# **On C and T, Ā-movement and "marked nominative" in Dinka**\* *Coppe van Urk, GLOW 37*

- The traditional view of C and T are that they are merged with different features and so perform different roles within the clause.
- An alternative proposal is that the features of T and C are **related**, in that they originate from the same source (e.g. Stowell 1982; Chomsky 2008; Miyagawa 2010). Recent work by Chomsky (2008), for example, proposes that the features on T originate on C, through a syntactic mechanism of *feature inheritance* (see also Richards 2007 and Miyagawa 2010).
- I will present evidence for this idea here, which I will refer to as the *C-T conjecture*:

**C-T conjecture (e.g. Chomsky 2008):** The features of T are *derivative* of C.

- More precisely, I will offer evidence for a kinship between C and T from the Nilotic language Dinka (South Sudan), a language in which the functions associated with C and T are expressed in one position. As a result,  $\bar{A}$ -dependencies go hand in hand with changes in case and  $\varphi$ -agreement.
- I will identify this mixed position as Spec-CP. In addition, I will argue that a case alternation involving the subject provides evidence that T performs no licensing work in Dinka.

The talk is structured as follows:

- Section 1 briefly reviews the predictions of the C-T conjecture
- Section 2 shows that  $\bar{A}$ -movement goes hand in hand with  $\varphi$ -agreement and case assignment in Dinka
- In section 3, I discuss where this mixed position might be and identify it as Spec-CP
- In section 4, I argue that T performs no licensing role, based on the "marked nominative" case in which non-initial subjects surface

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# **1** The C-T conjecture

Various authors have suggested that the features of C and T are related, so that one determines the content of the other (e.g. Stowell 1982; Chomsky 2008; Miyagawa 2010).

#### An argument from infinitival clauses:

- One of the motivations behind this idea is the observation that raising or ECM infinitival clauses lack tense and  $\varphi$ -features in the absence of C (Stowell 1982; Chomsky 2008):
  - (1) a. Alex appears [ $_{TP} t$  to like bananas].
    - b. I made Sam out  $[_{TP} t$  to be a liar].
- We can explain this if the tense feature and  $\varphi$ -features on T originate on C, as raising and ECM infinitivals cross-linguistically lack C (Rizzi 1982).
- As a result, raising is forced and, as Stowell shows, the tense interpretation of the infinitival clause is fully determined by the matrix predicate.
- In contrast, control infinitivals may contain a C head, and therefore may contain a tense operator and can license a PRO subject.

#### A prediction:

- One of the predictions of the C-T conjecture is that the functions associated with one head in a particular language might be carried out by the other in a different language.
- For example, we might expect there to be languages in which C is the locus of  $\varphi$ -agreement, and T does no licensing work:



- It is clear that there are languages in which C carries a  $\varphi$ -probe, such as West Flemish (Haegeman 1992; see also Van Koppen 2005). However, in these languages, T triggers  $\varphi$ -agreement independently, leaving it unclear whether they bear on how C and T are related (Haegeman and Van Koppen 2012).
- In this talk, I will argue that Dinka is indeed a language of type (2). C carries a  $\varphi$ -probe, but T is inactive as a licenser. This is evidence that C may fulfil some of the functions associated with T in another language.

## **2** Case assignment and $\varphi$ -agreement in Dinka

Dinka is a Nilotic language, spoken in South Sudan, by at least 3 million people (Abu-Bakr & Abu-Manga 1997:3). This talk is based on data from Dinka Bor, the southeastern dialect group.

#### Main message:

In Dinka, long-distance dependencies are accompanied by  $\varphi$ -agreement and case assignment.

#### 2.1 Matrix and embedded V2

• Dinka is V2 in all finite clauses (Andersen 1991, 2002; Van Urk and Richards, to appear). We see this below in a matrix clause, for example (3a–c):

#### (3) Matrix clauses are V2

Subject first:

a.	Ayén	a-cé	cuín	cám	ne p	<u>à</u> l.				
	Ayen.ABS	DCL.SG-PRF	food.ABS	eat	P k	cnif	e.ABS			
	'Ayen ate food with a knife.'									
	Direct obj	ect first:								
b.	Cuín	a-cíi	Áyèn		cám	ne	p <u>à</u> l.			
	food.ABS	DCL.SG-PRF.	NS Ayen.N	IOM	eat	Р	knife.ABS	5		
	'The food, Ayen ate with a knife.'									
	Instrumen	tal first:								

