

The grammaticalisation of a specific indefinite determiner

Prenominal *-m̀̀t̀̀é* in Tunen

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1 Introduction

Tunen is a Bantu (Niger-Congo) language spoken in Cameroon in the Centre and Littoral provinces, with Guthrie classification A44 (Maho 2003, 2009). The language is typologically unusual in displaying SOV base word order, i.e. a head-final verb phrase (O V), while elsewhere being head initial (prepositions, Dem-N order). Dugast (1971) and Mous (1997) note that cardinal numerals appear postnominally (N NUM), with the exception of the form *-m̀̀t̀̀é* ‘one’, which can also appear before the noun in the plural. In this article, I investigate this puzzling prenominal case of *-m̀̀t̀̀é* and argue based on new data that it is not synchronically a numeral and has in fact grammaticalised to function as an indefinite determiner marking epistemic specificity. I use controlled elicitation to show semantic tests to support this and present syntactic arguments that prenominal *-m̀̀t̀̀é* appears in the position of a determiner rather than a numeral. I then investigate the marker’s likely grammaticalisation over time by considering the “seemingly universal” grammaticalisation path of numeral ‘one’ to (specific) indefinite markers that has been proposed in the typological literature (Givón 1981: 35); Heine (1995, 1997). I test the predictions of such an account by means of a corpus study of 61 folk tales (*contes*) published in Dugast (1975), and conclude by a brief survey of related Cameroonian languages.

The structure of the article is as follows. Section 2 gives background on Tunen nominal syntax, Section 3 presents my fieldwork study on the syntax and semantics of postnominal and prenominal *-m̀̀t̀̀é*, Section 4 lays out the proposed grammaticalisation, Section 5 investigates a corpus of older Tunen texts to test the predictions, Section 6 considers the question of language contact, and Section 7 concludes.

2 Background

As is typical of Bantu languages, the Tunen noun is composed of a noun root (-V) and a noun class prefix (PFX-), e.g. *m̀̀-nd̀̀* ‘person’, where *m̀̀-* is the class

1 prefix, and *-ndɔ̃* is the lexical root. The noun root can never appear in isolation, and so the noun stem *PFX-√* is considered a ‘bare noun’ in this article, while the additional of elements such as demonstratives would make it a modified noun phrase.¹ The prefix varies dependent on the gender of the noun, which I will gloss throughout this article using traditional Bantu noun class numbering.²

Looking now further than the noun, we can show that the order of nominal modifiers is fixed in the following way:³

Table 1
Linear order of Tunen nominal modifiers.

DEM POSS WH	<u>NOUN</u>	ADJ	NUM Q
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For example, consider (1) below.⁴

- (1)

tɛ́yɛ̀

tɔ̀bànáà

tɔ̀fititìà

tɔ̀tɛ́tɛ́

tɔ̀fàndè

DEM N ADJ ADJ NUM

/tɔ̀-ɛyɛ̀

tɔ̀-banana

tɔ̀-fititià

tɔ̀-tɛtɛ

tɔ̀-fandɛ́/

13-DEM.PROX

13-banana

13-black

13-small

13-two

‘ces deux petites bananes noires’

‘these two small black bananas’

[JO, 844]

Here, we see that the demonstrative *tɛ́yɛ̀* ‘these’ appears before the noun *tɔ̀bànáà* ‘bananas’, while the adjectival and numeral modifiers are postnominal. The demonstrative and nominal modifiers all take a prefix *tɔ̀-* in agreement with the class 13 head noun *tɔ̀bànáà* ‘bananas’.

Further evidence shows us that the relative order of nominal modifiers is hierarchically fixed, as the grammaticality contrast between (2) and (3) below exemplifies.

1

Ferch (2013) uses the term ‘bare classified nouns’ to describe *PFX-√* forms in the Bantu language Shona; I use ‘bare nouns’ here in a synonymous way.

2

The prefix is standardly called a class prefix, with 24 noun classes reconstructed for Proto-Bantu (Katamba 2003). Within these classes, there are singular/plural pairs, e.g. 1/2, 3/4. These pairs should be considered as genders.

3

I assume that quantifiers and numerals occupy the same slot in the absence of examples that test their co-occurrence. Similarly, I do not have evidence to distinguish between the position of demonstratives, possessives and *wh*-words.

