

Puzzle 2: Objects in Tunen

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Outline

This talk presents work in progress on Tunen objects. Section §1 gives relevant background information, section §2 presents data, and section §3 highlights three puzzles: (a) whether there is a focus position, (b) object drop and expression in discourse, and (c) discontinuous orders. Section §4 concludes.

1 Background

1.1 Tunen

See below for a basic factfile on Tunen.

Property	Value
Language classification	Bantu (Niger-Congo), Guthrie no. A44 (Maho 2003)
Country	Cameroon (Centre/Littoral)
Base word order	SOV (not SVO!)
Phonology	2 phonological tones (H and L) ATR vowel harmony system (Boyd 2015) Sentence-final tone lowering and vowel reduction (Dugast 1971 ; Mous 2003)

Table 1: Tunen factfile

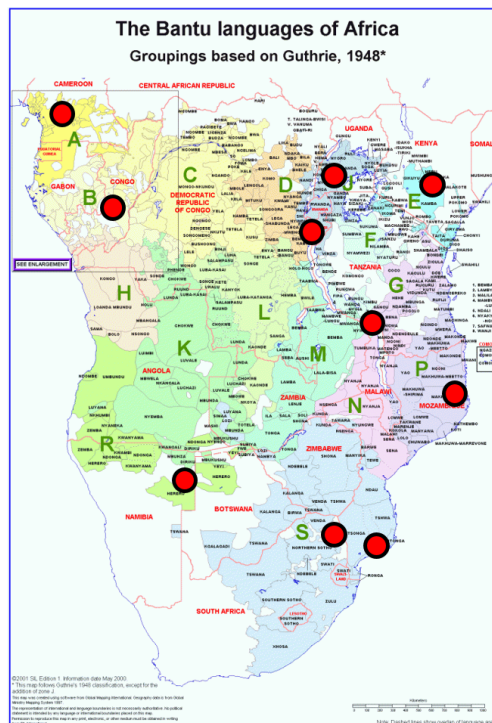


Figure 1: BaSiS languages, showing Tunen in the North-West (map ©SIL 2001)

1.2 Objects and Case theory

In a nominative-accusative system, direct objects are thought to be assigned accusative case through head-complement relationship with the verb (and indirect objects get dative case).

More in puzzle 3 tomorrow about case diagnostics and disentangling the notions of ‘object’ and ‘accusative’...

1.3 Objects in Bantu

Bantu languages typically have an object marker (OM) within the verbal complex, as a prefix.

The typology of object-marking in Bantu languages has been studied in some detail. For instance, [Marten and Kula \(2012\)](#) discuss a three-way typology of Bantu object-marking.

Type	Pre-verbal OMs	Post-verbal OMs	Main geographical location
Type 1	✓	✗	Eastern and Southern Bantu
Type 2	✗	✓	North-western Bantu
Type 3	✓	✓	Central and Western Bantu

Table 2: Three-way typology of Bantu object marking (adapted from [Marten and Kula \(2012\)](#))

Based on Table 2, we predict from Tunen’s position as a North-Western Bantu language that it would be a Type 2 language with post-verbal object markers. However, we will later see that Tunen differs from the three types here in that it has no object marking on the verb.

1.4 Methodology

This study builds on existing work on Tunen (notably [Dugast \(1967, 1971\)](#); [Mous \(2003\)](#)) with original fieldwork. The first fieldwork trip was conducted in Mar-Jun 2019 (3.5 months) in Ndikiniméki, Cameroon. Audio and video recordings were made with 6 consultants (of which 3 were main consultants), using French as a met-language. Approximately 75 hours of material was recorded and transcribed onto Dative.¹

The BaSIS methodology was used, namely elicitation with a given context / picture stimulus, as well as collection of natural dialogues. Data was transcribed and inputted onto a Tunen server accessed via the *Dative* database ([app.dative.ca](#)); the raw data, metadata, and Dative transcriptions will be archived open access at the end of the project.



Figure 2: Elicitation session video still.

¹Based on 30 fieldwork sessions and an estimated average duration of 2.5 hours (total session duration, not hours of continuous speech).

2 Tunen data

2.1 Base word order

Tunen has base word order of SOV (unlike most Bantu SVO). This applies to all affirmative tenses, and to both full DP objects and pronominal objects.^{2,3}

- (1) mènó mìsəkù siəkìn(ə)! (hot news thetic)
/mɛ-nɔ mi-səku siəkinə/
SM.1SG-PAST1 3-elephant see
'Je viens de voir un éléphant!'
'I just saw an elephant!' [PM, 316]

The Tunen VP is therefore head-final (OV). However, the DP, PP, and CP are head-initial (see below), making Tunen a non-rigid SOV language.

Evidence that the DP is head-initial is that demonstratives appear postverbally.⁴

- (2) *Head-initial DP*
yéyè èngàndó
/yɛyɛ ɛ-ŋgandɔ/
DEM.PROX.7 7-crocodile
'ce crocodile'
'this crocodile' [PM, 741]

PPs are always head-initial. The preposition ð is used in a broad range of contexts (and so is translatable as 'in', 'on', 'to', 'at', 'from', etc., and therefore glossed simply as PREP).