- c. **Pàl** a-cii Áyèn cuín cám. knife.ABS DCL.SG-PRF.NS Ayen.NOM food.ABS eat 'With a knife, Ayen ate food.'
- Finite embedded complement CPs are V2 also:<sup>1</sup>

#### (4) **Embedded clauses are V2**

Subject first:

- a. A-yúkku luéel, [Ayén a-cé cuín cám ne pàl].
  DCL.SG-IMPF.1PL say Ayen.ABS DCL.SG-PRF food.ABS eat P knife.ABS 'We're saying that Ayen ate food with a knife.' Direct object first:
- b. A-yúkku luéel, [cuín a-cíi Áyèn cám ne DCL.SG-IMPF.1PL say food.ABS DCL.SG-PRF.NS Ayen.NOM eat P pàl].
  knife.ABS 'We're saying that, the food, Ayen ate with a knife.'

<sup>&</sup>lt;sup>1</sup>As evident in the examples in (4a–c), an apparent exception to V2 may arise in the matrix clause when a CP object is present. This is because, as extensively discussed in Van Urk and Richards (to appear), finite CPs may move to the initial position, but have to be linearized on the right.

Instrumental first:

- c. A-yúkku luéel, [pàl a-cii Áyèn cuín DCL.SG-IMPF.1PL say knife.ABS DCL.SG-PRF.NS Ayen.NOM food.ABS cám].
  eat 'We're saying that, with a knife, Ayen ate food.'
- This is not restricted to bridge verbs, but true of all finite CPs.

#### Unlike in familiar V2 languages...

V2 is associated with several changes in case and agreement relations:

- The clause-initial XP triggers agreement on the highest verb/auxiliary
- The clause-initial XP is in the absolutive case

#### 2.2 Long-distance dependencies trigger agreement

- Unlike in Germanic V2 languages, *long-distance dependencies are accompanied by*  $\varphi$ *-agreement*. The XP in clause-initial position triggers agreement on a prefix which attaches to the highest verb/auxiliary, which I will refer to as the *tense-force prefix*.
- This is illustrated below with simple topicalization (5a–c) (associated with a variety of information-structural functions; Frascarelli and Hinterhölzl 2007):
  - (5) *Agreement with displaced XP:* 
    - a. Yín cé m<u>îi</u>r tíŋ. you PRF giraffe see 'You saw a giraffe.'
    - b. M<u>îi</u>r **a**-c<u>á</u> t<u>í</u>ŋ. giraffe **DCL.SG**-PRF.1SG see 'A giraffe, I saw.'
    - c. Mi<u>ɛ</u>́ɛr **aa**-c<u>á</u> ke t<u>í</u>ŋ. giraffes **DCL.PL**-PRF.1SG PL see 'Giraffes, I saw.'

The declarative paradigm for this  $\varphi$ -agreement pattern is given below:<sup>2</sup>

PRES	SG	PL	PAST	SG	PL
1st/2nd	Ø-	Ø-	1st/2nd	e-	e-
3rd	a-	aa-	3rd	e-	aa-ke-

 $<sup>^{2}</sup>$ As is clear from these tables, there is some morphological irregularity in this paradigm conditioned by tense. This is evidence that the tense-force prefix hosts true agreement and not a doubled clitic (see Nevins 2011).

- This is true of all types of Ā-movement. The same facts obtain under *wh*-movement, for example. Agreement goes with the *wh*-phrase, even when it has undergone long-distance movement, as in (6c):
  - (6) *Agreement with wh-phrase:* 
    - a. Yeyíŋà e-ke-nhiàr yòn-dén?
       who.PL PST-PL-love house.LNK-SG.3PL
       'Who all loved their house?'
    - b. Yeyíŋà **e-ke**-cíi Áyèn ke gám kit<u>à</u>p? who.PL **PST-PL**-PRF.NS Ayen.NOM PL give book 'Which people had Ayen given a book to?'
    - c. Yeyíŋà **e-ke**-yíi ke t<u>àa</u>k, e-ke-cíi Áyèn ke gám kit<u>à</u>p? who.PL **PST-PL**-IMPF.2SG PL think PST-PL-PRF.NS Ayen.NOM PL give book 'Which people were you thinking that Ayen had given a book to?'

