary nominal word-building mechanism (see §4.3.). Lexical compounds join nouns to nouns, as in:

(31) *Lexical compounds*

bɛfá-céméɾ	'*Cissus rhodesiae* herb'	(puff adder-herb)
aká-kwá[1]	'lip'	(mouth-edge)
dĩɗe-ŋwa	'female donkey'	(donkey-female)
lɛra-aƙw[a]	'White-Thorn place'	(White Thorn-inside)
wáána-ho	'church'	(prayer-hut)

In principle, any noun in the language can be a compound's N_2 (though not all will be semantically acceptable), but a smaller subset of nouns are more productive and seem to be in the process of shifting from the status of full nouns to nominal adpositions or even suffixes. They include the following:

(32) *Grammaticalizing compound N_2s*

aƙɔ́-	'interior'	>	Inessive case suffix?
ámá-	'person'	>	Agentive singular suffix?
icé-	'(Ik) people'	>	Agentive plural suffix?
imá-	'child'	>	Diminutive singular suffix?
wicé-	'children'	>	Diminutive plural suffix?

The nominals in (32), while today still full nouns in their own right, also function in compounds with semi-grammatical functions. It looks like a slow

transition from noun to adposition or inflectional morpheme is currently underway. Admittedly a matter of speculation, this idea is given just as a possible scenario for how Ik case suffixes developed. And unfortunately, it is not known whether any of the Ik case suffixes could be tied to any nouns with full lexical status synchronically; these have yet to be identified.

In terms of areal parallels for the Ik case system, the closest place to look is Teso-Turkana. Dimmendaal's description of the Turkana case system reveals a few similarities with Ik but also substantial differences (1983:66-67). With six cases (absolutive, nominative, genitive, instrumental, locative, and vocative), Turkana has almost as many as Ik. But a crucial difference is that Turkana cases are marked with tone rather than affixes. Also, while Ik is both a marked nominative *and* marked accusative language, Turkana is only a marked nominative language: Direct objects, indirect objects, and a noun's citation form are all unmarked as absolutive. But post-verbal clauses subjects take the tonally marked nominative case. So if Teso-Turkana had influence on the development of the Ik case system, it was through syntax only and not morphology. Tone plays no role at all in Ik case marking.

As a putative close relative of Ik, the Kuliak So exhibits substantial morphological decay of an older Kuliak case system that Ik has more fully retained (Carlin 1993:90-93). The table in (33) presents the author's analysis of the current overlap between the case systems in both languages. Namely, the So 'goal' case morpheme *-Vk* is a relic of the Ik dative case morpheme {-kɛ} but has taken only some of its semantic roles (goal and recipient). The Location role of the Ik dative case has been assumed by the So 'locative' case *-a/o*. But this case now also shares roles handled by the Ik ablative case {-ɔ} (e.g. location) and in one of its allomorphs shares the form as well. The So 'circumstantial' case seems to take its current form (*-ʊk*) from the Ik copulative case, which, in combination with a verb-final vowel often looks like *-ʊkᵊ*. The So circumstantial case shares the semantic roles of instrument and cause with the Ik ablative case:

(33) *Comparison of Ik and So case suffixes*

Ik		So		
OBL	-Ø			
NOM	-a			
DAT	-kɛ	-Vk	‘Goal’	
		-a, -o	‘Locative’	
ABL	-ɔ			
INS	-ɔ	-ʊk	‘Circumstantial’	
COP	-kɔ			
ACC	-ka			
GEN	-ɛ			

6.3 Case on nouns

The present section presents details of each of the eight cases as they apply to their function in the nominal system. Formal parallels to case suffixes and their functions in other grammatical subsystems are treated in §6.4.

6.3.1 Oblique

The oblique case is the only zero-marked (Ø) case in Ik. As such, it segmentally mirrors a noun’s basic underlying lexical form. But in their non-final forms, nouns with a tone melody LH surface as LL. That is, tone may minorly distinguish the oblique case from the lexical base of some nouns. In the oblique case, stem-final vowels are devoiced or deleted before a pause. The paradigm for oblique, as well as those for the other cases, show nine nouns each ending with one of the language’s nine contrastive vowels:

(34) *Oblique case paradigm*

Basic form[OBL]	Non-final	Final	Gloss
ŋókí-Ø	ŋókí	ŋók^{i}	‘dog’
sɪsí-Ø	sɪsɪ	sɪs	‘honey-beer’

ɓóré-Ø	ɓóré	ɓór	‘corral’
ɲɛkɛ-Ø	ɲɛkɛ	ɲɛkᵉ	‘hunger’
ŋʊrá-Ø	ŋʊra	ŋʊr	‘cane rat’
zɪnɔ́-Ø	zɪnɔ	zɪn	‘zebra’
ɗéró-Ø	ɗéró	ɗér	‘rat’
kafʊ-Ø	kafʊ	kafᵘ	‘thorn’
dakú-Ø	daku	dakᵘ	‘tree’

Despite the near identity of a noun’s basic form and oblique case form, the Oblique must be maintained as a proper case of its own. This is because it is required for specific, unique grammatical relations and semantic roles.

The Ik oblique case marks out the following seven grammatical functions:

(35) *Oblique case grammatical functions*

1	The subject of imperative and optative clauses.
2	The object of imperative and optative clauses.
3	The complement of identity copula clauses.
4	The first element in a nominal compound.
5	The nominal complement of a quotative clause.
6	A vocative.
7	A noun after a preposition

The first function of the oblique case—marking the subject (A/S) of an imperative or optative clause—is illustrated in the two following examples:

(36) *Kae bi awak.*

ƙa-é	bi_S	awá-kᵉ
go-IMP.SG	you.sg[OBL]	home-DAT

You go home!

(37) *Talake ǰa ngo ceiḱotima gaso.*
talák-é = ǰa ŋgo$_{A}$ cɛ-íḱɔ́t-ıma gaso$_{O}$
let-IMP.SG = ADV we.EXC[OBL] kill-COMP-1PL.EXC[OPT] warthog[OBL]
And then (lit. 'let go') we just killed the warthog.

The second function—marking the object (O) of an imperative or optative clause—is illustrated in (38) for imperative and (39) for optative:

(38) *Dee ɗi nak.*
d-e-e ɗı$_{O}$ = nák^{a}
bring-VEN-IMP.SG one[OBL] = DEM.SG.PST1
Bring the one of earlier!

(39) *Nesibano nai na.*
nesíb-ano naí$_{O}$ = na
hear-OPT here[OBL] = DEM.SG
Let's listen here (i.e. 'Let's listen to this.')

The third function of the oblique case—marking the complement of an identity copula clause—is shown in the next two examples. In an Ik copula clause of identity, the copula *mıt-* 'be (sth. or sb.)' links the copula subject (CS) with the copula complement (CC). As seen below, the copula subject occurs in the nominative case, while the complement occurs in the oblique:

(40) *Mitiya noo terega ntsie ɗusesi ts'iḱae.*
mit-i-a = noo terég-a$_{CS}$ ntsí-é ɗus-ésí$_{CC}$ ts'ıḱá-^{ɛ}
be-PLUR-REAL = PST3 work-NOM he-GEN dip-INF[OBL] bees-GEN
His work used to be to collect bees (i.e. to 'dip' honey).

(41) *Mita noo kiǰa otae.*
mıt-a = noo kíǰ-á$_{CS}$ ɔtá$^{I}_{CC}$
be-REAL = PST3 land-NOM wet.season[OBL]
The land was wet season (i.e. it was wet season).

The fourth function of the oblique case is to mark the first element (N_1) of a nominal compound. The first nominal element must be in the oblique case, while the second element takes whatever case the syntactic context calls for. In this grammar, compounds are identified with a hyphen between the two nouns or pronouns in question. (42) gives two examples of compounds in isolation, and (43)-(44) give two in complete sentences:

(42) *ɗerocemer* *epuaw*
ɗéró-cɛmɛ́r-^{Ø} epú-áw-^{Ø}
rat[OBL]-herb-NOM sleep[OBL]-place-NOM
rat poison sleeping place

(43) *Kaini ƙaatie mariŋikagwariik.*
ƙa-ini ƙá-áti-e maríŋ-íka-gwarí-ík-^{o}
go-SEQ go-3PL-SIML fence-PL[OBL]-top-PL-INS
And they went, going by the fence-tops.

(44) *Zeƙwesoo ɟaka dakudeao.*
zɛƙw-ɛs-ɔ-ɔ ɟák-á dakú-dɛa-^{ɔ}
sit-IPFV-3SG-SEQ elders-NOM tree[OBL]-foot-ABL
And the elders were sitting at the foot of the tree.

The fifth function of the oblique case is to mark the complement of a quotative clause if the complement is a single noun, usually *isi-* 'what':

(45) *Kutia naa bie is?*
kʊt-í-a = naa bi-e [is]$_{\text{QUOT COMPLEMENT}}$
say-1SG-REAL = PST1 you.SG-DAT what[OBL]
I said to you what?

The sixth function of the oblique case is to mark the 'vocative', that is, any noun referring to a person being called. Take the following examples:

(46) *Ee wice!* *Iyida, abaŋi?*
éé wice i-íd-a abáŋi
INTJ children[OBL] be-2SG-REAL my.father[OBL]
Hey, children! Hello, father (lit: 'Are you there?')!

The seventh function of the oblique case is to mark nouns coming after any of the following five prepositions: *akɪlɔ* 'instead of' and *(i)kóteré* 'because of' (from Teso-Turkana), *gone* 'until/up to', *ŕtʻda* 'and/with', and *páka* 'until/up to' (from Swahili). Three other prepositions take the genitive case (see §8.5). The fact that the oblique case is used after mostly-borrowed prepositions confirms that the oblique is a case for 'left-over' case functions.

Examples of *páka*, *(i)kóteré*, and *gone* are shown below with the oblique:

(47) *Tubini ntsia toroɓo paka ak.*
túb-ini ntsí-á toroɓ-ó páka ak[a]
follow-SEQ he-ACC breastbone-INS until mouth[OBL]
It (i.e. urine) followed the center of his torso down to his mouth.

(48) *Ŋapei nee Lokinenee paka Lopokok…*
ŋapei né-é lokinéné-é páka lopokók[o]…
from here-DAT Lokinene-GEN until Lopokok[OBL]
From here in Lokinene up to Lopokok…

(49) *Kotere is? Kotere kainika ni gaan.*
kóteré is kóteré kaɪn-ɪka = ní gaan-[Ø]
because.of what[OBL] because.of year-PL[OBL] = REL.PL bad-REAL
Because of what? Because of bad years.

(50) *Iryametia fiyekesie ncie kotere kiroti nci.*
iryam-et-í-á fiyek-esí-é ɲci-e kóteré kirotí ɲci-[Ø]
get-VEN-1SG-REAL live-INF-DAT I-GEN b'se.of sweat[OBL] I-GEN
I get my livelihood because of my own sweat.

(51) *Koyaa gone at, gone seda ɟakamae.*

ƙó-i-a	gone	át^{i}	gone	séda	ɟák-áma-^{e}
go-1SG-SEQ	up.to	FILL[OBL]	up.to	garden[OBL]	elders-SING-GEN

And I went up to the, um...the garden of the elder.

(52) *Atsini gone ndai?*

ats-ini	gone	nda^{i}
come-SEQ	up.to	where[OBL]

And they came up to where?

The preposition *ń^{ɬ}da* 'and/with' is often used elsewhere as a connective to join whole independent clauses (see §10.1.10. But the following examples show it preposed to nouns or noun phrases taking the oblique case:

(53) *Atsese gone awa toroɓo nda ɲoropuo...*

ats-ese	gone	awa	toroɓ-o	ń^{ɬ}da	ɲorópúó...	
come-SPS	up.to	home[OBL]	breastbone-INS	and	organs[OBL]	

And people came up to home with the breastbone and the organs...