- (3) *Head-initial PP*
ð bələá?
/ɔ bɔ-lɛa/
PREP 14-tree
'De l'arbre?'
'From the tree?' [EO, 579]

Complementisers appear head-initially in embedded CPs. Frequently the class 1/3 relative marker ðwá is used as a complementiser. Another complementiser is mèséá, which is grammaticalised/-ing from the verb -séá 'say', inflected with the 1SG subject marker mɛ-.⁵

²In some other zone A languages, there is a tense-dependent OV/VO alternation. It has been suggested that the diachronic source of Tunen SOV was from pronouns, and it is observed in Basaa, another Cameroonian zone A language, that objects are marked with pronominal forms (Marten and Kula 2012). This use of pronoun-like object markers is not found synchronically in Tunen, though could be hypothesised to have been found previously (meaning that Tunen would be further down the grammaticalisation path than Basaa).

³Data are presented with the consultant's initials and the Dative form id number. A list of glossing abbreviations can be found at the end of this handout.

⁴Demonstratives may also appear postnominally, but this is almost always in addition to a pre-nominal demonstrative (Dem-N-Dem). cf Makhuwa. The exception is in a construction *FOC N Dem!* 'voilà un X', 'there's an X!'. This construction can be used in a hot news thetic context (e.g. announcing a crocodile to people who haven't noticed its presence) and will be analysed in more detail in future work.

⁵The prescriptive standard seems to be ðwá.

- (4) káákè! nèðfénè miàḡḡá mbà mé àḡḡá lèénà mèséá bàbá Dàníélè àkà wé èé?
 /kəəkə neɔfene miaḡḡa mba me aḡḡa leɛnà [CP **mɛ-sɛa** baba
 EXCL today PRON.1SG.EMPH but SM.1SG PRON.2SG.EMPH say.APPL that 1.father
 Daniele a-ka wə] ee/
 Daniel SM.1-PAST3 die Q

'Bah! Est-ce que c'est moi qui va aujourd'hui te dire que papa Daniel était mort?'

'Bah! Am I really the one to tell you today that Papa Daniel died?' [PM, 1002]

Before looking to see whether this order is affected by information structure, we will consider imperatives and relative clauses.

2.2 Imperatives

2.2.1 Affirmative imperatives: VO

Affirmative imperatives are formed using the verb stem. Objects appear **after** the verb.

- (5) kákà mènífə tókà!
 /kaka ma-nifə tɔka/
 go 6-water draw

'Va puiser l'eau!'

'Go draw water!', 'Go fetch water!'

[JO, 613]

Non-arguments also appear postverbally:

- (6) kákà ò nìdóní!
 /kaka ɔ ne-oni/
 go PREP 5-market
 'Va au marché!
 'Go to the market!'

[JO, 615]

2.2.2 Negative imperatives: SOV

Negative imperatives are formed with the *-lè* negation marker, which appears in the tense slot. A second person subject marker attaches to the negation marker, and the order is SOV.

Negative imperatives have the base word order and a negation marker in the tense slot.

- (7) ðlè máyé mónífə nya!
 /ɔ-le ma-ye ma-nifə nya/
 SM.2SG-NEG 6-DEM 6-water drink
 'Ne bois pas cet eau!
 'Don't drink this water!'

[JO, 617]

2.3 Relative clauses

2.3.1 SVO

We see SVO in object relatives:⁶

- (8) àlèà fānákát#⁵ tūèfūlè tūkīmè òtwá mùlólìè án#átìlèk
/a-lea fana-aka-tò tò-əfulə tɔ-kimə **ɔtwa** mu-ləliə á-na-til-aka/
SM.1-be read-DUR-PTCP 13-book 13-all REL.13 1-teacher REL.SM.1-PAST2-write-DUR
'Il a lu tous les livres que le professeur a écrit'
'He has read every book that the teacher wrote' [PM, 492]

Note that the above is a verbal construction with the copula *-lèà* 'be' followed by a participle form of the verb *-fānà* 'read'.

2.3.2 SOV

We also see SOV order in object relatives:

- (9) (nèòfénè) mətìnè ànà bèlábónéá bīkīmè òbéá yàmiá ìnyò àn#á táléáká nàánèkòlà (*nèòfénè) òkòlòkèn(à)
(nèòfén)
/(nəʔfɛnɛ) mətɪnə a-na bɛ-labɔnɛa bɛ-kimə **ɔbɛa** yamɪa inyɔ a-na talea-aka
(today) Martin SM.1-PAST2 8-food 8-all REL.8 my 1.mother SM.1-PAST2 cook-DUR
naanɛkɔla (*nəʔfɛnɛ) ɔkɔlɔkɛna (nəʔfɛnɛ)/
yesterday (*today) taste (today)
'Martin a goûté (aujourd'hui) toute la nourriture que ma mère a cuisiné hier'
'Today, Martin has tasted all the food that my mother cooked yesterday' [PM, 498]

2.3.3 Discontinuous order

In natural dialogue, object relatives were sometimes produced where the noun is preverbal and the relative clause is postverbal. This occurred in the QUIS map task and in an unscripted conversation.