#### 2.3 Long-distance dependencies trigger case assignment

- In addition to  $\varphi$ -agreement, long-distance dependencies trigger *case assignment*.
- The clause-initial XP always occurs in the unmarked case form, the *absolutive* (7a–c).
  - (7) Initial XP has absolutive case:
    - a. **Ayén** a-cé cuín cám ne p<u>à</u>l. Ayen.ABS DCL.SG-PRF food.ABS eat P knife.ABS 'Ayen ate food with a knife.'
    - b. **Cuín** a-cíi Áyèn cám ne p<u>à</u>l. food.ABS DCL.SG-PRF.NS Ayen.NOM eat P knife.ABS 'The food, Ayen ate with a knife.'
    - c. **Pàl** a-cii Áyèn cuín cám. knife.ABS DCL.SG-PRF.NS Ayen.NOM food.ABS eat 'With a knife, Ayen ate food.'
- This is true of subjects, objects, and adjuncts (like the instrumental in (7c)).
- This happens with all types of  $\overline{A}$ -movement. Focus movement, triggered by the particle *e*-, is also accompanied by case assignment (8a–b):
  - (8) Focus movement triggers case assignment:
    - a. e-**Mayén** a-nhiàr yòn-dé. FOC-Mayen.ABS DCL.SG-love house.LNK-SG.3SG 'Mayen loves his house.'
    - b. e-**yòn**-dé a-nhiềgr Máyèn. FOC-house.ABS.LNK-SG.3SG DCL.SG-love.NS Mayen.NOM 'His house, Mayen loves.'
- I will refer to this as the *absolutive case*, following Andersen (1991, 2002) and the broader literature on Nilotic (e.g. Dimmendaal 1983:66, 1985).

- One of the consequences of case assignment in long-distance dependencies is that XPs that do not otherwise appear in the absolutive do so when they move. PPs otherwise appear as full PPs, but become absolutive when fronted, for example:
  - (9) *PPs lose oblique marking when fronted:* 
    - Majók e-<u>yòo</u>c alàath thúuk.
       Majok.ABS PST-buy clothes.ABS market.LOC
       'Majok bought clothes at a market.'
    - b. **Thúk** e-<u>yòo</u>c-e Májòk alàath. market.ABS PST-buy-PREP Majok.NOM clothes.ABS 'A market, Majok bought clothes at.'
    - c. Ayén a-cé cuín cám **ne p<u>à</u>l**. Ayen.ABS DCL.SG-PRF food.ABS eat P knife.ABS 'Ayen ate food with a knife.'
    - d. **Pàl** a-cénne Áyèn cuín cám. knife.ABS DCL.SG-PRF.PREP Ayen.NOM food.ABS eat 'With a knife, Ayen ate food.'
- We can capture this if, like at Spec-TP in English, (absolutive) case is assigned as a reflex of  $\varphi$ -agreement (George and Kornfilt 1981; Chomsky 2000, 2001).

#### 2.4 Long-distance dependencies feed binding

- In support of the idea that long-distance dependencies in Dinka have A-properties, we can show that the clause-initial position behaves likes English Spec-TP for binding.
- In Dinka, long-distance dependencies feed binding, so that there are no Weak Crossover effects with topicalization (10b) or *wh*-movement (10c):
  - (10) No weak crossover with movement to Spec-CP:
    - a. Thòk-dé a-cé dhùk ebén kàc. goat-SG.his 3SG-PRF.NS boy.ABS every bite 'His<sub>j/\*i</sub> goat bit every boy<sub>i</sub>.'
    - b. Dhúk ebén a-cíi thòk-dé kàc. boy.ABS every 3SG-PRF.NS goat-SG.his bite 'Every boy<sub>i</sub>, his<sub>i</sub> goat bit.'
    - c. Ye dhúŋo cíi thờk-dé kàc? Q boy.which 3SG-PRF.NS goat-SG.his bite 'Which boy<sub>i</sub> did his<sub>i</sub> goat bite?'
- Importantly, this is true when Ā-movement is *long-distance* also. We can see this in the long-distance topicalization example below (11).
  - (11) Dhúk εbén a-yíi meth-ké luéel, [e-nhiàr kit<u>ε</u>p-ké].
     boy.ABS every 3SG-IMPF.NS friends-PL.3SG say PST-love books-PL.3SG
     'Every boy<sub>i</sub>, his<sub>i</sub> friends say loved his<sub>i</sub> books.'