4

See Section 3.1 for discussion of the format of data I will use in this article.

- (2) *tòbànáà tòhéà tófàndè* N ADJ NUM
 /tò-banana tò-ɲɛɲa tò-fandè/
 13-banana 13-big 13-two
 ‘deux grandes bananes’
 ‘two big bananas’
 [JO, 839]
- (3) **tòbànáà tófàndè tòhéà* *N NUM ADJ
 /tò-banana tò-fandè tò-ɲɛɲa/
 13-banana 13-two 13-big
 Intd.: ‘deux grandes bananes’
 Intd.: ‘two big bananas’
 [JO, 840]

For the analysis of these nominal structures in Tunen, I assume the DP hypothesis, where a determiner (D) takes a noun phrase (NP) as complement, following work in the generative tradition since Abney (1987). We saw above in (1) that demonstratives are prenominal in Tunen.⁵ As demonstratives have a determining function, we can situate them in D, meaning that the Tunen DP is head-initial, while numerals and nominal modifiers with a qualifying function such as adjectives appear after the noun.⁶

Having set up the necessary background into Tunen nominal syntax, we can turn to investigating the puzzling case of prenominal *-mòté*.

3 Investigating prenominal *-mòté*: fieldwork study

3.1 Methodology

The data come from fieldwork conducted in March-June 2019 with 6 Tunen speakers in Ndikiniméki, Cameroon. The majority of speakers spoke the Tòbóányè dialect, while 1 speaker, EO, spoke Hiliɲ. All sessions were recorded and transcribed, and will be archived open access.⁷ For this reason, the form ID is given in square brackets alongside the consultant’s initials. I provide the French translation along with the English as this was a translation agreed upon together with the consultant, and so potentially more useful in understanding the sense of the original Tunen than the English translation I added later.

Stimuli were used from the Bantu Syntax and Information Structure (BaSIS) questionnaire, drawing on the Questionnaire on Information Structure (QUIS;

⁵ Demonstratives can also occur postnominally in Tunen, but crucially only in a doubling construction of the form DEM-N-DEM.

⁶ Note in the interest of syntactic typology that this order is consistent with Greenberg’s Universal 20 (Cinque 2005; Dryer 2018) and the Final Over Final Condition (FOFC) (Sheehan et al. 2017).

⁷ The data will be archived towards the end of the Bantu Syntax and Information Structure (BaSIS) project, predicted as 2022.

- (6) Context: Same picture as (4), but two people are without hats
bëndò bəkìmà bálè nà tètàmbá úhúúliá bëndò báfándé

/bɛ-ndɔ bə-kimə ba-lea na tɔ-tamba uhuuliə
 2-person 2-all SM.2-be with 13-hat except

bɛ-ndɔ **ba-fandé**/
 2-person 2-two

‘Tout le monde portent le chapeau sauf deux personnes.’
 ‘Everybody is wearing a hat except two people.’
 [PM, 482]

- (7) Context: Shown drawing of two birds, EK asks in Tunen “How many birds do you see?”

**mëndò tɔfándé tɔ̀ndò̀nì sìn*

/mɛ-ndɔ tɔ-fandɛ tɔ-noni sinə/
 SM.1SG-PRS 13-two 13-bird see

Intd.: ‘Je vois deux oiseaux.’

Intd.: ‘I see two birds.’

[JO, 874]

As all other cardinal numerals are restricted to a postnominal position with a numeral reading, the rest of the article will restrict its discussion to *-m̀tɛ́*, which as we will see in the next section can appear prenominal.

3.2.2 Prenominal *-m̀tɛ́*

To investigate prenominal *-m̀tɛ́*, I controlled elicitation contexts for the definiteness and specificity of the referents. This was done by providing the speaker with a full discourse context and/or by using a continuation that disambiguates the specificity of the referent. By investigating a range of different contexts, I was able to pinpoint the conditions on the usage of prenominal *-m̀tɛ́*.

In a specific context, prenominal *-m̀tɛ́* can be used. This was supported by multiple consultants, as in the examples below.⁸

- (8) Context: You can’t find your friend Maarten, and are looking for him

mëndò òm̀tɛ́ m̀ndò̀ sià bá¹séá Mátìn

/mɛ-ndɔ ɔ-m̀tɛ mɔ-ndɔ siə ba-sɛa Mətinə/
 SM.1SG-PRS 1-one 1-person search REL.SM.2-say Maarten

‘Je cherche quelqu’un qui s’appèle Maarten.’