- (10) òlè ènómè ètá òyéá yéndó ákánà ò mīòkó
/ɔ-le ɛ-nɔmɛ ɛta **ɔyɛa** yɛ-ndɔ akana ɔ mi-ɔkɔ/
SM.2SG-NEG 7-route take REL.7 SM.7-PRES leave PREP 4-chicken
'Ne prends pas la route qui mène aux poules'
'Don't take the road which leads to chickens' [PM, 692]

- (11) mèkà ámé yáyéá ìbèḡùlùèkè yíbúsíé sīèkìné òyéá á#ná ònd, á Ínyàsè á#ná bá ándò kīndì -
/mɛ-ka amɛ yayɛa ɛ-bɛḡuluɛkɛ yɛ-busɪə sɪəkinɛ **ɔyɛa** a-na ɔnd
SM.1SG-PAST3 PRON.1SG PRON.POSS.3SG 7-car 7-first see REL.7 SM.1-PAST3 buy
á Inyasɛ á-a-na ba a-ndɔ kindɪə -/
FOC Inyas REL-SM.1-PAST3 be SM.1-PRES drive -
'Moi j'avais vu la première véhicule qu'il a acheté, c'est Inyas qui conduisait -'
'I myself saw the first vehicle he bought, it was Inyas who drove (it) -' [PM, 1045]

We will see more discontinuous objects in section §2.7 below.

⁶The head noun is underlined and the relative marker is in boldface.

2.4 Indirect objects

2.4.1 Main clauses

So far, we have seen direct objects. For ditransitives, the indirect object precedes the direct object (S IO-DO V).⁷

(12) Q: *Who gave fish to this cat?*

A: á mɔ́ná wà Màlé áná hí hìmùísìmùísí híðfɔ̀ ìndì

/á mɔ́na wa Malea á-na hi hɛ-muisimuisi hɛ-ɔfɔ̀ indi/

COP 1.child ASSOC.1 1.Marie REL.SM.3SG-PAST2 DEM.PROX.19 19-cat 19-fish give

'C'est l'enfant de Marie qui a donné du poisson à ce chat'

'Marie's child gave fish to this cat'

[EO, 281]

2.4.2 Imperatives

The same IO-DO order is found in imperatives (V-IO-DO).⁸

(13) índìè miàṅó mìðf!

/indìə miəŋo miðf/

give PRON.1SG 3.hoe

'Give me the hoe!'

[Mous 2003:304]

2.5 Focussed objects

We now turn to investigate whether/how Tunen objects are affected by information structure, working from function to form using the BaSIS methodology of Q-A congruence.

There are four strategies for term focus on an object DP: (i) in-situ focus, (ii) ex-situ focus (postverbal), (iii) ex-situ focus (cleft), and (iv) fragment answers.

2.5.1 In-situ focus

Focussed object DPs can be realised in-situ (S[O]_{FOC}V).

(14) Q: *What is the man holding?* + hand-drawn picture stimulus (DP focus)

A: mɔ̀ndɔ̀ àná kàlótɔ̀ ìtí

/mɔ̀-ndɔ̀ a-na kalɔ̀tɔ̀ iti/

1-person SM.1-PAST2 7.carrot hold

'L'homme tient une carotte'

'The man is holding a carrot'

[JO, 1107]

⁷The same IO-DO order applies within questions.

⁸Glosses of the example have been adapted.

2.5.2 Ex-situ focus

The object can move after the verb when there is sub-DP focus (e.g. on a numeral).

(15) Q: *'How many fish have you caught?'* (sub-DP focus)

A: mèná nófó ómàná hìðfó hímdòtì

/mɛ-na nɔfɔ ɔmana hɛ-ɔfɔ hɛ-mɔtɛ/

SM.1SG-PAST2 fish only 19-fish 19-one

'J'ai seulement pêché un poisson'

'I've only caught one fish'

[PM, 1205]

2.5.3 Discontinuous DP

In a context where both a noun and modifying numeral are new information (i.e. in focus), discontinuous orders (S-O-V-Num) are regularly found.

(16) Q: *'What do you see?'* + *hand-drawn picture stimulus* (DP focus)

A: méndò tùnòní sínè tólál

/mɛ-ndɔ tɔ-nɔni sinɛ tɔ-lalɔ/

SM.1SG-PRES 13-bird see 13-three

'Je vois trois oiseaux'

'I see three birds'

[JO, 547]

We will consider more cases of discontinuous DPs in §2.7.

2.5.4 Fragment answers

Fragment answers are common, e.g. below.

(17) Q: *'What is the man holding?'* + *hand-drawn picture stimulus* (DP focus)

A: kàlót

/kalɔt/

7.carrot

'Une carotte.'

'A carrot.'

[PM, 1266]

(18) *Dialogue*

bìkìm ě, èbákà mì hìkəkìə bìkìm -

/bɛ-kimə ě ɛ-baka mɛ hìkəkìə bɛ-kimə /

8-all eh SM.7-be SM.1SG like 8-all

'Tous eh, j'aime normalement tous (ca) -'

'Everything eh, I generally like everything -'

[PM, 967]

2.5.5 Heavy DP shift (?)

All examples of focussed heavy DPs have SVO order, suggesting there could be phonological weight motivations for postverbal object placement.

(19) *Scope picture 1/77* (DP focus)

méndò sinə̀ b̀l̀léá nà̀ t̀ùnòní òmbà̀ṅà ò̀ m̀l̀éáfè té
 /mɛ-ndɔ̀ sinə̀ bɔ-lɛa na tɔ-noni ɔmbaŋa ɔ mɔ-leafe tɛa/
 SM.1SG-PRES see 14-tree with 13-bird on_top PREP 3-branch each
 'Je vois une arbre avec des oiseaux sur chaque branche'
 'I see a tree with birds on each branch'

[EO, 1470]

(20) *Hand-drawn picture stimuli* (DP focus)

méndò sinə̀ h̀èbà̀nánà h́ímòtì nà̀ k̀alótò é̀mòtè
 /mɛ-ndɔ̀ sinə̀ hɛ-banana hɛ-mɔtɛ na kalɔtɔ ɛ-mɔtɛ/
 SM.1SG-PRES see 19-banana 19-one with 7.carrot 7-one
 'Je vois une banane et une carotte'
 'I see a banana and a carrot'

[JO, 877]

2.6 Object expression

Unlike most Bantu languages (cf Table 2), Tunen does not mark objects on the verb; there are no object markers. Overt expression of the DP object is therefore the only means of expressing the object beyond using a pronominal form (which is not common). Object drop is frequently found in Tunen.