- In addition, as with movement to Spec-TP in English, Principle C effects are obviated:
  - (12) *No Principle C reconstruction at Spec-CP:* 
    - a.  $pro_{k/*i}$  a-cé cuín [e-bíye B<u>ô</u>l<sub>i</sub>] cám. DCL.SG-PRF food PST-bring.NS Bol.NOM eat 'He likes the food brought by Bol.'
    - b. Cuín [e-bíye  $B\hat{\underline{o}}l_i$ ] a-cíi  $pro_{k/i}$  cám. food PST-bring.NS Bol.NOM DCL.SG-PRF.NS eat 'The food brought by Bol, he likes.'
- At the same time, these orders are not base-generated, because Dinka shows many reflexes of intermediate movement, as extensively discussed in Van Urk and Richards (to appear).
- In addition, Dinka places severe restrictions on *pro*-drop and uses overt pronouns in resumptive contexts, so that these cannot plausibly be analyzed as resumptive constructions.

#### Summing up so far:

- We have seen that, in Dinka, long-distance dependencies and case assignment, two functions usually associated with C and T respectively, work in tandem.
- This is evidence that these processes need not be independent and that at least these functions of C and T may come from a common source.
- This is the *moral* of this talk. In the rest of it, I will focus on the narrower question of where exactly this mixed position is, at Spec-CP or Spec-TP.
- I will end up arguing that what is different in Dinka is that Spec-CP is a case position. In addition, based on an unusual case alternation involving subjects, I provide evidence that T plays no licensing role.

# **3** Spec-CP as a case position

- Having established that Dinka has this mixed position, I will now focus on the question of where exactly it is located, at Spec-CP or Spec-TP.
- At first glance, it seems attractive that Dinka V2 is in the T domain, since embedded V2 is possible and may co-occur with overt complementizers (13a–b).
  - (13) *Complementizers may co-occur with V2:* 
    - a. A-cá tàak, [ke Càn bé wít tiáam]. 3SG-PRF.1SG think C Can.ABS FUT wrestling win.TR 'I think that Can will win the wrestling.'
    - b. A-cá luéel, [ye Càn a-bé wít tiáam]. 3SG-PRF.1SG say C Can.ABS DCL.SG-FUT wrestling win.TR 'I said that Can will win the wrestling.'
- I will nonetheless argue that V2 is CP-level in Dinka, as concluded also by Van Urk and Richards (to appear), suggesting that the initial position is Spec-CP. As a result, I treat overt complementizers in examples such as (13a–b) as part of an extended left periphery, in the sense of Rizzi (1997).

#### 3.1 Argument 1: No V2 with interrogative complementizers

- One argument for taking V2 in languages like Icelandic and Yiddish to be established at the TP level is that you can get embedded V2 order when the embedded clause contains an interrogative operator (e.g. Diesing 1990; Iatridou & Kroch 1993).
- In both, we get V2 following an interrogative complementizer (14a–b):
  - (14) V2 following an interrogative C:
    - á. Ég vissi aldrei, [hvort hann kæmi eða ekki].
      I knew never whether he would.come or not
      'I never knew whether he would come or not.'
      (Icelandic; Maling 1980:72)
    - b. Zey hobn gefregt [eyb di bobe hot zikh getrofn mit emetsn].
      they have asked if the grandma had REFL met with someone
      'They asked whether grandma had met someone.
      (Yiddish; Adam Albright, p.c.)
- In contrast, in Dinka, V2 order is impossible after an interrogative complementizer or *wh*-phrase):
  - (15) *No embedded V2 with interrogative operator:* 
    - a. Adít a-gĝi [ná nhiàr Máyèn yèen]. Adit DCL.SG-wonder whether love Mayen.NOM 3SG 'Adit wonders whether Mayen loves her.'

b. \*Adít a-gĝi [ná Mayén nhiàr yèen]. Adit DCL.SG-wonder whether Mayen love 3SG 'Adit wonders whether Mayen loves her.'

• Note that verb-initial order is the order which emerges in anything smaller than a CP, just as verb-final order does in Dutch and German. I treat this as raising of the verb of T.