(54) *Ƙaini kot nda kokesi hoikee dii.*

ƙa-ini = kot^{o}	ń^{ɬ}da	kɔk-ɛ́sí	hó-íke-e = ^{ɬ}díí	
go-SEQ = ADV	and	close-INF[OBL]	house-PL-GEN = ANPH.PL	

And then they went and closed up those houses.

In some instances, though, a noun in another case other than the oblique can be found after *ń^{ɬ}da*. This happens when a verb 'sees through' *ń^{ɬ}da* to assign a case role. In the following example, the verb *egini* assigns the dative case to mark its conjoined complex indirect object (with a Goal role):

(55) *Egini guritinie nda ŋatametaak.*

eg-ini	gúr-ítíní-e	ń^{ɬ}da	ŋátámɛtaá-k^{e}	
put-SEQ	heart-PL-DAT	and	thoughts-DAT	

And they put (it) in their hearts and thoughts.

6.3.2 Nominative

The nominative case suffix {-a} has engendered more than its share of confusion in the descriptive literature. Referring to this morpheme, Heine & König state that "Like Crazzolara, we consider the 'complemental suffix' to be a functionally empty appendage of nouns…in their unmarked form. Accordingly, it is interpreted as a morphologically redundant ending…" (1996:137). Later, the segmental similarity between the nominative {-a} and the accusative {-(k)a} led to the following comment (König 2008:73):

> "The final vowel *-a* has a unique value in the system. All words or particles of the language end by default in the vowel *-a*, and so are nominative and accusative case forms (in the non-final form). It remains unclear whether the *- a* of the nominative and accusative is triggered by the general rule of the language to use vowel *-a* as a default ending of each word or whether *-a* has the value of an independent case suffix encoding nominative or accusative."

By contrast, the claim made in this grammar is that the morpheme {-a} is functionally very significant, as both a marker of nominative case and realis modality in the verbal system (§7.6.2). This morpheme has a L tone but assimilates to the tone melody projected by the stem it attaches to (T7). It is one of the language's opaque dominant suffixes (§3.1.3), and as such can also be represented as {-a^{+}}. One if the nominative's characteristics that has produced confusion in the past is its subtraction of stem-final vowels. It and the instrumental case suffix {-ɔ} are the only two cases that do this. Before pauses, the nominative surfaces as /-^{a}/ or /-∅/. Lastly, if a noun's final vowel is a back vowel, it may desyllabify before {-a}:

(56) *Nominative case paradigm*

Basic form-NOM	Non-final	Final	Gloss
ŋókí-a	ŋók-á	ŋók-[a]	‘dog’
sɪsí-a	sɪs-a	sɪs-∅	‘honey-beer’
ɓóré-a	ɓór-á	ɓór-∅	‘corral’
ɲɛkɛ-a	ɲɛk-a	ɲɛk-[a]	‘hunger’
ŋʊrá-a	ŋʊr-a	ŋʊr-∅	‘cane rat’
zɪnɔ́-a	zɪn-a	zɪn-∅	‘zebra’
ɗéró-a	ɗérw-á	ɗérw-[a]	‘rat’
kafʊ-a	kaf-a	kaf-∅	‘thorn’
dakú-a	dakw-a	dakw-[a]	‘tree

On stems with back vowels (/ɔ, o, ʊ, u/) as their final vowel, one cannot predict whether the vowel will be deleted or desyllabified. Out of a sample of sixty-eight nouns ending in a back vowel, only the following fifteen (22%) underwent desyllabification (in order of root-final back vowel):

(57) *Desyllabification of back vowels in the nominative case*

cikó-	→	cikw-a	male-NOM
diyo-	→	diyw-a	lookout-NOM
ído-	→	ídw-a	milk-NOM
ínó-	→	ínw-á	animal-NOM
natsiko-	→	natsikw-a	granary.cover-NOM
paɗo-	→	paɗw-a	small.cave-NOM
pakó-	→	pakw-a	cave-NOM
tsɪkɔ́-	→	tsɪkw-a	tree.species-NOM
mízɪʒɔ-	→	mízɪʒw-a	tree.species-NOM
ɗaʊ-	→	ɗaw-a	knife-NOM
káú-	→	káw-á	ash-NOM
dakú-	→	dakw-a	tree-NOM
ekú-	→	ekw-a	eye-NOM
buƙú-	→	buƙw-a	marriage-NOM
ɛkɛ́ú-	→	ɛkɛw-a	muscle.fiber-NOM

Contrary to the nouns in (57), most nouns ending in a back vowel lose the vowel entirely in the nominative and instrumental cases (see next section), as in *sɔkɔ́-* → *sɔk-a* 'root-NOM' and *habu-* → *hab-a* 'tree.hive-NOM'. Looking at nouns that delete their final vowel versus those that desyllabify it, the reason for this discrepancy is not obvious. It likely represents a historical morphological change toward or away from desyllabification. That nominative-case desyllabification is lexical and not post-lexical is shown by the fact that compensatory lengthening does not occur on the case suffix. Back vowels also desyllabify after the non-final accusative case allomorph /-a/, but when they do, compensatory lengthening occurs. For example, compare *dakú-* 'tree' as *dakw-a* 'tree-NOM' and as *dakw-áá* 'tree-ACC'.

The nominative case marks out the following five grammatical functions:

(58) *Nominative case grammatical functions*

1	The citation or isolation form of nouns.
2	The subject (A/S) of indicative main clauses.
3	The subject (A/S) of sequential subordinate clauses.
4	The object (O) of transitive clauses with 1-2 person subjects.
5	A fronted (left-dislocated or apposed) argument.

The first function—marking a noun's citation or isolation form—is clearly seen with isolated nouns (57 above) or in response to *Isio ɗa* 'What is it?':

(59) Isio ɗa? 'What is it?' → ŋɔ́k^{a} 'a dog'

The second function—marking the subject (A/S) of indicative main clauses—is the most common function of the nominative case, e.g.:

(60) *Ƙaa naa roɓa ndaik?*
ƙa-a = náa roɓ-a$_{S}$ ndaí-k^{e}
go-REAL = PST1 people-NOM where-DAT
Where did the people go?

(61) *Iya noo koto ɲeƙa zuk.*
i-a = noo = kóto ɲɛƙ-a$_S$ zuk^u
be-REAL = PST3 = ADV hunger-NOM very
There was a lot of hunger then.

(62) *H'yea noo ntsiceka ɟii naperitik.*
ɦye-a = noo ntsí-cék-a$_A$ = ɟɪɪ napéríti-k$^a{}_O$
know-REAL PST3 he-woman-NOM = also camp-ACC
His wife also knew the campsite.

The third function of the nominative is to mark the subject (A/S) of preposed (non-chained) subordinate clauses with sequential verbs:

(63) *Na kiɟa ɓetsuƙotuo,...*
na = kíɟ-á$_S$ ɓets'-úƙót-u-o
CONJ = land-NOM white-COMP-3SG-SEQ
When the land gets light,…

(64) *Na tsora iwuo leŋaa,...*
na = tsɔ́r-á$_A$ iw-u-o lɛŋá-á$_O$
CONJ = baboon-NOM hit-3SG-SEQ ratel-ACC
When the baboon hit the ratel,…

The fourth function—marking the object of first or second person subjects—is illustrated below. As further discussed in §6.3.6, a third person subject always takes an object in the accusative case. But in clauses with first or second-person subjects, both A and O are in the nominative:

(65) *Nta nka wetiii idw.*
ńt-á ŋk-a$_A$ wet-í-íí ídw-$^a{}_O$
not-REAL I-NOM drink-PLUR-1SG milk-NOM
I don't usually drink milk.

(66) *H'yeida ama na.*
ɦye-íd$_{A}$-a ám-á$_{O}$ = na
know-2SG-REAL person-NOM = DEM.SG
You know this person.

(67) *Bedîma ƙoona Kaaɓoŋje ts'oo.*
bɛ́ɗ-ím$_{A}$-a ƙo-on-a$_{O}$ kaaɓóŋi-e ts'ɔɔ
want-1PL.EXC-REAL go-INF-NOM Kaabong-DAT now
We want to go to Kaabong now.

The fifth function of the nominative case—marking a fronted argument (often followed by a pronoun in the copulative case)—is illustrated below:

(68) *Roɓa nii, ntuo bee ƙaata Kalapataak.*
roɓ-a = nií ńtú-o = bee ƙá-át-a kalapataa-k^{e}
people-NOM = DEM.PL they-COP = PST2 go-3PL-REAL Kalapata-DAT
These people, it was they who went to Kalapata yesterday.

(69) *Oŋoraa, saɓuƙotaa noo muŋu Icekiǧao.*
oŋor-aá sáɓ-úƙot-a-a = noo muŋu icé-kíǧa-^{o}
elephant-NOM kill[PL]-COMP-IPS-REAL = PST3 all Ik-land-ABL
Elephants, they were all killed off in Ikland.

6.3.3 Instrumental

The instrumental case suffix {-ɔ} may have an areal parallel in the South Omotic language Dime's locative suffix *-ó* (Mulugeta 2008:55)—no other possible links have been identified. Regardless, the Ik suffix has L tone but may take a H projected by the noun stem's melody. It is a recessive suffix harmonizable to /-o/ by a [+ATR] stem. Like the nominative, it deletes the noun stem's final vowel. Before a pause, the instrumental suffix is devoiced to /-^{ɔ}/ or /-^{o}/. And in these final form allomorphs, it may be reduced

phonetically to mere labialization on the stem-final consonant (especially nasals). Often, the labialization is not audible at all but only visible.

An interesting further trait of the instrumental suffix is that, while it is devoiced before a pause, it is never deleted. Even if devoiced, it minimally leaves a trace of labialization. So this is an example where the grammar overrides its tendency to delete devoiced vowels for the sake of meaning. For if {-ɔ} was allowed to be deleted, it would be ambiguous with the nominative case suffix which may be fully deleted. The following table shows the presence of the suffix, irrespective of the preceding consonant:

(70) *Instrumental case paradigm*

Basic form-INS	Non-final	Final	Gloss
ŋókí-ɔ	ŋók-ó	ŋók-ᵒ	'dog'
sɪsí-ɔ	sɪs-ɔ	sɪs-ᵊ	'honey-beer'
ɓóré-ɔ	ɓór-ó	ɓór-ᵒ	'corral'
ɲɛƙɛ-ɔ	ɲɛƙ-ɔ	ɲɛƙ-ᵊ	'hunger'
ŋʊrá-ɔ	ŋʊr-ɔ	ŋʊr-ᵊ	'cane rat'
zɪnɔ́-ɔ	zɪn-ɔ	zɪn-ʷ	'zebra'
ɗéró-ɔ	ɗér-ó	ɗér-ᵒ	'rat'
kafʊ-ɔ	kaf-ɔ	kaf-ᵊ	'thorn'
dakú-ɔ	dak-o	dak-ᵒ	'tree'

The instrumental case has the grammatical function of marking a non-core argument expressing any of the following six semantic roles:

(71) *Instrumental case semantic roles*

1 Instrument/Means
2 Path
3 Comitative
4 Manner
5 Time
6 Occupative Aspect

First, the instrumental case is used to encode peripheral arguments that denote an Instrument or Means by which an action is realized. The following two sentences illustrate this specifically 'instrumental' case role:

(72) *Kokese akina makulik.*

kɔk-ɛsɛ	ak-ɪn-a	makúl-ík-°
close-SPS	mouth-POSS.PL-NOM	grass.over-PL-INS

And its openings were closed with grass covers.

(73) *Taa buƙa noo bia ino tana?*

taa	buƙ-a = noo	bi-a	ín-ó	taná-∅
QUOT	marry-REAL = PST3	you-ACC	animal-INS	how.many-REAL

So he married you with how many animals?