An example of object drop is given below. Later in section §3.1, a case study will be worked through to investigate how the choice of object expression is affected by accessibility.

(21) *Context: QUIZ map task between PM and EO*

m̀òkátá ẃó b́énómè ẃúbúsíá ìb̀ùṅ̀l̀ù̀òk̀è ýéndà p̀áká h́áhà ò̀ m̀átá
 mɔ-kata wɔ bɛ-nɔmɛ wu-upusɔ ɛ-buŋuluəkə yɛ-nda baka haha ɔ mata
 3-hand ASSOC.3 right first 7-car SM.7-PROX be here PREP bottom
 'There's a car at the bottom on the first road on the right'

[PM, id 671]

(22) éé, méndò̀ sìn

ɛɛ, mɛ-ndɔ̀ sinə̀
 yes SM.1SG-PRES see.APPL
 'Yes, I see it.'

[EO, id 672]

Note that this example has an applicative marker on the verb, which suggests an extra argument is needed syntactically (though no argument is linguistically expressed).

2.7 Discontinuous DPs

An interesting puzzle about Tunen is discontinuous DPs. These occur frequently, especially with (cardinal) numerals (O-V-Num), but not exclusively (e.g. V-O-Num is possible). On a syntactic level, discontinuous constituents are surprising and an analysis must allow for them.⁹ This section will present the types of discontinuous DPs found in the data, and then provide some preliminary discussion.

⁹Mous (2003:305) briefly discusses discontinuous DPs, saying that numerals are postverbal 'due to their selectional property'.

- (23) méndò t̀̀b̀̀à̀nà̀nà nyé t̀̀f̀̀à̀ndé ò bwòs
 /mɛ-ndɔ tɔ-banana nɛ tɔ-fandɛ ɔ bɔ-ɔsɛ
 SM.1SG-PRES 13-banana eat 13-two PREP 14-day
 ‘Je mange deux bananes par jour’
 ‘I eat two bananas a day’ [PN, 351]

- (24) Context: *Response to EK stating “Every tree has one bird” + scope image 3/77*
 b̀̀óó, màléá màkímè màlébà nà h̀̀noní h̀̀m̀̀òtì. b̀̀léá b̀̀b̀̀ákà b̀̀m̀̀òtè ɛ̀̀nà̀nà h̀̀ǹ̀onì
 /bɔɔ, ma-lea ma-kimə ma-lɛ-ba na hɛ-noni hɛ-moti **bɔ-lea bɔ-baka bɔ-mɔtɛ ɛnana**
 no 6-tree 6-all SM.6-NEG-be with 19-bird 19-one 14-tree 14-be.DUR 14-one without
hɛ-noni/
 19-bird
 ‘Non, tous les arbres n’ont pas un oiseau. Il y a un arbre sans oiseaux.’
 ‘No, all the trees don’t have a bird. There is a tree without a bird.’ (NEG>ALL) [JO, 1154]

The same speaker used a non-discontinuous order in the same session.

- (25) Context: *Asked to describe scope image 1/77*
 b̀̀léá b̀̀m̀̀òtè b̀̀b̀̀ákà nà t̀̀ǹ̀oní t̀̀è̀n
 /bɔ-lea bɔ-mɔtɛ bɔ-baka na tɔ-noni tɔ-ɛni/
 14-tree 14-one 14-be.DUR with 13-bird 13-many
 ‘(Il y a) un arbre avec beaucoup de oiseaux’
 ‘(There is) a tree with many birds’ [JO, 1150]

Here, it looks like the numeral ‘one’ is not interpreted as in focus, in contrast to the previous example where the existence of one tree without birds served as a counter example to the prompt statement. This gives some support to a postverbal focus position.

In the same task, the speaker gave a S-V-O-Num order in a term focus context:

- (26) Context: *Scope image 1/77 Context + question “yàté ́ndò s̀̀n?” (What do you see?)*
 méndò s̀̀nè b̀̀léá b̀̀m̀̀òtè. b̀̀b̀̀ákà nà t̀̀ǹ̀oní t̀̀è̀n
 /mɛ-ndɔ sɪnə bɔ-lea bɔ-mɔtɛ bɔ-baka na tɔ-noni tɔ-ɛni/
 SM.1SG-PRES see 14-tree 14-one 14-be.DUR with 13-bird 13-many
 ‘Je vois un arbre. Il a beaucoup de oiseaux’
 ‘I see a tree. It has many birds.’ [JO, 1151]

Sometimes, the object DP is fronted in answers, instead of using a discontinuous order.¹⁰

- (27) Context: *hand-drawn picture stimuli*
 t̀̀ǹ̀oní t̀̀l̀̀l̀́ méndò s̀̀nè
 /tɔ-nɔni tɔ-lalɔ mɛ-ndɔ sɪnə/
 13-bird 13-three SM.1SG-PRES see
 ‘I see three birds’
 ‘Je vois trois oiseaux’ [JO, 545]

¹⁰The subject marker is high toned here, while it is normally low - this could be relative marking, for instance as part of a cleft structure (although there is no clear indication of a copula here, and little suggestion of zero copulas in the language).