#### 3.2 Argument 2: Embedded V2 is satisfied by wh-movement

- A second argument for treating V2 as CP-level in Dinka is that both terminal and intermediate *wh*-movement satisfies V2 in embedded clause.
- Dinka differs from Icelandic and Yiddish in this respect also. In these languages, *wh*-phrases do not satisfy the V2 requirement in embedded CPs:
  - (16) *V2 following a wh-phrase:* 
    - a. Þeir vissu [hvern amma hafði hitt í bænum].
      they knew who.ACC grandma had met in town 'They knew who grandma had met in town.' (Maling 1980:72)
    - b. Zey hobn gevust [mit vemen di bobe hot zikh getrofn]. they have known with who the grandma had REFL met 'They knew who grandma had met.'
- In Dinka, in contrast, embedded *wh*-movement always satisfies V2:
  - (17) yèn cé gậi [yeŋú cíi Bôl tíŋ].
     I PRF wonder what PRF.NS Bol.NOM see 'I wonder what Bol saw.'
- This is even true of *intermediate*  $\bar{A}$ -movement. In particular, wh-phrases undergoing longdistance movement necessarily satisfy the V2 property of intermediate clauses:
  - (18) *Long-distance movement satisfies intermediate V2:* 
    - a. Yeŋà yúkku luéel, [\_\_\_\_ e-cé cuín cám]? who IMPF.1PL say PST-PRF food eat 'Who did we say ate food?'
    - b. \*Yeŋà yúkku luéel, [cuín e-cíi cám]? who IMPF.1PL say food PST-PRF.NS eat 'Who did we say ate food?'
    - c. Yeŋú yúkku luéel, [\_\_\_\_ e-cúkku cám]? what IMPF.1PL say PST-PRF.1PL eat 'What did we say we ate?'
    - d. \*Yeŋú yúkku luéel, [wò e-cé cám]?
       what IMPF.1PL say we PST-PRF eat
       'What did we say we ate?'

• As Van Urk and Richards (to appear) argue, this suggests that the clause-initial position serves as an *escape hatch* for successive-cyclic movement, a property generally ascribed to Spec-CP (e.g. Chomsky 1977 et seq.).

#### 3.3 V2 position marks clause type

- A final consideration with regard to the position of V2 in Dinka is that the V2 position hosts morphological marking of clause type, which is usually associated with the high left periphery.
- In particular, there is a prefix that attaches to the V2 verb/auxiliary, which expresses whether the clause is declarative or interrogative. This is the particle *a* in (19).
  - (19) *Declarative prefix on V2 verb/auxiliary:* 
    - a. B<u>ò</u>l **a**-cé w<u>è</u>u kw<u>à</u>l. Bol **DCL.SG**-PRF money steal 'Bol stole some money.'
    - b. A-c $\underline{\acute{a}}$  luéel, [ye C $\underline{\grave{a}}$ n **a**-bé wít ti $\underline{\acute{a}}$ am]. 3SG-PRF.1SG say C Can.ABS DCL.SG-FUT wrestling win.TR 'I said that Can will win the wrestling.'
- This particle disappears in questions (20a), even when we have *wh* in situ (20b):
  - (20) Declarative particle disappears in questions:
    - a. Yeŋú Ø-cíi B<u>ô</u>l tíŋ? what Q-PRF.NS Bol.NOM see 'What did Bol see?'
    - b. ŋòr Ø-cé ŋú ku<u>éɛ</u>n? Ngor Q-PRF what read 'What did Ngor read?'
- This prefix can surfaces both on the matrix and embedded V2 position, as (19a–b) demonstrate. We can explain this pattern if the V2 verb/auxiliary raises all the way up to C, which is expressed as a prefix.

#### 3.4 *C* as the locus of case assignment

- Taking these arguments as indication that the clause-initial position is Spec-CP, I propose that *C* is a case assigner in Dinka. C, and not T, carries a  $\varphi$ -probe and assigns case to the XP it enters into  $\varphi$ -agreement with.
- As a result of this, an XP moving to Spec-CP triggers  $\varphi$ -agreement and surfaces in absolutive case.

#### The syntax of subject-initial clauses

• In this syntax, C is the usual licenser for subjects, as the first  $\varphi$ -probe above the subject. Clauses with unmarked word order have the syntax in (21):



• In this tree, the subject DP moves to Spec-CP and is assigned absolutive case there. T does no work, because it is inactive.