A culturally relevant usage of the instrumental case to encode the Means role involves the verb *bír-és* 'to avail, assist with'. In Ik collective society, one is expected to share any acquired resources, from snuff tobacco to meat to clothing to water, etc. The preferred phrase used to acquire assets from another person is constructed with the formula *bíré* NP[OBL] NP-INS, in other words "Assist me/us with X." A couple of examples will suffice:

(74) *Bire nci cwo.*

bír-é	ɲci	cu-°
assist-IMP.SG	I[OBL]	water-INS

'Assist me with water (or 'Give me water.').

(75) *Biroo ngo nƙaƙ.*

bír-ɔ́ɔ	ŋgo	ŋƙáƙ-°
assist-IMP.PL	we.EXC[OBL]	food-INS

'Assist us with food (or 'Give us food.').

When requests like the one in (74) are made, the peripheral argument may be dropped. This formulaic request is so often used it is typically

phonetically reduced to something like [bríɲcˀ]. Such a reduced surface form seems to have given rise to the phrase *brinji lotop* 'Give me tobacco' of Colin Turnbull's fame (1972:299). His phrase can actually be parsed as:

(76) *"Brinji lotop."*

bír-é	ɲ́ci	lɔ́tɔ́ɓ-ᵓ	→	[bríɲtʃi̯ lɔ́tɔ́ɓ̚ˀ]
assist-IMP.SG	I[OBL]	tobacco-INS		

'Assist me with tobacco (or 'Give me tobacco.').

Second, the instrumental case is used to encode peripheral arguments that denote a Path: a place by or through which a motion or action is realized:

(77) *Atsimaa sabo didik.*

ats-ima-a	sab-o	didi-kᵉ
come-1PL.EXC-SEQ	river-INS	up-DAT

And we came up by way of the river.

(78) *ŋatiini awoo xaino gai.*

ŋat-í-íni	awó-ó	ʃa-in-o	ˈgáí
run-PLUR-SEQ	home-ABL	direction-POSS.PL-INS	both

And they ran from the home by way of both directions.

Thirdly, the instrumental case is used to encode peripheral arguments that denote an entity with which an agent goes somewhere. This role is 'instrumental' in that the agent takes an object somewhere by the hand to thereby achieve some goal. This case role is most common with inanimate objects or animate entities that have little control over the event. The following two sentences show this Comitative role of the instrumental case:

(79) *Koyaa naa kuruɓad.*

ƙó-í-a = naa	kúrúɓád-ᵒ
go-1SG-REAL = PST1	things-INS

I went with (my) things.

(80) *Atsuo eakwa ƙayuo nk, zeiike ɟik.*
ats-u-o ɋakw-a ƙa-i-o ŋk-^{o} ze-íí-ke ɟík^{ɪ}
come-3SG-SEQ man-NOM go-3SG-SEQ I-INS big-1SG-SIML ADV
And the man came and went with me, I being quite grown up.

The use of the instrumental case in (80) indicates that once a dowry was paid, the woman had less control over her going since she was being led away as the property of the man. If she had gone fully on her own accord, it may have been worded instead as *ń^{ɬ}da ɲc^{i}* 'with me'.

Fourthly, the instrumental case is used to encode peripheral arguments that denote the Manner or the way in which an action is accomplished. Such arguments have an adverbial function in that they modify the semantics of the main verb, giving information on how an action is realized:

(81) *Rɑɟetuo ebitini nayee ɲeryaŋie batanon.*
raɟ-et-úó ɛ́b-ɪtíní naí-é ɲɛryaŋí-ɛ́ batán-ón-^{w}
return-VEN-IMP.PL gun-PL[OBL] place-DAT g'ment-GEN be.easy-INF-INS
Turn in the guns to the government easily (i.e. without problems).

(82) *Sea ni ɗuo kutanee Hyotodo* ŋapeon.
se-a = ni ɗú-ó kʊt-an-é = e ɦyɔ-tod-o *ŋápɛɔn*
blood-NOM = DEM.PL PRO.PL-COP say-IPS-REAL = DP cow-talk-INS *ŋapeon*
This blood is the one called *ŋapeon* in the Karimojong language.

As shown in (82), 'in X language' is rendered in Ik with the name of the language plus the instrumental case, here "by 'cow talk'", i.e. Karimojong.

Fifthly, the instrumental case is used to encode peripheral arguments that denote the Time during which an activity or state takes place. This case role is 'instrumental' in that a given period of time is used as chronological space through which an event or activity can be achieved:

(83) *Nanoo koto ɲeƙea gaaniyee kainiko dii.*
na = noo = kótó ɲɛƙɛ-a gaan-i-é = e kaín-ík-o = ˈdíí
CONJ = PST3 = ADV hunger-ACC bad-PLUR-REAL = DP year-PL-INS = ANPH
So when hunger had gotten bad in those years...

(84) *Hakwiana aɗo aƙwedo kainie kon.*
hakw-í-án-a aɗ-o áƙw-éd-ɔ kaıní-é kɔn-∅
gather-PLUR-IPS-REAL three-INS inside-POSS.SG-INS year-GEN one-REAL
They [white-ants] are usually gathered three times in one year.

Lastly, the instrumental case is used to mark arguments in a special syntactic construction used to express Occupative Aspect (§9.5.3). The construction is made up of the verb *cɛm-* 'fight' and a nominalized verb in the instrumental case. So a clause like 'He is working' is rendered in Ik as 'He is fighting with work'. The following three sentences illustrate this role:

(85) *Cema saa ibito waicikae.*
cɛm-a sa-a íbit-o wa-ıcíká-ᵉ
fight-REAL some-NOM planting-INS greens-PL-GEN
Some (others) are planting greens (i.e. 'fighting with planting').

(86) *Cemesoo didia wat.*
cɛm-és-ɔ́-ɔ didi-a wat-ᵒ
fight-IPFV-3SG-SEQ weather-NOM raining-INS
And it was raining (i.e. 'fighting with raining.').

(87) *Cemetoo imaɗ.*
cém-ét-ɔ-ɔ ımáɗ-ᵓ
fight-INCH-3SG-SEQ dressing-INS
And he began dressing (a wound) (i.e. 'fighting with dressing').

6.3.4 Ablative

Like the instrumental, the ablative case suffix has the form {-ɔ}. It has a likely parallel in the Lowland Cushitic language Saho where the suffix *-ko* is the bound form of a 'source marker' (Banti & Vergari 2005:14). If these forms are cognate, that would explain why the Ik ablative suffix does not subtract the stem-final vowel: In an older form as **-kɔ*, it would have required that vowel to break up a disallowed CC cluster. Another potential parallel is the locative suffix *-ó* in South Omotic Dime (Mulugeta 2008:55).

The ablative case suffix has a L tone but may take a H depending on the tone melody of the stem (T7). It is recessive in terms of vowel harmony, but harmonizes to /-o/ when attached to a [+ATR] stem. The crucial morphological difference between the ablative and instrumental suffixes is that, unlike the instrumental, the ablative does not subtract the nominal stem-final vowel. Instead, the final vowel remains. Before a pause, the ablative suffix is devoiced to /-ˀ/ or /-ᵒ/. And if the ablative suffix attaches to a stem ending in a high back vowel (/ɔ, o, ʊ, u/) before a pause, it may not be heard audibly at the surface level of pronunciation (i.e. [-∅]:

(88) *Ablative case paradigm*

Basic form-ABL	Non-final	Final	Gloss
ŋókí-ɔ	ŋókí-o	ŋókú-∅	'dog'
sɪsí-ɔ	sɪsɔ́-ɔ́	sɪsú-∅	'honey-beer'
ɓóré-ɔ	ɓóré-o	ɓóré-ᵒ	'corral'
ɲɛkɛ-ɔ	ɲɛkɔ-ɔ	ɲɛkɛ-ˀ	'hunger'
ŋʊrá-ɔ	ŋʊrɔ́-ɔ́	ŋʊrá-ˀ	'cane rat'
zɪnɔ́-ɔ	zɪnɔ́-ɔ́	zɪnɔ́-∅	'zebra'
ɗéró-ɔ	ɗéró-o	ɗéró-∅	'rat'
kafʊ-ɔ	kafʊ-ɔ	kafʊ-∅	'thorn'
dakú-ɔ	dakú-ó	dakú-∅	'tree'

As (88) shows, the ablative suffix is involved in several kinds of vowel assimilations (see §2.9.4). For example, if the final vowel of a nominal stem in a phrase-medial position is /ɪ/ or /a/, these two vowels get totally assimilated to the ablative suffix (see *sɪsí-* 'honey-beer' and *ŋʊrá-* 'cane rat'). Also, if the final vowel of a nominal stem in a phrase-final position is /i/ or /ɪ/, these vowels get partially assimilated to /u/ and /ʊ/ respectively.

In terms of grammatical function, the ablative case is used to mark non-core clause arguments with 'from' or 'at' semantic roles including the following:

(89) *Ablative case semantic roles*

1	Source
2	Cause
3	Stimulus
4	Location
5	Experiencer

First, the ablative case is used to mark peripheral arguments that encode the physical or geographical Source of an action or motion. The following sentences illustrate this prototypical ablative role:

(90) *Atsia naa awoo ne*

ats-í-á = naa awó-ó = ne

come-1SG-REAL = PST1 home-ABL = DEM.SG.MED

I came from that home.

(91) *Kanetaa ɟumʊɟumasia cuaako.*

ƙan-et-á-á ɟʊmʊɟʊm-ası́-a cuá-áƙɔ-∅

take-VEN-REAL-PRF sand-ABST-ACC water-inside-ABL

He has taken sand out of the water.

Second, the ablative case is used to mark peripheral arguments that encode the Location of an action or state. The first two sentences below illustrate this role with intransitive verbs, while the second two do it with transitives:

(92) *Sarata epa hoikao.*
sár-át-a ep-a hó-íka-°
still-3PL-REAL sleep-REAL hut-PL-ABL
They are still sleeping in the huts.

(93) *Iwiya ceŋa nee ɓeƙesanee muceeo.*
iw-i-a cɛŋ-a nɛ́ɛ́ ɓɛƙɛ́s-án-é=e muceé-°
hit-PLUR-REAL woodpecker-NOM CONJ walk-IPS-REAL=DP path-ABL
The woodpecker makes a call when people are walking on the path.

(94) *Ceyoo fetieku!*
cɛ-íɔ́ fetí-éku-°
kill-IMP.PL sun-eye-ABL
Kill from the East (lit. 'sun-eye')!

(95) *Italiana nƙaƙa ɗaɗee dakugwariao.*
ɪtál-í-an-a ŋƙáƙ-á ɗaɗe-e dakú-gwaría-°
forbid-PLUR-IPS-REAL eating-NOM honey-GEN tree-top-ABL
It is forbidden to eat honey in the top of the tree.

Third, the ablative case is used to mark peripheral arguments with the semantic role of Cause, which can be animate or inanimate. The next two sentences illustrate the role of Cause with animate entities. Keep in mind that this construction is susceptible to interpretation as encoding the demoted agent of a passive. This view is perpetuated, for example, in Heine & König (1996:33), but Ik speakers insist that strictly cause, not agency, is in expresed by the ablative. Cause and agency are semantically related, of course. But while an agent is also a cause, a cause need not also be an agent:

(96) *Detosa waicika ni ncu.*
det-ós-á wa-icik-a = ni ɲ́cu-∅
bring-PASS-REAL greens-PL-NOM = DEM.PL I-ABL
These greens are brought because of me (**by me).

(97) *Kawimetaa tsuura na ntsu.*
kaw-im-et-á-á tsúúr-a = na ntsú-∅
cut-MID-INCH-REAL-PRF acacia.sp-NOM = DEM.SG he-ABL
This acacia has been cut down because of him (**by him).

And the next two sentences illustrate Cause with inaminate entities:

(98) *Baduƙota noo ɲeɗekeeo.*
bad-úƙót-a = noo ɲɛɗɛkɛ́-ᵓ
die-COMP-REAL = PST3 disease-ABL
He died from disease.

(99) *Boretiaa ɓeƙesu.*
bɔ́r-ét-í-a-a ɓɛƙ-ésó-∅
tire-INCH-1SG-REAL-PRF walk-INF-ABL
I am tired from walking.