The speaker accepted the following as an alternative order in the same context.

(28) *Context: same as previous*

méndò sínè tùnòní tólál

/mɛ-ndɔ sínə tɔ-nɔni tɔ-lalɔ/

SM.1SG-PRES see 13-bird 13-three

'I see three birds'

'Je vois trois oiseaux'

[JO, 546]

The speaker also accepted a discontinuous order.

(29) *Context: same as previous*

méndò tùnòní sínè tólál

/mɛ-ndɔ tɔ-nɔni sínə tɔ-lalɔ/

SM.1SG-PRES 13-bird see 13-three

'I see three birds'

'Je vois trois oiseaux'

[JO, 547]

All instances of discontinuous DPs in my data are with cardinal numerals, but Mous (2003) gives an example with an adjective -*héhé* 'big', which is translated with contrastive focus.¹¹

(30) mɛ-ná ìmìtə yè m^wənífí índí mɛ-héhé ò hɛ̀lɔ́bátò

/mɛ-na e-mitə ye ma-nifə india me-hɛɛ ɔ hɛ-lɔbatɔ/

SM.1SG-PAST2 9-calabash ASSOC.9 6-water give 9-big PREP 19-child

'I gave the BIG water calabash to the child.'

(Mous 2003:305)

2.8 Object questions

When questioning the number of something, the noun is pied-piped along with the wh-word.

(31) tùnòní tónéá òndò sín?

/tɔ-nɔni tɔ-nɛa ɔ-ndɔ sínə/

13-bird 13-how_many SM.2SG-PRES see

'Combien de oiseaux vois-tu?'

'How many birds do you see?'

[EO, 226]

The discontinuous in-situ order cannot be used for a question:

(32) *ɔndɔ tunoni sin tɔnɛa?

/ɔ-ndɔ tɔ-nɔni sínə tɔ-nɛa/

SM.2SG-PRES 13-bird see 13-how_many

Intd.: 'Combien de oiseaux vois-tu?'

Intd.: 'How many birds do you see?'

[EO, 1402]

¹¹The first line and translation are presented as in the source, and I have added further segmentation in the morpheme break line and adapted the glosses accordingly.

Unsurprisingly, fronting the noun while leaving the wh-word in-situ is ungrammatical:

- (33) **tunoni ɔndɔ sin tɔneɑ?*
 /tɔ-noni ɔ-ndɔ sinə tɔ-neɑ/
 13-bird SM.2SG-PRES see 13-how_many
 Intd.: ‘Combien de oiseaux vois-tu?’
 Intd.: ‘How many birds do you see?’ [EO, 1403]

Forming a cleft while leaving the noun in-situ is not possible:

- (34) **tɔn#éá á ɔná tùðfɔ nɔf?*
 /tɔ-neɑ á ɔ-na tɔ-ɔfɔ nɔfɔ/
 13-how_many COP REL.SM.2SG-PAST2 13-fish catch
 Intd.: ‘Combien de poissons as tu pêché?’
 Intd.: ‘How many fish have you caught?’ [PM, 1209]

However, a cleft is accepted when the object is moved. This gives an interpretation where the speaker cares only about the N in question. In the example below, the addressee may have caught other sea-creatures such as crabs, but these are excluded.¹²

- (35) *tɔn#éá á tùðf(ɔ) (á) ɔná nɔf?*
 /tɔ-neɑ á tɔ-ɔfɔ á ɔ-na nɔfɔ/
 13-how_many COP 13-fish COP REL.SM.2SG-PAST2 fish
 ‘Combien de poissons as tu pêché?’
 ‘How many FISH have you caught?’ (don’t care about crabs, prawns etc.) [PM, 1210]

Although discontinuous DPs are generally accepted and often given as the first answer, they are not always judged as grammatical/felicitous.

- (36) Context: *EK asks ‘How many birds do you see?’ in Tunen (SVOwh; form id 1401) + hand-drawn picture*
 #méndò tùnòní sinə tɔfandɛ
 /mɛ-ndɔ tɔ-noni sinə tɔ-fandɛ/
 SM.1SG-PRES 13-bird see 13-two
 Intd.: ‘Je vois deux oiseaux.’
 Intd.: ‘I see two birds.’ [EO, 1406]

Similarly, S-O-Num-V is not always accepted.

- (37) Context: *EK asks ‘How many birds do you see?’ in Tunen (ex-situ) + hand-drawn picture*
 #méndò tùnòni tɔfandɛ sɪn
 /mɛ-ndɔ tɔ-noni tɔ-fandɛ sinə/
 SM.1SG-PRES 13-bird 13-two see
 Intd.: ‘Je vois deux oiseaux’
 Intd.: ‘I see two birds’ [JO, 873]

¹²Note that it is hard to know for sure how many *á*'s are present underlyingly given that Tunen has a vowel elision rule. However, the subject marker is normally low-toned, so we know from the realised H tone that there is relative marking on that part of the sentence.

S-Num-O-V is ungrammatical.

(38) Context: *Same as previous*

*méndò tófandé túnòní sìn

/mɛ-ndɔ tɔ-fandɛ tɔ-nɔni sɪnə/

SM.1SG-PRES 13-two 13-bird see

Intd.: 'Je vois deux oiseaux'

Intd.: 'I see two birds'

[JO, 874]

The below shows the discontinuous form given as the first answer, and the S-V-O-Num order accepted when asked for a follow-up judgement.