‘I am looking for someone who is called Maarten.’

[PM, 1189]

⁸ I assume that the difference in agreement prefix between ɔ- in (8) and wɔ- in (9) is simply due to the insertion of a semivowel in the environment ɔ#_ɔ, applying in fast speech.

- (9) Context: You are looking for your friend Daniel

méndò wòmàté mǎndò sì. nèàá nínýà á Tànièl

/mɛ-ndɔ ɔ-mɔtɛ mɔ-ndɔ siə neaya nɛ-nyə
SM.1SG-PRS 1-one 1-person search 5.POSS.1 5-name

á Tànièl/
COP Daniel

‘Je cherche une certaine personne. Son nom est Daniel.’

‘I’m looking for someone. His name is Daniel.’

[JO, 891]

These contexts are specific because the speaker is using the noun phrase *wòmàté mǎndò* to refer to a particular referent they have in mind, namely Maarten in (8) and Daniel in (9). This is *epistemic specificity* (Ionin 2013), also termed *referential specificity* (Karttunen 1968; Von Heusinger 2019), and contrasts with a predicational reading of an indefinite (Fodor and Sag 1982). As well as the discourse context supplied, the continuations (a relative clause in (8) and a follow-up sentence in (9) reinforce a specific interpretation on the nominal.

Note that prenominal *-màté* is not obligatory in such contexts. Bare nouns (as defined in Section 2 above) can also be used; these are ambiguous in terms of definiteness and specificity, as shown below.

- (10) *méndò mǎndò sì*

/mɛ-ndɔ mɔ-ndɔ siə/

SM.1SG-PRS 1-one 1-person search

‘Je cherche {quelqu’un/une personne/la personne}.’

‘I’m looking for {someone/a person/the person}.’

[JO, 898]

We therefore have prenominal *-màté* + N competing in usage with a bare noun, where the former is specific and the latter is ambiguous between specific and non-specific interpretations. If my analysis is correct and prenominal *-màté* is really what contributes the specific referential meaning, then it should not be possible to use prenominal *-màté* in a non-specific context. We see in (11) below that this prediction is borne out.

- (11) Context: You need an extra pair of hands to help with your work, so you announce that you are looking for an extra employee (it doesn’t matter who)

**méndò (w)òmàté mǎndò sì*

/mɛ-ndɔ ɔ-mɔtɛ mɔ-ndɔ siə/

SM.1SG-PRS 1-one 1-person search

Intd.: ‘Je cherche quelqu’un.’

Intd.: ‘I’m looking for someone.’

[JO, 894, 895]

This context is set up for a predication use of the indefinite, where there is no particular referent in mind, just someone who is able to work. The fact that prenominal *-m̀t́é* was judged infelicitous here supports the argument that it marks epistemic specificity rather than just indefiniteness. As predicted, a bare noun is felicitous in this context, with (10) above being judged as fine in the same context.

To sum up the findings so far, we have seen that prenominal *-m̀t́é* is used in specific contexts and is infelicitous in non-specific contexts. It is not obligatory; a bare noun can also be used. However, it is systematic; it always has a specific interpretation.

Let us now investigate the restrictions on prenominal *-m̀t́é* in more detail. Firstly, as already indicated, prenominal *-m̀t́é* agrees with the noun class of the head noun. So far we have only seen class 1 (singular human animates) examples, but *-m̀t́é* can appear with other noun classes, as in the class 7 example below.