The fourth semantic role encoded by the ablative is the Stimulus role. For example, the verbs *mor-* 'fear, respect' and *ʃɛɓ-* 'be shy, afraid' take a peripheral argument in the ablative case. This peripheral argument provides the Stimulus for the sensation of fear or timidity, as in:

(100) *Itaamana moriduo baboo nda ŋo.*
ɪtámáán-á mor-idu-o bábo-o ńda ŋ́ó
behoove-REAL fear-2SG-SEQ your.father-ABL and your.mother[OBL]
You must respect your father and your mother.

(101) *Xeɓa ƙironu.*
ʃɛɓ-a ƙír-onu-∅
fear-REAL thunder-INF-ABL
She's afraid of thunder.

Fifth, the ablative case is used to mark non-core arguments that encode the semantic role of Experiencer, a metaphorical extension of Location. The Experiencer in this usage senses or perceives something and forms an opinion of it. The following two sentences illustrate this ablative case role:

(102) *Daa aminu.*
da-a ám-ínu-∅
nice-REAL person-POSS.PL-ABL
It's nice to those concerned.

(103) *Gaana ncu.*
gaan-á ɲcu-∅
bad-REAL I-ABL
It's bad to me.

Finally, the verb *bɪrá-* 'to lack' or 'to not be there' selects the ablative case to mark animate (Experiencer) or inanimate locations of lack (Location or Source). The two sentences below illustrate this important semantic role:

(104) *Biraa cikama ntu.*
bɪra-a cɪkám-á ńtú-∅
lack-REAL women-NOM they-ABL
They don't have wives.

(105) *Biraata awikoo ni muŋ.*
bɪrá-át-a aw-iko-o=ni muŋ
lack-3PL-REAL home-PL-ABL=DEM.PL all
They are lacking in all these homes.

6.3.5 Genitive

The genitive case suffix has the form {-ɛ}. It is possible that this morpheme is a reflex of the ancient Eastern Sudanic genitive case marker **-ɪ/i* (Dimmendaal 2010:34). A similar form (*-i*) is found in the Cushitic languages Afar, Beja, and Bilin. Another promising connection is with the Shabo (Nilo-Saharan or unclassified) genitive marker *-ke* (Teferra 1991:9). This connection is appealing because it could help explain why the Ik genitive suffix does not subtract the stem-final vowel. If an older form was **-kɛ*, then the stem-final vowel would be kept to prevent a CC cluster.

The genitive suffix has a L tone but can take a H depending on the melody of the preceding stem (T7). It is recessively [-ATR] but can harmonize to /-e/ when afffixed to [+ATR] stems. Like the ablative, the genitive suffix does not subtract the stem-final vowel. And before a pause, the genitive is devoiced to /-^{ɛ}/ or /-^{e}/. When the stem ends in non-low front vowel, it is usually inaudible [-∅]. And when a noun stem ends in a high back vowel, that vowel may desyllabify to [w] causing compensatory lengthening on the following genitive suffix. Lastly, the genitive suffix may totally assimilate a stem-final /a/ or other [-ATR] vowel in non-final noun forms.

(106) *Genitive case paradigm*

Basic form-GEN	Non-final	Final	Gloss
ŋókí-ɛ	ŋókí-e	ŋókí-∅	‘dog’
sɪsí-ɛ	sɪsɛ́-ɛ́	sɪsí-∅	‘honey-beer’
ɓóré-ɛ	ɓóré-e	ɓóré-∅	‘corral’
ɲɛkɛ-ɛ	ɲɛkɛ-ɛ	ɲɛkɛ-∅	‘hunger’
ŋʊrá-ɛ	ŋʊré-é	ŋʊrá-^{ɛ}	‘cane rat’
zɪnɔ́-ɛ	zɪnɔ́-é	zɪnɔ́-^{ɛ}	‘zebra’
ɗéró-ɛ	ɗéró-e	ɗéró-^{e}	‘rat’
kafʊ-ɛ	kafʊ-ɛ/kafw-ɛɛ	kafwɪ-∅	‘thorn’
dakú-ɛ	dakú-é/dakw-éé	dakwí-∅	‘tree’

The genitive case in Ik has two grammatical functions:

(107) *Genitive case grammatical functions*

1	To mark the nominal modifier of a noun phrase head
2	To mark the complement of a similative clause

In the genitive's first function—to mark a noun dependent on its noun phrase head—the genitive-marked noun encodes Possession broadly construed, including notions of ownership, whole-part, kinship, attribution, orientation, association, and nominalization; see also §9.2:

(108) Ownership: *Kisanini kuruɓadiicikaa nti.*
kisán-íni kúrúɓádi-icíká-a ńtí-∅
divide-SEQ things-VAR.PL-ACC they-GEN
And they divided up their various things.

(109) Whole-part: *Zikini deikaa ntsi.*
zík-ınɪ dɛ-ıka-a ntsí-∅
tie-SEQ leg-PL-ACC he-GEN
And they tied up his legs.

(110) Kinship: *Naƙwita imaa ntsi.*
naƙw-ıt-a imá-á ntsí-∅
suck-CAUS-REAL child-ACC s/he-GEN
She nurses her child.

(111) Attribution: *Gaana ɲepitea dee bie.*
gaan-a ɲɛpıtɛ-a = ˈdéé bi-e
bad-REAL manner-NOM = ANPH.SG you.SG-GEN
That behavior of yours is bad.

(112) Orientation: *Iya kanedee awae.*
i-a kán-éˈdé-e awá-ᵉ
be-REAL back-POSS.SG-DAT home-GEN
It's at the back of the home.

(113) Association: *Eɟa ceida loŋotoma ngoe.*
eɟ-á cɛ-íd-a lɔŋɔ́t-ɔ́m-a ŋgó-ᵉ
not-REAL kill-2SG-REAL enemy-SING-NOM we.EXC-GEN
Don't kill our enemy (the one we captured)!

(114) Nominalization: *Nda ikamesuƙoti ɲokokoroe.*
ń̩ˈda ɪkam-és-úƙɔtɪ ɲɔ́kɔkɔrɔ́-ᵋ
and catch-INF-COMP[OBL] chicken(s)-GEN
And they caught the chickens.

In Ik, nouns with the genitive case can also modify a noun phrase head that is left implicit. The omitted NP must be the complement of a copular verb like *mɪt-* 'be sb. or sth.' or *benɪ́-* 'not be sb. or sth.', for example:

(115) *Benia ngoe.*
beni-á ŋgó-ᵉ
not.be-REAL we.EXC-GEN
It is not ours (lit. 'It is not X of ours').

(116) *Mita roɓee ni wetiat.*
mɪt-a róɓe-e = ni wet-í-át-ᵃ
be-REAL people-GEN = REL.PL drink-PLUR-3PL-REAL
It (i.e. tobacco) is of people who snuff (lit. 'drink') regularly.

One of the language's strategies for coordinating and subordinating clauses is to nominalize a clause's verb into an infinitive (as in example 114 above). When this happens, the subject and object (if present) of the nominalized verb follow it in the genitive case, as shown in (117) and (118) below:

(117) *Arutetona ebee,...*
arút-ét-on-a ɛ́ˈbɛ-ɛ́
sound-INCH-INF-NOM gun-GEN
At the sound of a gunshot (lit. 'the sounding of a gun'),...

(118) *Nda ƙooni ntie sabak.*
ńˈda ƙo-oni ńtí-e saba-kᵉ
and go-INF[OBL] they-GEN river-DAT
And they went to the river (lit. 'and the going of them to the river').

In another special construction, the roles of the NP head and genitive modifier can be reversed so that the possessor is now the head. The sentence in (119) shows the noun *ámá-* 'person' modified by the 'one' (*kɔ́ní-*), even though it is *ámá-* that is in the genitive case. Then in (120), the pronominal form *ntsɛ́ní* modifies *ɲeɓuryaŋíᵉ*, though the latter is in the genitive:

(119) *Atsuo kona amae.*
ats-u-o kɔn-a ámá-ᵉ
come-3SG-SEQ one-NOM person-GEN
Another person should come.

(120) *Ŋana nda ntseni ɲeɓuryaŋi.*
ŋan-a ńˈda nts-ɛ́ní ɲeɓuryaŋí-∅
each-NOM with s/he-PSSM[OBL] container-GEN
Each person with his or her own (snuff) container.

Besides Possession, the second grammatical function of the genitive is to mark the complement of a similative clause. Similative clauses in Ik are formed with the special verb *ƙám-* 'be like' (cf. Swahili *kama* and West Rift Cushitic *qoom-*). Similative clauses have the schema 'X is like Y', where X is in the nominative case and Y in the genitive case. This in interestisng example of a genitive used as a clausal argument instead of an NP modifier:

(121) *Ƙamata dziberikae.*

ƙám-át-a	dzibér-íka-^{e}
be.like-3PL-REAL	axe-PL-GEN

They are like axes.

(122) *Biraa keda ƙamad.*

bıra-a	ké^{ɬ}d-a	ƙám-á = d^{e}
not.be-REAL	way-NOM	be.like-REAL = DP

There is nothing it is like.

In (122), the verb *ƙám-* is in a relative clause (without a relative pronoun) modifying the word *kéd*^{a} 'way, manner'. Because the complement of the similative relative clause is missing from the relative clause, the dummy pronoun (DP) is used to mark its absence (see §5.10).

6.3.6 Accusative

The accusative case suffix has the form {-ka}, and as such, is one of three Ik case suffixes that consist of /k/ plus a vowel (the other two being the dative and the copulative, described below). Potential parallels for this suffix are widespread in the general Ethio-Sudanic language area. For Nilo-Saharan accusative cases, "the widest-spread marker is a velar, occurring in at least six of twelve families; it seems safe to assume this is a reflex of the proto-form" (Dimmendaal 2010:30), which Ehret reconstructs as **-kɔ̀* (2001:203). Besides Ik, Shabo (Nilo-Saharan or unclassified) has *-kak* or *-k* as an object/accusative marker (Teferra 1991:9). And the Cushitic language Afar marks objects on the verb with the morpheme *-aka* (Mahaffy n.d., p. 29).

The Ik accusative suffix has a L tone but may take a H tone according to the stem's tone melody (T7). It is one of the language's opaque dominant [+ATR] suffixes and thus can also be represented as {-ka^{+}}. Any recessive enclitic following the accusative suffix will surface as [+ATR].

It does not delete the final vowel of the stem but instead attaches directly to it. Before a pause, the vowel of the suffix devoices, changing the suffix to /-kᵃ/ or /-kˀ/. And within a phrase, the suffix loses the /k/, changing the suffix simply to /-a/. If the stem-final vowel is a high back vowel, it may desyllabify and cause the accusative suffix to lengthen in compensation:

(123) *Accusative case paradigm*

Basic form-ACC	Non-final	Final	Gloss
ŋókí-ka	ŋókí-a	ŋókí-kᵃ	‘dog’
sɪsí-ka	sɪsí-á	sɪsí-kᵃ	‘honey-beer’
ɓóré-ka	ɓóré-a	ɓóré-kᵃ	‘corral’
ɲɛƙɛ-ka	ɲɛƙɛ-a	ɲɛƙɛ-kᵃ	‘hunger’
ŋʊrá-ka	ŋʊrá-á	ŋʊrá-kᵃ	‘cane rat’
zɪnɔ́-ka	zɪnɔ́-á/zɪnw-áá	zɪnɔ́-kᵃ	‘zebra’
ɗéró-ka	ɗéró-a/ɗérw-áa	ɗéró-kᵃ	‘rat’
kafʊ-ka	kafʊ-a/kafw-aa	kafʊ-kᵃ	‘thorn’
dakú-ka	dakú-á/dakw-áá	dakú-kᵃ	‘tree’

In terms of grammatical function, the accusative case in Ik is used to mark core clausal arguments, namely the following:

(124) *Accusative case grammatical functions*

1	Direct object (O) of a transitive clause with a 3SG/PL subject
2	Direct object (O) of all subordinate clauses
3	Subject (A/S) of any subordinate clause (except sequential)

First, the accusative marks the direct objects (O) of transitive clauses with third person subjects. If the subject of the clause is first or second person, then both the subject and the object(s) take the nominative case (§6.3.1). See, for example, the pattern in the following paradigm, in which the accusative case (underlined) is found only with the third person verb forms:

(125) *Number-based differential accusative marking*

1SG	bɛ́ɗía ŋƙáƙ-^{a}	'I want food.'
2SG	bɛ́ɗída ŋƙáƙ-^{a}	'You want food.'
3SG	bɛ́ɗá ŋƙáƙá-$\underline{k}^{a}$	'S/he wants food.'
1PL.EXC	bɛ́ɗíma ŋƙáƙ-^{a}	'We want food.'
1PL.INC	bɛ́ɗísına ŋƙáƙ-^{a}	'We want food.'
2PL	bɛ́ɗíta ŋƙáƙ-^{a}	'You want food.'
3PL	bɛ́ɗáta ŋƙáƙá-$\underline{k}^{a}$	'They want food.'