#### Clauses with Ā-movement of a non-initial subject:

• I propose that objects and other XPs are also assigned absolutive case when they move to Spec-CP, as a reflex of the  $\varphi$ -agreement they trigger:



- Objects also appear to be case-licensed in the vP, though, where they also surface in the absolutive:
  - (23) *Objects always in absolutive:* 
    - a. Ayén a-cé **cuín** cám ne p<u>à</u>l. Ayen.ABS DCL.SG-PRF food.ABS eat P knife.ABS 'Ayen ate food with a knife.'
    - b. **Cuín** a-cíi Áyèn cám ne p<u>à</u>l. food.ABS DCL.SG-PRF.NS Ayen.NOM eat P knife.ABS 'The food, Ayen ate with a knife.'

- In particular, as discussed in detail in Van Urk and Richards (to appear), there is clear evidence that *v* assigns absolutive also and that objects move through Spec-*v*P on their way to Spec-CP.
- Case assignment then *does not render nominals inactive for further*  $\varphi$ *-agreement in Dinka*. As a result, an object moving to Spec-CP can trigger  $\varphi$ -agreement both at v and at C.
- (This factor is presumably what distinguishes Dinka from other languages in which  $\varphi$ agreement can happen at C, in which the case and agreement alternations described above
  do not appear to obtain.)

#### A note on movement of PPs

- The syntax in (22) can also be applied to instances in which the clause-initial represents a PP, like an adjunct. We might wonder how a PP can trigger φ-agreement at C, however, since φ-agreement with PPs is severely restricted across languages (e.g. Rezac 2008).
- It turns out that, when PPs move to clause-initial position, a suffix *-el-ne* must appear on the V2 verb/auxiliary:
  - (24) *PPs lose oblique marking when fronted:* 
    - a. Majók e-<u>yò</u>c alàath **thúuk**. Majok.ABS PST-buy clothes.ABS market.LOC 'Majok bought clothes at a market.'
    - b. **Thúk** e-<u>yòo</u>c-e Májòk alàath. market.ABS PST-buy-PREP Majok.NOM clothes.ABS 'A market, Majok bought clothes at.'
    - c. Ayén a-cé cuín cám **ne p<u>à</u>l**. Ayen.ABS DCL.SG-PRF food.ABS eat P knife.ABS 'Ayen ate food with a knife.'
    - d. **Pàl** a-cé-**ne** Áyèn cuín cám. knife.ABS DCL.SG-PRF-PREP Ayen.NOM food.ABS eat 'With a knife, Ayen ate food.'
- This suffix is identical in shape to Dinka's general purpose preposition, which has the same two allomorphs. PPs then seem to strand their P before moving to Spec-CP, enabling them to enter into a  $\varphi$ -agreement relation. See Van Urk (in prep.) for a detailed proposal for how this works.

# 4 On the role of T and "marked nominative" in Dinka

- I will now provide evidence that T plays no licensing role in Dinka, based on the observation that non-initial subjects occur in a special, morphosyntactically marked case, sometimes called "marked nominative".
- The result will be a syntax in which *C* and *v* are the active case assigners.
- 4.1 "Marked nominative" case
  - I proposed above that C carries a  $\varphi$ -probe and assigns case, and that it targets the XP moving to Spec-CP.
  - If C is responsible for subject licensing, however, this should prevent the subject from getting licensed. We might then expect to see a special strategy emerge to license the subject in these contexts.
  - As it turns out, when subjects are non-initial, they surface in a *dedicated case*, which has been called "marked nominative" (Dimmendaal 2005, 2007; König 2006, 2008).
  - This case is tonally distinguished from the absolutive:
    - (25) Subjects appear in "marked nominative" when non-initial:
      - a. **Ayén** a-cé cuín cám ne p<u>à</u>l. Ayen.ABS DCL.SG-PRF food.ABS eat P knife.ABS 'Ayen ate food with a knife.'
      - b. Cuín a-cíi Áyèn cám ne p<u>à</u>l. food.ABS DCL.SG-PRF.NS Ayen.NOM eat P knife.ABS 'The food, Ayen ate with a knife.'

**The idea:** "Marked nominative" is a repair, assigned as a Last Resort because the subject fails to be licensed when Spec-CP is otherwise occupied.

• Before developing this analysis, let me first show that "marked nominative" is not like familiar structural cases associated with subjects.