- (12) Context: I am looking at a map, clearly searching for something. PM asks me what I am doing. I reply:
m̀́́ndò ỳ́́m̀t́é b̀́́l̀kà s̀́́à b̀́́s̀́́éá Ỳ́́h̀́́nd
 /m̀́́-ndò **ỳ́́-m̀t́é** b̀́́likə s̀́́ə b̀́́a-s̀́́ə Ỳ́́h̀́́ndə/
 SM.1SG-PRS 7-one 7.town search SM.2-say Yaoundé
 ‘Je cherche une certaine ville qui s’appelle Yaoundé.’
 ‘I am looking for a town which is called Yaoundé.’
 [PM, 737]

Interestingly, prenominal *-m̀t́é* can also be used with plural nouns, functioning as an indefinite quantifier. For example, see (13) below.⁹

- (13) Context: You are a teacher giving a lesson about animals
t̀́́tá t̀́́ǹ́́ǹ́́ t̀́́k̀́́m̀́́ á t̀́́́́ndò h̀́́l̀́́l̀́́l̀́́. t̀́́m̀́́t́é t̀́́ǹ́́ǹ́́ t̀́́́́́́́́ndò h̀́́l̀́́l̀́́l̀́́
 /t̀́́tá t̀́́-ǹ́́ǹ́́ t̀́́-k̀́́m̀́́ á t̀́́-ndò h̀́́l̀́́l̀́́l̀́́
 not 13-bird 13-all COP SM.13-PRS fly
t̀́́-m̀́́t́é t̀́́-ǹ́́ǹ́́ t̀́́-l̀́́-ndò h̀́́l̀́́l̀́́l̀́́/
 13-one 13-bird 13-NEG-PRS fly
 ‘Ce n’est pas tous les oiseaux qui volent. Certains oiseaux ne volent pas.’
 ‘Not all birds fly. Some birds do not fly.’
 [EO, 412]

While this ability for *-m̀t́é* to be used prenominally with plural nouns was picked up in earlier work by Dugast (1971: 158), it was not discussed in depth and the marker was still treated as a numeral. I argue that the ability for *-m̀t́é* to be used with the plural noun *t̀́́ǹ́́ǹ́́* ‘birds’ shows that it is not functioning

⁹ Note that class 13 is the plural counterpart of class 19 nouns in Tunen (see Dugast (1971) and Mous (2003) for more detail on the Tunen noun class system).

4 The grammaticalisation of the specific indefinite determiner

Our starting point for understanding the history of this marker is postnominal *-mòtɛ́*, which clearly functions as the numeral ‘one’ synchronically, and can also be traced back to the numeral ‘one’ in Proto-Bantu. For example, one widely supported proposal for Proto-Bantu ‘one’ is **mòtí* (Bastin et al. 2002). As the link between the Proto-Bantu numeral and prenominal *-mòtɛ́* is uncontroversial, I leave aside the specifics of the reconstruction. The phonological changes proposed depend heavily on the starting point chosen (Pozdniakov (2018) has also proposed **m-ò-dì* as a reconstruction, and **mòì* is the MAIN reconstruction from Bastin et al. (2002)), and such debates are tangential to our current purposes.

The origin of prenominal *-mòtɛ́* as the numeral ‘one’ is therefore clear. We are then left with two outstanding questions: (i) How did the marker change in meaning from the numeral ‘one’ to a marker of epistemic specificity, and (ii) How did the syntactic change from postnominal numeral to prenominal determiner take place? I will discuss these in turn.

4.1 Semantic shift

In this section, I argue that the semantic change from the cardinal numeral ‘one’ to a specific indefinite determiner is to be expected given the crosslinguistically commonality of such a grammaticalisation path, which suggests that such a semantic shift is cognitively likely. In this section I consider language-internal change, leaving the question of language-external influence to Section 6.

Semantic change from the numeral ‘one’ has been particularly well-studied for the development of indefinite articles, with the following pathway given in the World Lexicon of Grammaticalization:

- (15) **Crosslinguistic grammaticalisation path (to be revised)**
ONE > INDEFINITE MARKER (Heine et al. 2004)

Evidence for this grammaticalisation pathway comes from a wide variety of languages across the world. The phenomenon has been well-studied for the article systems of Indo-European languages such as English and French, but has also been suggested for various language (families) including Mandarin, Sherpa, Hungarian, Neo-Aramaic, Persian, Turkish, Amerindian, Austronesian, and various creole languages (Givón 1981). The wide variety of languages across the world that show such a shift in meaning from a numeral ‘one’ to an indefinite marker leads Givón (1981: 35) to write that the development from the numeral ‘one’ to a marker of indefiniteness is “seemingly universal”.