Taken from narratives, the following two sentences show the accusative marking the object (O) of transitive clauses with 3SG/PL person subjects:

(126) *Tsidziteta naa inok.*

tsídz-it-et-a = náá ínó-k$^{a}_{O}$

carry-CAUS-VEN-REAL = PST1 animal-ACC

He flushed out an animal (from a thicket).

(127) *Ɗamatini awaa bubun.*

ɗamat-ini awá-á$_{O}$ bʊbʊn-^{ɔ}

shoot-SEQ home-ACC coal-INS

And they opened fire on the home (with 'coals' = bullets).

As noted in the Case Overview (§6.1), Ik is classified as a split-accusative language due to this type of number-based differential object marking. While this is the descriptive fact, can any explanation be offered for it? Some attempts can be made, though none are conclusive. König suggests that accusative marking comes into play when cross-referencing 'fails' on the verb (2008:85). That is, if the subject is not cross-referenced on the verb, case is needed to show grammatical relations. But this explanation falls short on two accounts: 1) First, clausal constituent order is not flexible enough to admit the kind of ambiguity implied by König's analysis. 2) The 'failure' of cross-reference (i.e. a zero morpheme) is in itself cross-reference.

Even if a 3SG subject is not cross-referenced—or is so with zero marking—constituent order would tell a speaker what the subject and object were:

(128) *Cea ama idemek.*
cɛ-a ám-á ídeme-k[a]
kill-REAL person-NOM snake-ACC
A person kills a snake.

(129) ***Cea idemea am.*
**cɛ-a ídeme-a ám-∅
**kill-REAL snake-ACC person-NOM
**A person kills a snake.

These two sentences illustrates that even with accusative marking, the order of subject and object cannot be reversed. At least synchronically, constituent order is fixed enough to prevent any hypothetical ambiguity arising from case 'defectiveness'. So the split-accusativity of Ik cannot be based only on a need to make up for a failure in subject cross-referencing on the verb.

Taking a different tack, some African languages show a special sensitivity to the notion of 'speech-act participant'. For example, in Turkana, the marking of a direct or indirect object on a verb depends on whether it is a speech-act participant. If it is (1/2 person), it is marked with the verbal prefix *k-*. If not (3 person), no prefix is present (Dimmendaal 1983:124). Inversely, but with the same attention to speech-act participants, the Ik accusative suffix is only present if the clause's subject is *not* a speech-act participant (i.e. 3 person).

Related to this is the idea of 'prototypical transitivity'. According to Næss (2007, quoted in Dimmendaal 2010:39), the prototypical Agent has the semantic features [+volitional], [+instigating], and [-affected]. The converse of this is that the prototypical Patient is [-volitional], [-instigating], and [+affected]. Dimmendaal (2010) explores the application of this for Differential Object Marking (DOM) in Nilo-Saharan.

The claim is that objects that have a more prototypical Patient role are more likely to be marked differently (e.g. with an accusative case) than those without it. Since prototypical Patients are [-volitional], and since volition implies animacy, it is claimed that objects further down the cline toward inanimacy are more likely to be marked differentially (Dimm. 2010:39).

The concept of prototypical transitivity seems applicable to Ik split-accusativity, but along slightly different lines. In Ik, volition, instigation, affectedness, and animacy alone do not determine whether an object will be marked with the accusative case or nominative case. By contrast, the only relevant factor is whether the Agent of a transitive clause is present in the conversation, i.e. is a speech-act participant (3 person). If the Agent (animate or inanimate) is not speaker or addressee, then the object must take the accusative case. Thus, taking Ik into account, the feature [± participant] can be added to Næss' definition of prototypical transitivity. An Agent that is not a speech-act participant (3 person) embodies a greater degree of transitivity because its intention (if animate) or capability (if inanimate) is inaccessible and therefore not knowable or assessable. This puts greater semantic 'distance' between the Agent and Patient than if the Agent was a speech-act particpant who could be negotiated with. This, then, is one further attempt to make sense of Ik's person-based split-accusativity.

Another question relevant to the Ik accusative case is what semantic roles the object of a transitive clause can take. This question applies to transitive objects generally, including those marked in the nominative case. Ik direct objects encode the expected semantic role of Patient, but they can also encode Direction and/or Purpose. Three Ik verbs of motion—*ats-* 'come', *ƙa-* 'go', and *ɪtá-* 'reach'—are unusual in that they can behave like transitive verbs. Similar motion-verb properties have been reported as common in Cushitic and Omotic languages (Dimmendaal 2003:100). Old Nubian is reported to have marked Patients and Directions with the suffix *-ka*, while the Semitic language Tigrinya uses its accusative prefix *ni-/nä-* to mark Patients, Directions, and many other roles (Dimmendaal 2010:41).

The following sentences are examples of a) Ik motion verbs functioning as transitive verbs and b) object case (NOM or ACC) marking Direction/Purpose:

(130) *Atsaa ƙanesia kuruɓadie ntsi.*
ats-á-á ƙan-ésí-a$_O$ kúrúɓádi-e ntsí-∅
come-REAL-PRF get-INF-ACC things-GEN he-GEN
He has come to get his things.

(131) *Ƙaa naa dzigwa nƙaƙae.*
ƙa-a = náa dzíˈgw-aa$_O$ ŋƙáƙá-^{e}
go-REAL = PST1 buy-ACC food-GEN
He went to buy food.

(132) *Iteesa Kaaɓoŋia ts'oo.*
ɪtɛ́-ɛ́s-á kaaɓóŋi-a$_O$ ts'ɔɔ
reach-INT-REAL Kaabong-ACC soon
He'll reach Kaabong soon.

In none of the preceding three sentences would the dative case be grammatical on the direct object (O) encoding Direction and/or Purpose. These examples are interesting in that the dative case (next section) is used more generally to encode both Purpose and Goal/Direction. It is only the unique combination of these roles that transitivize the verb and objects.

Back to the grammatical functions of the accusative: Its second function is to mark the overt subject (A/S) of any subordinate clause (except those with sequential verb forms). In many subordinate clauses, the subject may be left implicit, though it is always cross-referenced on the verb. When the subject of a subordinate clause is explicit, it comes before the verb, as opposed to after the verb like unmarked main clauses. Turkana is also a VSO language. And it also marks its preverbal subjects with object case, which for it is the 'absolutive', the equivalent of the Ik accusative (Dimmendaal 1983:260).

The next three sentences below illustrate the accusative case marking and preverbal syntactic position of subordinate clause subjects (A/S):

(133) *Naa ɲaɓalaŋitia iwiɗimetik,...*
náa ɲaɓáláŋɪtí-á$_S$ iwiɗ-ím-ét-i-k^e
CONJ soda.ash-ACC pulverize-MID-INCH-3SG-SIML
When the soda ash is ground to a fine powder,...

(134) *Ɗuo nuu didia watad,...*
ɗú-ó = nuu didi-a$_S$ wat-á = d^e
ones-ABL = REL.PL.PST3 weather-ACC rain-REAL = DP
Because it was raining,...

(135) *Naa nee amedea beɗee ŋuesia,...*
náa nɛ́ɛ́ ám-ɛ́dɛ-a$_A$ bɛ́ɗ-ɛ́ = ɛ ŋʊ-ɛ́sí-a
CONJ CONJ person-POSS.SG-ACC want-REAL = DP grind-INF-ACC
Whenever the owner wants to grind (some tobacco),...

The third function of the accusative is to mark the direct object of any non-sequential subordinate clause, regardless of the person of the subject. In (136), the object (O) *kɔ́nɛ́-ɛ́ní-* 'some-X' is in the accusative case, even though the subject is second person singular. Also, in (137), the object *ɲ́ci-* 'I' is in the accusative, even though the subject is second person plural:

(136) *Nee rebidee koneenia amae,...*
nɛ́ɛ́ réb-id-e = e kɔ́nɛ́-ɛ́ní-a$_O$ ámá-^{e}
CONJ deny-2SG-REAL = DP one-PSSM-ACC person-GEN
When you deny someone (tobacco, that is),...

(137) *Isio tubiitee ncia ɟiik?*
isi-o túb-i-it-é = e ɲci-a$_O$ ɟíík
what-COP follow-PLUR-2PL-REAL = DP I-ACC always
Why do you follow me always?

6.3.7 Dative

The dative case suffix has the form {-kɛ}. Potential areal parallels for it include the Cushitic language Saho's goal/source marker *-k* (Banti & Vergari 2005:14) and the Dhaasanac 'core adposition' *-(k)i* that encodes dative, benefactive, and instrumental roles (Tosco 2001:232).

The Ik dative suffix has L tone but can take a H tone spread from the preceding stem (T7). It is a recessive suffix with the [+ATR] allophone /-ke/ after [+ATR] stems. In terms of suffixation strategy, the dative suffix preserves the stem-final vowel, ostensibly to avoid a disallowed CC cluster. Before a pause, the dative suffix is reduced to /-kᵋ/ or /-kˇ/, and its clause-medial allomorph, losing the /k/, has the form /-ɛ/ or /-e/. If the stem-final vowel is /a/, /ɪ/ or /ɔ/, it may be totally assimilated by the dative suffix. And if the final vowel of a stem is a high back vowel, it may desyllabify and cause the dative suffix to lengthen in compensation:

(138) *Dative case paradigm*

Basic form-DAT	Non-final	Final	Gloss
ŋókí-kɛ	ŋókí-e	ŋókí-kᵉ	'dog'
sɪsí-kɛ	sɪsí-é/sɪsɛ́-é	sɪsí-kᵋ	'honey-beer'
ɓóré-kɛ	ɓóré-e	ɓóré-kᵉ	'corral'
ɲɛkɛ-kɛ	ɲɛkɛ-ɛ	ɲɛkɛ-kᵋ	'hunger'
ŋʊrá-kɛ	ŋʊré-é	ŋʊrá-kᵉ	'cane rat'
zɪnɔ́-kɛ	zɪnɔ́-é/zɪnɛ́-é	zɪnɔ́-kᵋ	'zebra'
ɗéró-kɛ	ɗéró-e/ɗérw-ée	ɗéró-kᵉ	'rat'
kafʊ-kɛ	kafʊ-ɛ/kafw-ɛɛ	kafʊ-kᵋ	'thorn'
dakú-kɛ	dakú-é/dakw-éé	dakú-kᵉ	'tree'

In terms of grammatical function, the dative case is used to mark peripheral arguments that most prototypically encode a Goal for motion or action verbs and Location for static verbs. These have literal and more metaphorical applications as evidenced by the following seven roles:

(139) *Dative case semantic roles*

1	Recipient/Benefactor
2	Experiencer
3	Destination/Goal
4	Location
5	Possessor
6	Purpose
7	Second object of the causative

First, the dative marks peripheral arguments that encode an entity receiving something from an Agent. This includes Recipients and Benefactors, e.g.:

(140) *Kisanese koto ɲekinerika roɓak.*
kisán-ese = kótó ɲekínér-ik-a roɓa-k^{e}
distribute-SPS = ADV meat.cuts-PL-NOM people-DAT
Then the meat cuts are distributed to people.