(39) Context: *form 1407 "Do you see two birds?"*

éè, méndò túnòní sìnə tófandè

/ɛɛ mɛ-ndɔ tɔ-nɔni sɪnə tɔ-fandɛ/

yes SM.1SG-PRES 13-bird see 13-two

'Oui, je vois deux oiseaux.'

'Yes, I see two birds.'

[EO, 1408]

(40) Context: *form 1407 "Do you see two birds?"*

éè, méndò sìnə túnòní tófandè

/ɛɛ mɛ-ndɔ sɪnə tɔ-nɔni tɔ-fandɛ/

yes SM.1SG-PRES see 13-bird 13-two

'Oui, je vois deux oiseaux.'

'Yes, I see two birds.'

[EO, 1409]

In sum, we have seen an empirical overview of Tunen objects, covering the so-called base word order, imperatives, relative clauses, ditransitives, focussed objects, object marking, discontinuous object DPs, and object wh-questions. We can now zoom in on a few puzzles and key questions.

3 Puzzles

3.1 Puzzle A: Do we have a dedicated focus position?

We saw some weak evidence for a postverbal (IAV) focus position, but we also saw that focus can be realised in-situ and via fronting.

Looking beyond objects to see whether we can motivate a dedicated IAV focus position, we can consider subjects and non-arguments (e.g. temporal clauses). Focussed subjects are never realised in the IAV position; ex-situ clefting with *á* is used (see Puzzle 5 tomorrow on word order). Focussed non-arguments can be in-situ or ex-situ with a cleft.

3.2 Puzzle B: How does object expression vary in discourse?

The Accessibility hierarchy [Ariel \(2001\)](#) and the Givenness hierarchy [Gundel et al. \(1993\)](#) predict that more accessible referents are referred to with less linguistic material, as shown in the hierarchy below (ordered least accessible to most accessible, numbers added).

- (41) Full name+modifier > full name > long definite description > short definite description > last name > first name > distal demonstrative+modifier > proximate demonstrative+modifier > distal demonstrative+NP > proximate demonstrative+NP > distal demonstrative (-NP) > proximate demonstrative (-NP) > stressed pronoun+gesture > stressed pronoun > unstressed pronoun > cliticized pronoun > verbal person inflections > zero

([Ariel 2001:31](#))

Given that Tunen has no verbal object marker and allows object DPs to be dropped (section §2.6), there is variation in object expression. The hierarchies above predict that objects are dropped (= “zero”) in Tunen when the referents are accessible, and more linguistic material (i.e. a DP) is used when the referent is less accessible.

To investigate how object expression varies in Tunen discourse and whether it matches the predictions from Accessibility theory, consider the following case study from a cooking video recorded with consultant JO. The consultant was showing how to make a traditional Banen dish called *kok*,¹³ narrating the process in Tunen as a monologue. We can consider how the object expression varies for the five consecutive utterances below, shown with timestamps, which all have the same object referent.

- (42) 00:38
 èséáǵákà mé hèkòkè sǵákà
 /εσεαǵaka me **hε-kòkε** sǵa-aka/
 now SM.1SG 19-kok wash-DUR
 ‘Maintenant, je lave le kok.’
 ‘Now, I wash the kok.’ [JO, 1343]

- (43) 00:58
 mé hèkòkè sǵákà
 /me **hε-kòkε** sǵa-aka/
 SM.1SG 19-kok wash-DUR
 ‘Je lave le kok.’
 ‘I wash the kok.’ [JO, 1344]

- (44) 01:34
 mèná hǵá ò òsǵà
 /mε-na hǵa ɔ ɔ-sǵa/
 SM.1SG-PAST2 finish PREP INF-wash
 ‘J’ai fini de laver.’
 ‘I’ve finished washing (it).’ [JO, 1345]

¹³The dish *kok* is made from kok leaves that are chopped finely, washed, and boiled with water, ground peanuts, and smoked fish or meat.

(45) 01:38
 mɛ̀ əmbəkínə̀ ò̀ mól
 /mɛ̀ əmbəkínə̀ ɔ̀ molo/
 SM.1SG throw.REP PREP 6.oil
 'Je (le) lance dans l'huile.'
 'I'm throwing (it) into the oil.' [JO, 1346]

(46) 3:19
 mèná həkòkè̀ əmbínə̀ ò̀ móló
 /mɛ̀-na hɛ̀-kòkɛ̀ əmbínə̀ ɔ̀ molo/
 SM.1SG-PAST2 19-kok throw PREP 6.oil
 'J'ai lancé le kok dans l'huile.'
 'I've thrown the kok in the oil.' [JO, 1347]

To visualise object tracking, we can plot each utterance by time (on the x-axis) and object expression (on the y-axis). The Accessibility Hierarchy scales are simplified to a binary distinction between expressed DP (plotted high-up) and no object expression (plotted low down)).