However, Tunen was seen to have a form sensitive to *specific* indefinite contexts, which is slightly less general than the indefinite contexts marked by

items such as the English indefinite article *a(n)*. Under Givón (1981)’s analysis, this is to be expected given that other languages have this extra restriction. In Hebrew, for example, the use of a numeral-derived marker *-(a)xat* ‘one’ in Hebrew is sensitive to specificity, being present in specific indefinite contexts and absent in non-specific contexts, as shown in the data below.^{12,13}

- (16) *hu mexapes isha, -(a)xat*
 he looking-for woman-one
 ‘He is looking for a (specific) woman.’
- (17) *hu mexapes (lo) isha*
 he looking (for-him) woman
 ‘He is looking for a woman (a member of the type).’
 Hebrew; Givón (1981: 45)

On the basis of data from languages such as Hebrew, Givón adds an intermediate step in the grammaticalisation pathway from (15), where the marker is restricted to specific indefinites. This results in the following 3-step categorisation:

- (18) **Crosslinguistic grammaticalisation path (3-step)**
 ONE > SPECIFIC INDEFINITE MARKER > INDEFINITE MARKER
 (Givón 1981)

This elaborated grammaticalisation path has a category that corresponds to the behaviour of prenominal *-m̀̀t́́* in Tunen as a specific indefinite marker, as defined in terms of epistemic specificity. The direction of the grammaticalisation path makes the prediction that older forms of *-m̀̀t́́* were not general indefinite markers, as the marker is first restricted to specific indefinites.¹⁴

While the grammaticalisation path in (82) from Givón (1981) is sufficient to understand the synchronic behaviour of Tunen *-m̀̀t́́*, a more detailed picture has arisen through subsequent typological research. Heine (1995, 1997) extends the path to a 5-stage model, where the specific indefinite stage is split into two (one for presentative uses for referents that are then elaborated on, and one for the introduction of any specific referent; Von Heusinger (2019)) and a fifth stage with broadening of meaning to readings such as generics is added.

12 Givón uses the term “referential indefinites”, which I understand as epistemic specificity, i.e. having a particular referent in the mind of the speaker (see Ionin (2013), Lyons (1999)). Glosses and translations of the Hebrew data have not been changed.

13 See Becker (2019) for a slightly different view where Hebrew *-xat* is a presentative marker rather than a marker of specificity. I will return to this distinction in (20) below.

14 This should however be taken as a general tendency rather than an absolute prediction, as the close semantic links between the interpretations means that different people will vary in where exactly they conceptualise the marker.

(19) **Crosslinguistic grammaticalisation path (5-step)**

numeral ‘one’ > presentative marker > specific marker >
nonspecific marker > generalized marker

Heine (1995: 71-6), as rephrased in Becker (2019: 174)

This second stage of presentatives accounts for referents that are introduced to the discourse, and therefore discourse prominent. While I believe that ‘specific marker’ is sufficient for a synchronic account of Tunen, we will see in Section 5 that the distinction between presentative marker and specific marker can be useful in understanding older Tunen texts.

4.2 Syntactic change

Having established the commonality of an interpretative shift from the numeral one to a marker of specific indefinites, we can turn to the other subquestion: How did the syntactic change take place?

To recap from Section 3, we saw that Tunen *-m̀̀t̀̀é* has changed from being a postnominal numeral to a prenominal determiner (with the assumption that there are two *-m̀̀t̀̀é*s synchronically: the one in question, and the postnominal cardinal numeral). There is therefore a difference in syntactic category and structural (and linear) position which we need to account for. Note that in other languages where the numeral ‘one’ has changed syntactic category to a determiner, this change is often structurally ambiguous due to the order of nominal modifiers. For instance, the English numeral ‘one’ was prenominal, and demonstratives and determiners are also prenominal in English, meaning that there is no effect on the linear order.

To answer this question, I propose that the semantic change occurred before the syntactic change. Once the form *-m̀̀t̀̀é* started being used in specific indefinite contexts, it opened up the possibility to reanalyse this form as a different syntactic category, losing the quantificational reading of a numeral and gaining the referential meaning of a specific indefinite marker. This referential meaning is elsewhere expressed by demonstratives, which are prenominal (Section 2). It is therefore very likely that the broadening of interpretation of postnominal *-m̀̀t̀̀é* was a sufficient catalyst for speakers to reanalyse it as a D-type element, and therefore express it in prenominal position. We therefore have the following timeline:

Table 2
The grammaticalisation stages of -m̀t́é in Tunen.