(141) *Duƙwee kidîasaik.*
d-uƙw-ee ki = dîásaí-k^{e}
take-AND-IMP.SG DEF = others-DAT
Take (it) to the others!

Second, the dative marks peripheral arguments that encode an Experiencer receiving something from a Stimulus, for example with verbs of speech:

(142) *Kutini naɓo ntsie,…*
kʊt-ɪnɪ naɓó ntsí-é
say-SEQ again he-DAT
And they said again to him,...

Third, the dative case in Ik is to mark peripheral arguments that encode the Destination or Goal of an action or motion, as for example in:

(143) *Ɓuƙotio honesiika rɨjaaƙok.*
ɓú-ƙót-i-o hɔn-ésí-ik-a ríɲá-aƙɔ-kᵉ
enter-AND-3SG-SEQ drive-INF-AGT.PL-NOM bush-inside-DAT
And the animal-drivers enter the bush.

(144) *Ƙeese koto awak.*
ƙe-esé = koto awá-kᵉ
go-SPS = ADV home-DAT
Then (people) went home.

(145) *Ƙaa naa roɓa ndaik?*
ƙa-a = náá roɓ-a ndaí-kᵉ
go-REAL PST1 people-NOM where-DAT
Where did the people go?

Fourth, the dative marks a peripheral argument encoding the Location of a state or action not including a sense of motion, as in the following:

(146) *Nda ɨyiima noo Baratiawak.*
ń̩da i-í-ím-a = noo baratí-áwa-kᵉ
and be-PLUR-1PL.EXC-REAL = PST3 fig.tree-place-DAT
And we were (staying) at Fig Tree Place.

(147) *Ibooƙotuo ɲoropua asakagwariik.*
íbo-oƙot-u-o ɲorópú-a asaka-gwaríi-kᵉ
keep.overnight-COMP-3SG-SEQ organs-ACC door-top-DAT
And he kept the organs over the door till morning.

(148) *Hakaikiaa lorokona moɗeripak.*
hakaik-í-a-a lorokon-a mɔ́ɗɛ́-ripa-kᵉ
forget-1SG-REAL-PRF adze-NOM ground.bee-hole-DAT
I've forgotten the adze in the ground-bee hole.

Fifth, the dative is used to mark a peripheral argument that encodes the Possessor of someone or something. In this function, the locative copula *i-* 'be (somewhere)' must be present, making the Possessor role a natural extension of the Location role illustrated above.

(149) *Iya kaudza bie ts'oo.*
i-a kaúdz-a bi-e ts'ɔɔ
be-REAL money-NOM you.SG-DAT now
Do you have money now (lit. 'Is there money to you now')?

(150) *Iya ŋokitina leɓetse ncik.*
i-a ŋók-ítín-á leɓetse ɲci-kᵉ
be-REAL dog-PL-NOM two I-DAT
I have two dogs (lit. 'There are two dogs to me').

Despite examples like the ones above, the more common way Ik expresses possession with the locative copula *i-* is with the connector *ń'da* 'and/with', as in *iía ń'da ŋókítíná leɓets* 'I have (lit. 'am with') two dogs'.

Sixth, the dative case is used to mark peripheral arguments that encode Purpose. In this function, the argument denoting purpose is usually a nominalized verb (infinitive) declined in the dative case.

(151) *Waana nƙanesie toboŋoe.*
ó-án-a ŋƙan-i-esí-e tɔbɔŋɔ́-ᵋ
call-IPS-REAL get-PLUR-INF-DAT maize.mush-GEN
They are invited to get (or 'for getting') maize mush.

(152) *Ŋweese paka itemuƙotuo ɟuresuƙotik.*
ŋʊ-ɛ-ésé páka itém-úƙot-u-o ɟúr-és-ʊƙɔtí-kᵋ
grind-INCH-SPS until suitable-COMP-3SG-SEQ snuff-INF-COMP-DAT
And it's ground up until it becomes suitable for snuffing.

The dative case is also used in a construction called ‘verb intensification’ or ‘verb strengthening’. Since verb strengthening is also found in Teso-Turkana (e.g. Dimmendaal 1983:423), the Ik construction is likely a calque of it. Verb strengthening is when an imperative verb is followed by the same verb in the infinitive and in the dative case. It can be translated as ‘X for X-ing’, that is, for the reason of X and no other. Examples include the following:

(153) *Kae ƙoonik!*
ƙa-e ƙó-oni-k^{e}
go-IMP.SG go-INF-DAT
Get the hell out of here (lit. ‘Go for going’)!

(154) *Ipasoetia ipasoonik.*
ipaso-et-í-a-a ipásó-oni-k^{e}
be.idle-VEN-1SG-REAL-PRF be.idle-INF-DAT
I just wandered over here for no reason at all.

The final function of the dative case to be described here has to do with causative verbs (see also §7.9.1). In Ik, if an intransitive verb is made a causative with the causative suffix {-ɪt}, the subject (S) of the original verb is treated as the object (O) of the now causative verb.

(155) *Tsidzetaa kotor.*
tsídz-et-á-á kɔtɔ́r-∅$_{S}$
carry-VEN-REAL-PRF oribi-NOM
An oribi (antelope) has flushed out!

(156) *Tsidzitetaa kotorak.*
tsídz-it-et-á-á kɔtɔ́rá-k$^{a}{}_{O}$
carry-CAUS-VEN-REAL-PRF oribi-ACC
He has flushed out an oribi.

Going a step further, when a transitive verb is made into a causative, the subject (A) of the original verb is treated as an object (O) of the now-causative verb. But, the object (O) of the original verb is now treated as a second object or extension (E) in the now causative construction. The data below shows what happens when the transitive verb *wet-* 'drink', which requires an agent (A) and a patient (O), is causativized:

(157) *Wetuo ima cemerik.*
wet-u-o im-a_A cɛmɛrɪ-$k^a{}_O$
drink-3SG-SEQ child-NOM herb-ACC
And the child drank the medicine.

(158) *Wetituƙotuo imaa cemerik.*
wet-it-úƙót-u-o imá-$á_O$ cɛmɛrɪ-$k^ɛ{}_E$
drink-CAUS-COMP-3SG-SEQ child-ACC herb-DAT
And she made the child take the medicine.

In (157)-(158), the subject (A) of the first clause (*im* 'child') becomes the patient (O) in the second, now causative clause. And the patient (O) of the first clause (*cɛmɛr* 'herb') becomes a second or extended object (E) in the second clause. So in a sense, through a metaphorical extension of the Location role, the extended object becomes the 'site' of the causation.

As a side topic, it is worth mentioning that the Ik verb *iryám-ét-oni-* 'to get' (cf. Teso-Turkana *a-ryam-un*) always takes an argument in the dative case:

(159) *Iryameida bee ŋitsanie?*
iryam-é-íd-a=bee ŋítsaní-ɛ
get-VEN-2SG-REAL=PST2 troubles-DAT
Did you get trouble yesterday?

At first glance, it would appear that this is an instance where a core argument is marked with the dative, a non-core-marking case. However, it

is more likely that despite the English translation of this verb as ‘get’, it is really an intransitive verb, making the object in fact a peripheral argument. A clue for this comes from Teso-Turkana, where *a-ryam-un* ‘to get’ is related to *aki-ryam-un* ‘to meet with’. As such, this Ik verb may carry more the idea of ‘meeting with sth.’ (e.g. ‘acquiring’) as opposed to merely ‘getting’ it.

Finally, on the basis of example (160) below, König has claimed that the verb form *bɪra-e* shows a ‘petrified’ form of the dative case on the verb *bɪrá-* ‘not there’. She analyzes this verb form as *bɪra*-DAT and suggests that it has been lexicalized into a ‘preposition’ meaning ‘without’ (2002:255):

(160) …ɠo-í-a kakum-e ɛdá bíra-e íŋar-esí-k[a]
go-1SG-a Kakuma-DAT alone be.NEG-DAT help-INF-ACC
I went alone to Kakuma without any help.

But this analysis is flawed due to incorrect morphological parsing. The verb form in question is not *bɪra-e* analyzed as *bɪra*-DAT but rather *bɪrá-í-ɛ* analyzed as *bɪrá*-3SG-SIML. This form is not a noun or verb fossilized into a preposition but rather an instance of the impersonal, 3SG adverbial simultaneous verbs used in clause chains (§11.2.2). It is true that this verb form is often best translated as ‘without’ into English, but it does not follow that it has become a ‘preposition’. The example sentence in (160), taken from König (2002:255) is reanalyzed and glossed here as follows:

(161) *Koyaa Kakumee eɗa, birayee iŋaaresik.*
ƙó-ia-a kákumé-é ɛɗá bɪrá-í-ɛ ɪŋaar-ésí-k[a]
go-1SG-SEQ Kakuma-DAT alone lack-3SG-SIML help-INF-ACC
I went to Kakuma alone without (lit. ‘it lacking’) any help.

6.3.8 Copulative

The Ik copulative case suffix has the form {-kɔ}. In terms of parallels, the wider Cushitic language family abounds with possibilities. Sidaamo has *-ho/hu* as a copulative suffix (Lamberti 1984:5), and Arbore has an interrogative copula with the form *-ko* (Hayward 1984:122). An interrogative copula with the form *-ko* is also found in the Southern Cushitic languages Alagwa and Burunge (Mous 2012:398). Suggesting a link with the Ik copulative's focalizing function, Eastern Cushitic's Dhaasanac has an enclitic *=u* called a 'nominal focus marker' (Tosco 2001:60, 268-269).

The copulative case suffix is L-toned but can take a H tone from a preceding stem (T7). It is a recessive suffix that harmonizes to /-ko/ after a [+ATR] stem. The copulative does not delete stem-final vowels but rather affixes directly to them. Before a pause, the it is devoiced to /-kᵊ/, /-kº/ or /-kˇ/. When the it attaches to a stem-final /i/, the /i/ is backed to /u/ in partial assimilation to the vowel in the case suffix. And if the stem-final vowel is /ɪ/ or /a/, it may be partially or totally assimilated by the case suffix. Lastly, if a stem ends in a high back vowel (/ʊ/ or /u/), that vowel may desyllabify, causing the non-final copulative suffix to lengthen in compensation.

(162) *Copulative case paradigm*

Basic form-COP	Non-final	Final	Gloss
ŋókí-kɔ	ŋókú-o	ŋókú-kº	'dog'
sɪsí-kɔ	sɪsɔ́-ɔ́	sɪsɔ́-kᵊ	'honey-beer'
ɓóré-kɔ	ɓóré-o	ɓóré-kº	'corral'
ɲɛƙɛ-kɔ	ɲɛƙɔ-ɔ	ɲɛƙɛ-kᵊ	'hunger'
ŋʊrá-kɔ	ŋʊrɔ́-ɔ́	ŋʊrá-kᵊ	'cane rat'
zɪnɔ́-kɔ	zɪnɔ́-ɔ́	zɪnɔ́-kᵊ	'zebra'
ɗéró-kɔ	ɗéró-o	ɗéró-kº	'rat'
kafʊ-kɔ	kafʊ-ɔ	kafʊ-kᵊ	'thorn'
dakú-kɔ	dakú-ó	dakú-kº	'tree'

The copulative case has the following three grammatical functions:

(163) *Copulative case grammatical functions*

1	Mark focus in a cleft construction
2	Mark the complement of a verbless copula
3	Mark the complement of a negative identity copula

The first function of the copulative is to mark an argument that has been brought into discursive focus by being fronted before the main verb. The result is a cleft-construction that means something like 'It is X (that)...'. The fronted constituent can be a subject, object, or any peripheral argument:

(164) Subject: *Ngoo naa ikametim.*
ŋgó-ó = naa ɪkam-ɛt-ím-^{Ø}
we.EXC-COP = PST1 catch-VEN-1PL.EXC-REAL
It is we (who) captured (him).