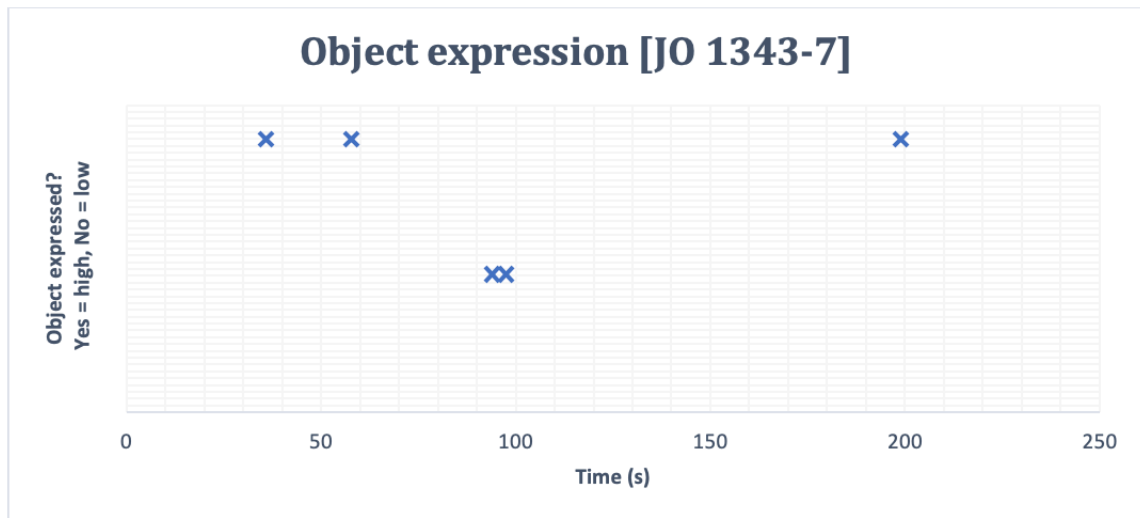


Figure 3: Tracking expression of object *həkòkè* 'kok'. Each of the five utterances is shown by a point at the appropriate time from the recording. Utterances which include an object are high on the y axis, utterances without an object are low.

We can see from Figure 3 that there is a correlation between object expression and accessibility. The first two utterances express the DP object, and are uttered approximately 20 seconds apart. The third and fourth utterances are uttered only a few seconds apart, and there is no object expression in either. Finally, there is a large time interval of 101 seconds between the fourth and fifth utterance.

We can explain these findings in terms of accessibility. At first, object expression is used to indicate the referent. Then, when the referent is introduced into the discourse, zero expression can be used. After a large time interval, the object is expressed again in order to boost the accessibility.

Although this is just one case study, the findings support the prediction that objects are dropped when the referent is more accessible.

3.3 Puzzle C: Discontinuous DPs

Discontinuous DPs are curious given that a constituent is broken up, with the verb appearing between the object noun and the numeral modifier. In order to develop a syntactic account of this phenomenon, we need an account of the syntax of the nominal domain more broadly.

3.3.1 Mapping out the nominal domain: Initial hypothesis

Cartographic work on the nominal domain in terms of Greenberg's Universal 20 gives the following supposedly universal base tree structure:



We see that the numeral (to be understood for now as located somewhere in NumP) dominates the NP, meaning that the NP is more deeply embedded within the DP structure than the numeral. We would therefore expect that the noun would not be able to be extracted from within this DP structure, as it is deeply embedded.

3.3.2 Supporting evidence

Evidence to support such a structure in Tunen is a difference in behaviour of numerals and adjectives. In my data, only numerals appear discontinuously (while adjectives appear continuous with the noun; see §2.7).

Further evidence is shown from the Universal 20 elicitation data below, where the adjective must appear closer to the noun, and the numeral outside; the N-Num-Adj order is considered ungrammatical.

- (48) tɔ̀bànáà tɔ̀ɲéɲà tɔ̀fàndè
 /tɔ̀-banana tɔ̀-ɲeɲa tɔ̀-fandɛ/
 13-banana 13-big 13-two
 'deux grandes bananes'
 'two big bananas' [JO, 839]

- (49) *tɔ̀bànáà tɔ̀fàndè tɔ̀ɲéɲà
 /tɔ̀-banana tɔ̀-fandɛ tɔ̀-ɲeɲa/
 13-banana 13-two 13-big
 Intd.: 'deux grandes bananes'
 Intd.: 'two big bananas' [JO, 840]

If a demonstrative is used, this appears prenominal, as expected:

- (50) tǝ́yè tǝ̀bànáà tǝ̀fítitìè tǝ̀tétʰé tǝ̀fàndè
 /tǝ-eyɛ tǝ-banana tǝ-fititiə tǝ-tɛtɛ tǝ-fandɛ/
 13-DEM 13-banana 13-black 13-small 13-two
 ‘ces deux petites bananes noires’
 ‘these two small black bananas’

[JO, 844]

Further evidence comes from domains of tone spreading. Mous (2003:288) writes that H tone spreads from the final TBU of the noun to the following adjective (shown below), crucially with the exception of cardinal numerals and the quantifier *kimə* ‘all’. The difference in tonal behaviour is a good predictor of differences in syntactic structure, assuming a model of the syntax-phonology such as Match Theory, whereby phonological domains are predicted to closely mirror syntactic constituency Selkirk (2011).

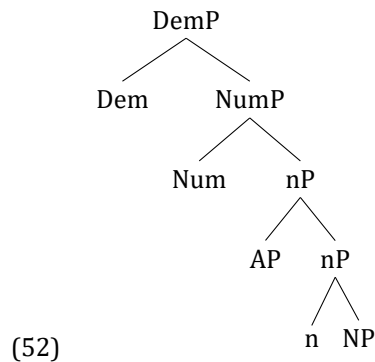
- (51) mòkòlò mò-tàtán ⇒ mòkòlò mó-tàtán
 mòkòlò mò-tàtán ⇒ mòkòlò mó-tàtán
 3-foot 3-big ⇒ 3-foot 3-big
 ‘big foot’

(Mous 2003:288)

In sum, the differences observed between adjectives and numerals/quantifiers supports a syntactic analysis whereby adjectives like *-ɲɛɲ* ‘big’ are merged closer to the noun than numerals/quantifiers, as in the tree structure in (47) above.