Stage	Syntactic position	Interpretation
Stage I	postnominal	cardinal numeral
Stage II	postnominal	specific indefinite marker
Stage III	prenominal	specific indefinite marker

Based on the crosslinguistic pattern reported by typologists, we could imagine a fourth stage in Tunen, Stage IV, whereby we see prenominal *-m̀t́é* as an indefinite determiner, and possibly a later stage, Stage V, where the marker broadens to other cases such as generics (Heine 1997). However, these stages are not attested and so can only be taken as speculation.

Having illustrated my proposal for the grammaticalisation of Tunen prenominal *-m̀t́é* based on crosslinguistic comparisons, I will consider some Tunen-specific factors to be taken into account.

4.3 Discussion

One reason to be cautious about generalising from other languages is that independent properties of the language may affect the grammaticalisation path. I will consider some of these briefly below.

A commonly reported feature of (specific) indefinite markers derived from the numeral ‘one’ is phonological reduction. For instance, Ionin (2013) reports that the Russian specificity marker *odin* is phonologically reduced (*odin_R*), a phenomenon also found in languages such as Hebrew and English (Givón 1981).¹⁵ In contrast, there is no evidence that prenominal *-m̀t́é* is phonologically reduced in Tunen: it still takes noun class agreement, and is therefore trisyllabic. One typological difference is that Tunen does not have a stress system, unlike Russian. Note also that demonstratives and possessives, which are prenominal, also take noun class agreement in Tunen, as is typical of Bantu. I therefore propose that whatever mechanism controls agreement for these elements is also responsible for agreement on prenominal *-m̀t́é*.

A further difference between Tunen and many other languages reported to have (specific) indefinite markers is the difference in use of bare nouns. Prenominal *-m̀t́é* in Tunen is optional, competing with a bare classified noun (i.e. the noun stem with noun class prefix). To my knowledge, there is no definite or nonspecific counterpart of prenominal *-m̀t́é*. Again, the

¹⁵ Himmelmann (2001) argues that phonological reduction is a weak criterion for determining whether a numeral has become an article, but he argues that the law is that numerals may be unstressed, whereas for Tunen we are concerned with whether the determiner must be unstressed.

optionality of Tunen *-mɔ́tɛ́* relates to the distinction between articles and other types of determiners, with obligatoriness (and therefore high frequency) a criterion for articlehood (Himmelmann 2001, Becker 2019). I therefore do not call prenominal *-mɔ́tɛ́* an ‘article’ in Tunen, and instead refer to it as a determiner.

4.4 Section summary

To conclude this section, I have shown how prenominal *-mɔ́tɛ́* in Tunen fits into a broader crosslinguistic picture of the grammaticalisation pathway ONE > PRESENTATIVE MARKER > SPECIFIC INDEFINITE MARKER > INDEFINITE MARKER, as discussed in typological work by Heine et al. (2004), Givón (1981), and Heine (1997). I propose that the semantic broadening from quantificational to referential function happened first, which then fed syntactic reanalysis from a numeral to a determiner, resulting in the switch from postnominal to prenominal position. The data presented in Section 3 above locate Tunen at the SPECIFIC INDEFINITE MARKER stage of the pathway, matching the behaviour of markers such as *-xat* in Hebrew (Givón 1981) and *odin_R* in Russian (Ionin 2013). As the marker in Tunen is optional, competing with bare nouns, and as it is not phonologically reduced, I refer to it as a determiner rather than an article.

5 Corpus study of Dugast texts

So far, I have shown from fieldwork data that the consultants I worked with used prenominal *-mɔ́tɛ́* as an indefinite determiner marking epistemic specificity, and I situated this in a broader typology of grammaticalisation of (specific) indefinite markers from the numeral ‘one’. This made the prediction that *-mɔ́tɛ́* in earlier stages of the language functioned as a cardinal numeral, then a presentative marker/specific indefinite marker, but not a more general indefinite marker (as that would be expected only after a more restricted usage). I also suggested that the change in meaning occurred before the change in syntactic position. While we have little textual record of the Tunen language, we do have texts and other studies of the language that have been conducted in the last 60 years, and so I will use these materials to test my predictions from Sections 3 and 4 above.