(165) Object: *Mesoo bedîm.*
mɛsɔ-ɔ bɛ́ɗ-ím-^{Ø}
beer-COP want-1PL.EXC-REAL
Is is beer (that) we want.

(166) Peripheral: *Ntsuo tomoranee nda kidîasai.*
ntsú-ó tɔmɔ́r-án-é = e ń^{ɨ}da kiɗíása^{i}
it-COP share-IPS-REAL = DP with others[OBL]
It is (why) it is shared with others.

The second function of the copulative is to mark nouns functioning as the complements of verbless copula clauses (VCC). VCCs provide an example of when a noun non-canonically functions as a clause's predicate. The copulative case makes this possible by verbalizing the noun. No corresponding subject is needed, though it may be inferred contextually:

(167)

Amak.	*Icek.*	*Roɓak.*
ámá-k^{o}	icé-k^{o}	roɓa-k^{o}
person-COP	Ik-COP	people-COP
It's a person.	They're Ik.	It's people.

The third function of the copulative is to mark the complement of a copula clause (CC) with the negative copula *bení-*. If the copula subject (CS) is mentioned, as in (169) and (170), then it appears in the nominative case:

(168) *Benia ɟa ngok.*

beni-a = ɟá	ŋgó-k^{o}$_{CC}$
not.be-REAL = ADV	we.EXC-COP
It's really not us.	

(169) *Benia noo cwoo kiɗaa.*

beni-a = noo	cuó-ó$_{CC}$	ki = ɗá-á$_{CS}$
not.be-REAL = PST3	water-COP	MED = ones-NOM
That was not water.		

(170) *Benia njinio ɗa gokisina nee ne?*

beni-a	ɲjíní-o$_{CC}$	ɗ-a$_{CS}$	gok-ísin-a	né-é = ne
not.be-REAL	we.INC-COP	one-NOM	sit-1PL.INC-REAL	here-DAT = DEM
Are we not the ones seated here?				

Despite what the preceding sentences show, complements of the negative copula of identity *bení-* can also appear in the nominative case. Or perhaps in the following two examples, the nouns in the nominative case are in fact the copula subjects whose complements are understood from the context:

(171) *Benia ɟa nk.*

beni-a = ɟá	ŋ̀k-^{a}$_{CS/CC?}$
not.be-REAL = ADV	I-NOM
It's just not me.	

(172) beni-á ɗ-a $_{CS/CC?}$ ɲjíní-e
not.be-REAL one.SG-NOM we.INC-GEN
Is it not (the one of) ours?

In closing, the question must be asked: Is the Ik 'copulative' really a case? As mentioned above, Cushitic parallels for the Ik copulative case suffix {-kɔ} are analyzed variously as suffixes, clitics and 'markers' more generally. In strictly morphological terms, the morpheme {-kɔ} certainly patterns like all the other Ik case suffixes: 1) It has an identical segmental shape as that of the dative and accusative cases, 2) it undergoes identical morpho-phonological alternations as the others suffixes, and 3) it fills the same nominal suffixal position as the other case suffixes. Then in syntactic terms, it patterns with other cases in that it is required to mark a unique argument (complement) in a specific clause type: a negative copula of identity clause. Thus it is analyzed in this grammar as a 'case' proper, synchronically.

Nevertheless, the copulative case has some peculiar properties that set it apart from all the other cases. First, apart from its function in marking a copular complement, the copulative does not encode grammatical relations of a noun with a predicate or a noun with another noun in a noun phrase. When it marks a noun, either in a cleft-construction or in a verbless copula clause, the noun fills the predicate slot. In that position, the noun with the copulative suffix can be followed by adverbial and tense-marking enclitics that otherwise come directly after true verbs. So in this sense, the copulative has a function more characteristic of a verbal morpheme.

As discussed below in §6.4.1, König has traced a chain of grammaticalization from an old focus marker (cf. the Cushitic parallels) to both the copulative suffix in the nominal system and the sequential aspect marker in the verbal system (2002:349-361). And so it would seem that the Ik copulative case shows the traits of a transitional form between a nominal and verbal morpheme. This might help explain its cross-categorial behavior.

6.4 'Case' and grammaticalization

Formal parallels or homophones of the nominal case suffixes are found in other subsystems of Ik grammar. These are most richly attested in the verbal system (§6.4.1), though they are also found on demonstratives, relative pronouns, and tense particles (§6.4.2). This homophony has led to claims that Ik case is marked on 'conjunctions, postpositions, prepositions, adverbs, and even verbs' (König 2008:81). But this is misleading because most of these word classes are really nouns or verbs in Ik. The notion that nominal case suffixes grammaticalized into verbal inflectional affixes is one of the key claims of König 2002. Using her methodology, Schrock 2013 traces out several other potential grammaticalization pathways going from nominal case suffix to verbal affix. The picture emerging from this work is that due to its near ubiquity, 'case' is a unifying structural element in the language.

Unless the traditional definition of case is revised to include functors outside the nominal system, it is useful to speak of 'case' and 'Case' in Ik. The former is a way the language encodes grammatical relations, and the latter is a meta-categorial or mono-systemic archi-morphology whose precise origin and path of grammaticalization is not always known. In some instances, there is a demonstrable semantic link between a form in one system and its parallel in another, but in other instances, there is not.

Up to now it seems to have been assumed in the literature that nominal case suffixes are prior, being the source of parallels found elsewhere. A less explored but equally possible scenario is that all the various formal parallels in the different subsystems all come from a yet undiscovered source. Until much more descriptive and historical-comparative work is done in the Horn of Africa, the origin of these morphological types may remain out of sight.

6.4.1 'Case' on verbs

König 2002 argued that Ik has grammaticalized nominal case suffixes into TAM verbal suffixes. The most prominent examples of this are 1) the dative

suffix turned marker of the simultaneous aspect ('subjunctive' in König's terminology) and 2) the copulative suffix turned marker of the sequential aspect ('narrative' in König's terminology). Consider these examples:

(173) *Grammaticalization of dative into simultaneous*

Dative		>	Simultaneous	
ɓóré-kᵉ	corral-DAT	>	ats-i-kᵉ	come-3SG-SIML
sɪsí-kᵋ	mead-DAT	>	ƙɔɗ-í-kᵋ	cry-3SG-SIML

(174) *Grammaticalization of copulative into sequential*

Dative		>	Simultaneous	
ɓóré-kᵒ	corral-COP	>	ats-u-kᵒ	come-3SG-SEQ
sɪsú-kᵓ	mead-COP	>	ƙɔɗ-ú-kᵓ	cry-3SG-SEQ

The data in (173) show that the dative case suffix and the simultaneous aspect suffix are identical in form ({-kɛ} and its various allomorphs). And as shown in (174), the copulative case suffix and the sequential aspect suffix are also identical in form ({-kɔ} and its allomorphs). König establishes the putative grammaticalization link between these nominal and verbal suffixes based on the following five points (adapted from 2002:318-319, 414):

(175) *Evidence of case > verbal suffix grammaticalization*

1. Their forms are identical.
2. Their morphophonological behavior is identical.
3. Their position in the word (i.e. always at the end) is identical.
4. The simultaenous and sequential suffixes show similar syntactic behavior (e.g. they are both used in subordinate clauses).
5. They exhibit other similar characteristics, such as:
    a. Their non-final/final forms.
    b. Their form consisting of /k/ plus a silent vowel.
    c. Their deletion of /a/ in the preceding stem.
    d. Their exclusion from negated verb forms.

In König's view, both the copulative case suffix and the sequential ('narrative') aspect marker were later developments from a nominal focus marker that was also a development from a copular suffix on nouns (2002:349-361). Paradoxically, she concludes that a focus marker encoding discontinuity developed into a 'narrative' mood marker encoding discourse continuity (2002:360). From a synchronic point of view, the copulative case in the nominal system and the sequential aspect in the verbal system do seem to focus attention on a given noun or verb. For nouns, this attention has a focal or copular function. For verbs, this attention simply highlights the point-by-point sequence of a text. In both systems, the morpheme {-kɔ} focuses attention on the respective item, as in the following:

(176)	ámá-kº	person-COP	'It IS [a person].'
	ats-u-kº	come-3SG-SEQ	'It IS [s/he/it came].'

As for the homophonous dative /simultaneous ('sujunctive') marker {-kɛ}, König states that "In Icetot, the starting point in the grammaticalization of the dative into the subjunctive was probably an application of the dative as a *purpose* marker: first of all, together with a noun; then with a verbal noun; and finally, with an inflected verb" (2002: 264, italics in original).

But another explanation for the dative > simultaneous grammaticalization—and the one adopted in this grammar—is that the dative case's semantic role of Location was simply extended over time from nouns to whole subordinate clauses. If true, this would reflect one of the cross-linguistic 'cognitive-communicative strategies' in grammaticalization to "treat subordinate clauses like nouns" (Heine & Kuteva (2007:100-101). There is precedent for this analysis in wider Nilotic and particularly in Turkana where the locative prefix *nɪ-/ni-* is used for manner adverbials whether based on nouns or verbs. As Dimmendaal states, "The semantic distinction between manner and location...is not always clear" (1983:363-364). Just as the Ik dative case on nouns expresses the locational senses of 'in', 'on', or 'at', so the

simultaneous aspect suffix seems to have over time come to encode states or actions in or during which other states or actions are occuring, for example:

(177) *Epuƙwee kiɟak.*
ep-uƙw-ee kíɟá-k^{e}
sleep-AND-IMP.SG ground-DAT
Lie down on the ground.

(178) *Epuƙwee maraŋidik.*
ep-uƙw-ee maráŋ-ídi-k^{e}
sleep-AND-IMP.SG good-2SG-SIML
Sleep well (Lit. 'Sleep you being good' or 'Sleep *in* you being good').

(177) is a simple command to lie down on the ground, while (178) is a command to lie down '*while* you are good', that is, '*in* the state of your being good'. These examples show how the semantics of *physical* co-occurrence on nouns, encoded by the dative, is extended to *circumstantial* co-occurrence on verbs. Even if this analysis is correct, the two homophones in the two grammatical systems must be treated as synchronically distinct. The location analogy may, however, be tested as a grammaticalization hypothesis.

Taking similar points of comparison, other links can be posited between nominal case suffixes and verbal inflectional affixes such as the following:

(179) *Other hypothetical case > verbal affix grammaticalizations*

Case		Verbal suffix
Oblique	>	Irrealis
Nominative	>	Realis
Accusative	>	Present perfect
Genitive	>	Singular imperative
Ablative	>	Plural imperative

Schrock 2013 goes through each potential pair in (179) and determines that some, namely the first three, are more likely than others. That view is amended here in that only the first two are considered plausible. Those two—oblique > irrealis and nominative > realis—are the only two that seriously affect the analysis of the whole grammar. The other four encounter serious problem but are still interesting for speculative historical analysis.

The hypothesis that Ik has grammaticalized the nominative suffix {-a} into a verbal realis modality marker is analytically important. It was Heine who first noted that the nominative case and his 'aorist' tense shared something in common—the vowel /a/, which he calls the 'thematic final a' (1983:§2.5.3.1.1). But so far no one has explored the possibility that the 'aorist' marker /-a/ is a grammaticalization of the nominative case marker.