3.3.3 Noun class prefixes and *n*

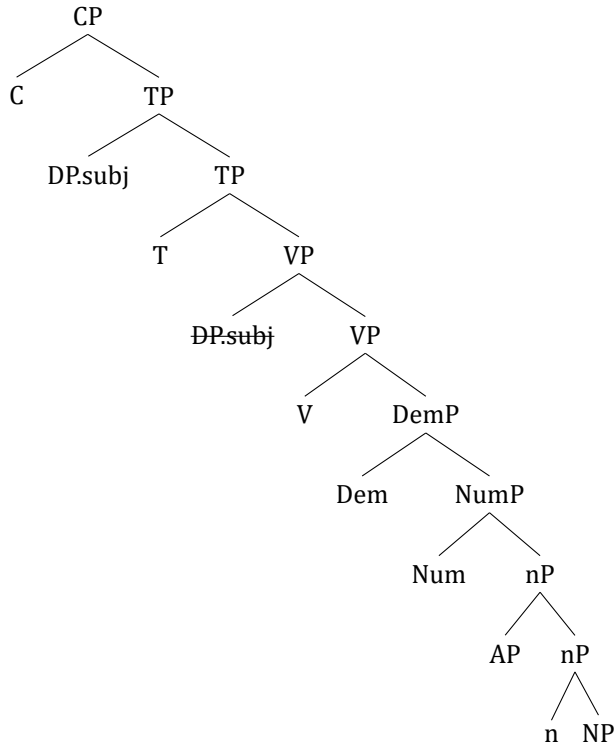
Having established the relative order of numerals and adjectives, we can break down the Tunen noun into a noun class prefix and a noun root. Following Carstens (2008), Kramer (2014, 2015, 2016) and Fuchs and van der Wal (2018), I consider Bantu noun class to be gender hosted on *n*, with the tree structure shown below.



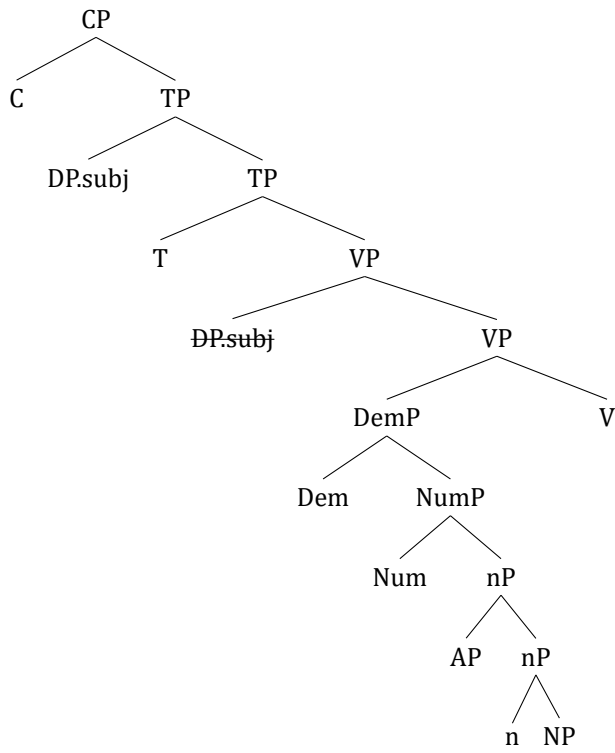
3.3.4 Putting it together

In terms of Tunen SOV, we can either assume a Kayneian base merge order of SVO, or parameterise Merge such that the VP is merged head-final (SOV).

For now, let’s assume an SVO base merge order. This gives us the following clause structure (not showing internal detail of the subject DP, assuming the verb-internal subject hypothesis (VPISH), and not assuming a structural focus/topic position).



If we assume SOV as a base word order, the tree looks like the following.



Regardless of which base word order we choose, we still need to account for how the discontinuous O-V-Num order is derived, given what was noted before in section §3.3.1 about the depth of embedding of the noun head within the DP.

Brainstorming some options:

1. Allow rightward movement of the numeral, remnant move the DemP higher than V
2. Have a full DP structure both preverbally and postverbally and only spell-out the noun in the preverbal instance and only the numeral in the postverbal instance

4 Conclusion

We have seen an empirical overview of objects in Tunen based on original fieldwork where the information structural context of an utterance was controlled and observed. The data show that the basic word order is SOV, but SVO is possible when objects are focussed (though in-situ is more frequent). Discontinuous objects are also allowed, whereby modifiers (especially cardinal numerals) may appear postverbally while the object remains in-situ; such ordering is common. Imperatives are VO, and indirect objects always precede direct objects. Objects may be discontinuous. Unlike most Bantu languages, Tunen does not have object marking on the verb. Objects can be fully dropped, and evidence was presented to show that this can be understood through accessibility of the referent. Conclusive evidence was not found for an IAV focus position, and initial sketches of the syntax of the nominal domain were drawn.

Topics for future research include conducting a phonological analysis of Tunen phrases in order to investigate whether ex-situ orders such as SVO and SOVNum show boundary tones and/or prosodic breaks; such prosodic information would clue syntactic constituency.

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