## "Marked nominative" $\neq$ ergative

- The presence of "marked nominative" is not linked to transitivity or semantic properties of the verb. We see it also with unergatives, for example. We can make sure that Spec-CP is occupied by using a *yes-no* question (26b) or topicalizing an adjunct (26c).
  - (26) *Case of subject alternates with unergatives:* 
    - a. **Adít** a-nín. Adit.ABS DCL.SG-sleep 'Adit is sleeping.'

- b. Nín Ádìt? sleep Adit.NOM 'Is Adit sleeping?'
  c. yột a-nìn-e Ádìt thín. house.ABS DCL.SG-sleep.NS-PREP Adit.NOM in.it 'In the house, Adit is sleeping.'
- In both cases, the subject appears in "marked nominative".
- We see the same pattern with unaccusatives (27a-c) (which can be distinguished from unergatives in Dinka using a variety of tests).
  - (27) *Case of subject alternates with unaccusatives:* 
    - a. **Galám** a-cé dhuòŋ. pen.ABS DCL.SG-PRF break 'The pen broke.'
    - b. Cé gálàm dhuòŋ?
       PRF pen.NOM break
       'Did the pen break?'
    - c. yồt a-cénne **gálàm** dhuồn thín. house.ABS DCL.SG-PRF.PREP pen.NOM break in.it 'In the house, the pen broke.
- "Marked nominative" is then clearly not like ergative case, since it shows no relation to properties of the verb.

#### "Marked nominative" $\neq$ nominative

- At the same time, "Marked nominative" is also not like nominative. First of all, it is the marked case. The absolutive is the case that appears in all default contexts, as in citation form and on nominal predicates (Andersen 1991, 2002) (28a–b).
  - (28) *Absolutive case is used on nominal predicates:* 
    - a. Adít a-nhiền dupiòc. Adit.ABS DCL.SG-love.NS teacher.NOM Adit, the teacher loves.
    - b. Adít e-**dupióoc**. Adit.ABS COP-**teacher.ABS** 'Adit is a teacher.'
- In addition to this, "marked nominative" is also assigned by prepositions, as pointed out also by Andersen (2002).
- This is evident in two environments. Possessors are expressed in a PP with the preposition *e*. The DP is "marked nominative" (29).

- (29) Oblique case on possessors:
   Yín nhiàr yòn è Máyèn.
   you love house.LNK P Mayen.NOM
   'You love Mayen's house.'
- "Marked nominative" is also found under the preposition *ne* to form *by*-phrases of passives (30).
  - (30) By-phrase of passive has oblique DP:
     Cuín a-cîi cám ne pàl ne Áyèn.
     food.ABS DCL.SG-PRF.PASS eat P knife.ABS P Ayen.NOM
     'The food was eaten with a knife by Ayen.'
- "Marked nominative" then does not pattern like nominative case either.
- 4.2 "Marked nominative" as a repair

**Proposal:** "Marked nominative" is a *repair*, reflecting the insertion of a null preposition to license a caseless nominal.

- The idea here is that C is the only head that can license the subject. If C agrees with another XP (because Spec-CP is occupied by the object, for example), then the subject is deprived of licensing.
- I suggest that "marked nominative" is the repair that emerges in these contexts.

#### **Repairs for the Person-Case Constraint**

- The notion of repair that I use here has been argued for recently by Rezac (2011), who observes that Person-Case Constraint (PCC) violations can be repaired in many languages by the insertion of additional, often prepositional, structure.
- The PCC is a ban on 1st/2nd person DPs in the context of certain DPs (Bonet 1991; Béjar and Rezac 2003). In some languages, this can be repaired by realizing one of these in an oblique form.
- In French ditransitives, for example, a 1st or 2nd person direct object clitic is ungrammatical in the presence of an indirect object clitic (31a–b):
  - (31) *PCC holds in French ditransitives:* 
    - a. Je la leur ai présenté. I 3P.CL 3P.CL have introduced 'I have introduced them to them.'

- b. \*Je vous leur ai présenté. I 2P.CL 3P.CL have introduced 'I have introduced you to them.'
- As a repair, the indirect object may be exceptionally realized as a full PP or, for some speakers, as the locative clitic *y* (Couquaux 1975):
  - (32) *Indirect object may be realized as PP or locative clitic:* 
    - a. Je vous ai présenté à eux hier.
      I 2P.CL have introduced to them yesterday 'I have introduced you to them.'
    - b. %Je vous y ai présenté. I 2P.CL LOC have introduced 'I have introduced you to them.'
- Crucially, this represents a repair, because these strategies are not available when the PCC would not be violated:
  - (33) *Repairs unavailable when PCC not violated:* 
    - a. \*Je l' ai présenté à eux. I 3P.CL have introduced to them 'I have introduced them to them.'
    - b. \*Je la y ai présenté.
      I 3P.CL LOC have introduced
      'I have introduced them to them.'
- Rezac (2011) documents similar repairs in Chinook, Basque, and Finnish, and proposes that, in these cases, K or P structure is added as a Last Resort to license a DP.