Besides their phonological identity, the nominative case {-a} and the realis {-a} share a significant morphological characteristic: They both subtract the final vowel of the stem or affix to which they attach. To illustrate this, the first column in (180) shows the underlying forms, first of noun roots with the nominative suffix, and then of verb roots and pronominal subject markers with the realis suffix. The second column then shows how {-a} in both systems subtracts the preceding nominal or verbal stem-final vowel:

(180) *Grammaticalization of nominative > realis*

Nouns			
ɓóré-a	→	ɓór-á	corral-NOM
ŋókí-a	→	ŋók-á	dog-NOM
sɪsí-a	→	sɪs-a	mead-NOM
Verbs			
ats-íí-a	→	ats-í-a	come-1SG-REAL
ats-ídi-a	→	ats-íd-a	come-2SG-REAL
ats-i-a	→	ats-a	come-3SG-REAL

Interestingly, similar suggestive commonalities are found to exist between the oblique case morpheme and the irrealis modality morpheme, both of which are zero (∅). Being zero-marked, the oblique case allows a noun stem's underlying form to surface (often with minor tonal changes). Likewise, the irrealis modality allows the underlying form of the preceding verbal morpheme to surface. In (181), the first column presents the underlying forms of several noun and verb stems with the oblique or Irrealis marker. The second column reveals their non-final surface forms:

(181) *Grammaticalization of oblique > irrealis*

Nouns			
ɓóré-∅	→	ɓóré	corral[OBL]
ŋjókí-∅	→	ŋjókí	dog[OBL]
sɪsí-∅	→	sɪsɪ	mead[OBL]
Verbs			
ats-íí-∅	→	ats-íí	come-1SG[IRR]
ats-ídi-∅	→	ats-ídi	come-2SG[IRR]
ats-i-∅	→	ats-i	come-3SG[IRR]

Based on the data above in (180), a plausible claim can be made that the nominative case {-a} and the realis modality {-a} are related historically. Whether one came from the other or both came from somewhere else is not known. And based on the data in (181), the same claim can be made for the oblique case and the irrealis modality which are both marked by {-∅}.

But beyond segmental identity and morphophonological similarity, can these morphemes in disparate grammatical systems be linked semantically? Tentative connections can be drawn, but they are speculative and based on Ik's mismatch of formal and semantic markedness. For example, just as the nominal system marks what is common (e.g. subjects) and does not mark what is uncommon (e.g. oblique arguments), the verbal system marks what is actual (realis predications) and not what is unactualized (irrealis).

Such theorizing about grammaticalization finds practical application in the analysis of the subject-agreement pronominal suffixes. The analysis of these suffixes has been both the stimulus and result of case grammaticalization hypothesizing. A few comments are made below to illustrate the complexity of the issue and its relevance to Ik grammaticography:

Ik cross-references subjects by means of bound personal pronominal suffixes on verbs. These are described elsewhere §5.1.4 and §7.4, but a brief summary is repeated here: The subject-agreement pronominals mark grammatical person (1-2-3), number (SG and PL) and clusivity (EXC and INC). The underlying forms of these suffixes are posited as [-ATR] (except 3PL) with [+ATR] allomorphs after dominant [+ATR] stems or affixes. The suffixes' tones may be altered by the verbal stem and certain verbal suffixes.

(182) *Ik bound pronominal suffixes*

1SG	-íí
2SG	-ídɪ
3SG	-ɪ
1PL.EXC	-ímí
1PL.INC	-ísínɪ
2PL	-ítí
3PL	-áti

The forms presented in (182) for the pronominal suffixes are not automatically discoverable in Ik data. Instead, they came to be analyzed this way through a rather convoluted process. Analysis of these suffixes has long been confounded by at least three factors: 1) the non-final versus final form distinction, 2) the realis suffix which substracts stem-final vowels (§7.6.2), and 3) the behavior of the sequential and simultaneous aspectual suffixes. The interaction of these three factors had led to two conflicting analyses:

(183) *Ik subject-agreement markers in the literature*

	With /-a/ as 'complemental suffix' (Crazzolara 1967:23, Tucker 1972:184)	With /-a/ as part of the pronominal suffixes (Heine & König 1996, König 2008:83)
1SG	-í-á	-íá
2SG	-íd-a	-ída
3SG	-∅-a	-a
1PL.EXC	-ím-á	-ímá
1PL.INC	-ísín-a	-ísína
2PL	-ít-á	-ítá
3PL	-át-a	-áta

The data in (183) are presented in their non-final forms since the final forms further obfuscate things by reducing the suffixes' final vowel. As argued in §7.6.2, the position taken in this grammar is that the realis suffix {-a} subtracts the last vowel of whatever morpheme it attaches to. Since this vowel subtraction happens to the subject-agreement suffixes as well, then this means that final vowels have been subtracted from the forms in (184).

That is one point. Parallel to this issue is what happens when verbal extensions like the simultaneous {-kɛ} are suffixed to the subject-agreement markers. When this occcurs, an /ɪ,i/ rather than an /a/ surfaces between the subject-agreement markers and the simultaneous suffix. If the vowel /a/ is part of the subject-agreement markers, it would be hard to explain what happens to it in this situation. Heine & König 1996 and König 2002 argue that the intervening /ɪ,i/ is the optative suffix, but no convincing semantic reason for this is given. Instead, the view taken here is that the intervening /ɪ,i/ is in fact part of the subject-agreement morpheme, while the /a/ so often seen is the realis marker than subtracts the /ɪ,i/ in many contexts.

Below in (184) are given all the subject-agreement suffixes in their non-final and final forms, in both the non-past tense, realis modality on the one hand,

and the simultaneous aspect on the other. For the sake of illustration, morpheme-breaks are purposely not inserted between the subject-agreement markers and the realis suffix {-a/-ᵃ} or the simultaneous suffix {-ɛ/-kᵋ}:

(184) *Ik subject-agreement markers in different verb forms*

	Non-past, realis		Simultaneous	
	Non-final	Final	Non-final	Final
1SG	-íá	-íᵃ	-ííkɛ	-ííkᵋ
2SG	-ída	-ídᵃ	-ídɪɛ	-ídɪkᵋ
3SG	-a	-ᵃ	-ɪɛ	-ɪkᵋ
1PL.EXC	-ímá	-ím	-ímíɛ	-ímíkᵋ
1PL.INC	-ísína	-ísín	-ísínɪɛ	-ísínɪkᵋ
2PL	-ítá	-ítᵃ	-ítíɛ	-ítíkᵋ
3PL	-áta	-átᵃ	-átie	-átikᵉ

If the simultaneous ('subjunctive') aspecutal suffix is *-ɛ/kɛ/kᵋ* as claimed in König 2002, where do the subject-agreement markers end in the last two columns of (184)? In answer to this question, it is concluded here that a) since the dative case preserves the stem-final vowel in the nominal system, and b) if the simultaneous suffix is a grammaticalization of the dative case, then c) it too, by analogy, might preserve the final vowel of the morpheme to which it attaches. In this case, that morpheme is the subject-agreement suffixes. So, when the simultaneous suffix in the final column of (184) is removed, what is left is the subject-agreement suffixes without an intervening optative marker. The realis forms can then be accounted for by the realis suffix {-a}, itself a (potential) grammaticalization of the nominative {-a} that subtracts the subject-agreement suffixes' final vowel.

6.4.2 'Case' in other word classes

Formal parallels of Ik nominal case markers are also found on demonstratives, relative pronouns, and tense particles. The situation is less surprising if one considers that both tense particles and relative pronouns

developed out of demonstratives. Ik tensed demonstratives and tensed relative pronouns are identical in form and are marked for Ik's three-term past tense system: recent past, removed past, and remote past:

(185) *Ik tensed demonstratives/relative pronouns*

	Singular		Plural	
Non-past	=na	'this/which'	=ni	'these/which'
Recent past	=náka	'that/which'	=níki	'those/which'
Removed past	=sına	'that/which'	=sini	'those/which'
Remote past	=nɔkɔ	'that/which'	=nuku	'those/which'

As can be seen in (186), the non-past form of the demonstrative/relative pronouns provides the base on which the other tense forms are built:

(186) *Analysis of tensed demonstratives/relative pronouns*

Non-past	=**na**	=**ni**
Recent past	=**ná**-ka	=**ní**-ki
Removed past	=sı-**na**	=si-**ni**
Remote past	=**nɔ**-kɔ	=**nu**-ku

In (186), the base (non-past) forms of the demonstratives/relative pronouns are in bold print—**na** for singular and **ni** for plural. Vowel assimilation changes **na** to **nɔ** in the remote past singular and **ni** to **nu** in the plural. The recent past and remote past forms form have suffixes resembling a case marker. (Only the removed past shows a prefix instead—*sı-/si-*, which is probably related to the South Omotic language Dime's proximal demonstrative element *si-* (Mulugeta 2008:73).) The recent past form of the Ik singular demonstrative has *-ka* as a suffix. This is homophonous with the accusative case suffix {-ka} and nearly so with the present perfect marker {-ˊka}. Likewise, the remote past singular demonstrative has *-kɔ* as a suffix. This resembles the copulative suffix and sequential aspect marker {-kɔ}.

Two of these Ik demonstratives have grammaticalized not only into relative pronouns but also into tense clitics. During that process, the deictic function a demonstrative has over a single noun or a noun phrase was extended to whole clauses. Since clauses are singular, the singular forms of the demonstratives were borrowed to function as tense markers. The tense markers for recent past and remote past are identical to demonstratives, while the removed past marker shows a different form of unknown origin:

(187) *Ik tense clitics*

	Non-final form	Final form
Recent past	=náa	=nák^{a}
Removed past	=bɛɛ	=bats^{ɛ}
Remote past	=nɔɔ	=nɔk^{ɔ}

The discussion above examining the recent past and remote past singular demonstratives applies equally to the recent and remote past tense enclitics. For the removed past tense enclitic, the segment /ts/ is missing in the non-final form, leading to vowel assimilation. The origin of the suffix /-tsɛ/ is unknown, though it recalls the Proto-Gumuz word **tsa* 'body' that has been grammaticalized in Gumuz for several different uses (Ahland 2012:251).

The parsed versions of the tense clitics in (187) are as follows:

(188) *Ik tensed clitics parsed*

	Non-final form	Final form
Recent past	=ná-a	=ná-k^{a}
Removed past	=bɛ-ɛ	=ba-ts^{ɛ}
Remote past	=nɔ-ɔ	=nɔ-k^{ɔ}

(188) shows that just as with the demonstratives and relative pronouns, the frozen suffixes on Ik tense particles lose their consonantal segment in non-final forms. The suffix on the recent past closely resembles the accusative

case and present perfect aspect suffixes, and the suffix on the remote past form closely resembles the copulative case and sequential mood suffixes. However, just as the present perfect suffix {-ˊka} has a preceding floating tone, the frozen suffix on the recent past demonstratives and tense clitic shows evidence of a floating tone. This suggests that the sequences /-ˊka/ for singular and /-ˊki/ for plural are related historically to the present perfect suffix and not the accusative suffix (which lacks the floating H).

Unlike the grammaticalization links for case > verbal affix discussed above, a semantic link can easily be envisioned between the present perfect aspect-tense marker {-ˊka} as a verbal suffix and the recent past marker {-ˊka} as a suffix on demonstratives, relative pronouns, and tense enclitics. In the same way, a semantic link can also be established between the sequential aspect marker {-kɔ} as verbal sufix and the remote past marker {-kɔ} as a suffix on demonstratives, relative pronouns, and tense enclitics. This is true for the singular demonstrative forms; it is less clear how the plural ones developed:

(189) *Verbal < > demonstratival grammaticalization*

	Singular	Plural?	
Present Perfect	ats-á-k^{a}		come-REAL-PRF
Recent Past	ná-k^{a}	ní-k^{i}	PST-REC
Sequential	ƙɔ́ɗ-ú-kˀ		cry-3SG-SEQ
Remote Past	nɔ-kˀ	nu-k^{u}	PST-REM

So based on phonological, morphological, and semantic properties, the diachronic relationship between the forms in (189) is established. The question one step removed—whether the present perfect {-ˊka} related to the accusative case {-ka} and whether the sequential {-kɔ} is related to the copulative {-kɔ}—is touched on above in §6.4.1 and in Schrock 2013. The latter source fails to take into account the floating H tone in the present perfect suffix {-ˊka} which makes a link with the accusative less plausible.