Proposal: "Marked nominative" is the insertion of a silent P, which assigns case to the subject.

• To illustrate, let's consider an example of object topicalization. The object moves to Spec-CP, where it agrees with C in  $\varphi$ -features and is assigned (absolutive) case:



• The subject is left without a case licenser, though. As a result, at Spell-Out, we have a violation of the Case Filter. As a repair, Dinka allows for the insertion of a silent preposition, which assigns case to the subject (35).



- This P assigns the "marked nominative" case to the subject. As a result, the subject ends up looking like it is in a "marked" form, because it is actually a PP.
- In contrast, when the subject moves to Spec-CP, P insertion never applies, because the subject is case-licensed by C before the phase is completed. We can then characterize the case alternation found with subjects as a *bleeding* interaction between P insertion and case assignment by C.

"Marked nominative" = prepositional: Under this approach, we can understand why Dinka appears to have a "marked nominative" case (König 2006, 2008). *Dinka actually only has one structural case, the absolutive*. This case therefore surfaces when we expect the structural default.

• That the subject case seems "marked" is because it reflects the presence of PP structure. "Marked nominative" is actually a case assigned by prepositions.

#### Verb-initial clauses

- We can apply the same story to verb-initial clauses in which "marked nominative" appears, such as matrix and embedded *yes-no* questions (36a–b):
  - (36) *"Marked nominative" in verb-initial clauses:* 
    - a. Adít a-gĝi [ná nhiàr Máyèn yèen]. Adit.ABS 3SG-wonder whether love Mayen.NOM 3SG 'Adit wonders whether Mayen loves her.'

b. Nhiàr Máyèn yèen?
 love Mayen.NOM 3SG
 'Does Mayen love her?'

- I propose that these C heads do not carry unvalued  $\varphi$ -features and do not host  $\overline{A}$ -dependencies.
- This means that the subject can never receive structural licensing and so insertion of P must happen at the end of the CP phase:



**Broader consequence:** If "marked nominative" reflects insertion of a preposition to license the subject, then T indeed does no licensing work in Dinka. Instead, only C has the capacity to license nominals.

• In addition, the above suggests that structural arguments can be licensed outside of the extended verbal projection (see Halpert 2012 and Imanishi 2014 for similar conclusions based on data from Zulu and Mayan, respectively).

#### A prediction: "Marked nominative" case in non-finite contexts

- If this is right, then the availability of "marked nominative" should not vary based on properties of T.
- This prediction appears to be borne out, as some familiar case licensing effects associated with T appear absent in Dinka.
- Specifically, Dinka has a set of non-finite clauses, headed by the irrealis marker *bé*, in which no tense contrasts are possible. In these, lexical subjects alternate with PRO, and surface as "marked nominative" (38a–b).

- (38) *Overt subjects can surface in non-finite clauses:* 
  - a. B<u>ò</u>l a-cé Ayén l<u>ô</u>ŋ [bé j<u>à</u>l]. Bol.ABS 3SG-PRF Ayen.ABS encourage.TR IRR leave 'Bol encouraged Ayen to leave.'
  - b. B<u>o</u>l a-cé Ayén l<u>ô</u>ŋ [bé Ádìt j<u>à</u>l]. Bol.ABS 3SG-PRF Ayen.ABS encourage.TR IRR Adit.NOM leave '(lit.) Bol encouraged Ayen for Adit to leave.'
- This follows, since P-insertion can apply to license the subject regardless of finiteness.

### **Concluding remarks**

- In this talk, I showed that *long-distance dependencies can be accompanied by case assignment and φ*-agreement.
- Specifically, I suggested that, in Dinka, C carries a φ-probe instead of T, so that C is responsible for subject licensing.
- These facts offer evidence that *the features C and T carry are related*, so that the functions associated with T in one language may be associated with C in another, as in feature inheritance approaches (Chomsky 2008).

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