5.1 Methodology

The earliest Tunen texts we have are those transcribed by Idalette Dugast, who published a collection of Tunen texts that were transcribed in the mid 20th century (Dugast 1975), and so are a record of the Tunen spoken two generations or so before the data presented in Section 3 above. As these are the oldest records we have of the Tunen language, I will take these as my object of study. The texts are *contes* (folk tales) and proverbs, presented in

Tunen with word-by-word translation alongside a translation into natural French and some linguistic commentary.

Because the texts are not digitised, I used the *contes* from *Part I* and *Part II* of the book as a subcorpus. These *contes* span two genres: social customs (*‘Contes faisant allusion à quelques coutumes sociales et à quelques techniques’*), and moral truths (*‘Contes faisant apparaître une vérité morale’*). The table below gives an overview of this corpus, including what we know of the *conteurs* (storytellers).

Table 3
***Contes* corpus overview.**

Format	Tunen contes with French translation, commentary, and linguistic annotation
Number of <i>contes</i>	61
Average length of <i>conte</i>	3.5 pages (including French translation and commentary)
Number of <i>conteurs</i>	11
Age of <i>conteurs</i>	4 old, 7 younger
Gender of <i>conteurs</i>	All male

In order to set up the corpus study, I manually annotated the *contes* to give a line number that could be referenced.¹⁶ I then manually searched for occurrences of *-m̀t̀é* and inputted each example and reference into a spreadsheet, tagging it using the following coding schema:

¹⁶ For *contes* that spanned multiple pages, I continued the line numbering from the previous page, rather than starting from 1 on each page. For proverbs that appeared before or after the main *conte* text, I used the *i*, *ii*, *iii*... numbering system.

Table 4
Corpus study coding schema.

Field	Meaning
UID	Unique identifier
Example	- <i>mòté</i> + N, usually bigram
Syntax	Pre- or post-nominal
Interpretation	specific, (nonspecific) indefinite, numeral, unclear
Part	Part 1 or Part 2
Page	Page number
Line	Line number
Full quote	Example in sentential context
Translation	Translation of full example
Notes	Text field for miscellaneous observations

For the syntax tagging, I ignored cases where *-mòté* was used without a noun and cases where it was discontinuous (e.g. separated from the noun by a verb). The forms left were therefore prenominal *-mòté* and postnominal *-mòté*, which are the focus of the current article.

The tagging of interpretation was more subjective. Discourse context and the French translation provided by Dugast was used to judge whether the DP had a specific, (nonspecific) indefinite, or numeral reading, with a fourth category “unclear” added for cases where the context/translation was too ambiguous to make a clear choice. Specificity was taken to mean epistemic specificity, as elsewhere in this article.

Once the spreadsheet was complete, I used Excel and Python for quantitative analysis and investigated interesting cases manually for qualitative analysis. The results are shown in the next section.

5.2 Results

The quantitative results for the syntax and interpretation tagging are shown in Table 5 below.

Table 5
Corpus results (syntactic position vs interpretation).

	specific	nonspecific indefinite	numeral	unclear	<i>Total</i>
postnominal	58	0	27	7	92
prenominal	3	1	0	0	4
<i>Total</i>	61	1	27	7	96

While these results are not to be taken as objective given the subjectivity in tagging the interpretation, there are several interesting findings. Firstly, prenominal *-m̀tɛ́* is indeed found in the Dugast texts, although it is rare, at only 4 out of 96 tokens (4%). Secondly, there are postnominal cases of *-m̀tɛ́* which appear to be specific, contrary to what was found in the 2019 fieldwork study where *-m̀tɛ́* was used prenominally in specific contexts. As expected, none of the prenominal occurrences of *-m̀tɛ́* had a numeral reading.

5.3 Discussion

Before discussing the implications further, I will give examples of the coding decisions made. I will show below an example of (i) postnominal + specific, (ii) postnominal numeral, and (ii) postnominal + unclear. As glossing imposes analysis, much of which is tangential to the discussion at hand, I give the Tunen and French quotes as they appear in the source text, provide an English translation, and explain the context in the discussion after each example.¹⁷

(i) Postnominal + specific

- (20) ‘Bô:, *m̀ndò ɔm̀tɛ́* à báká mí lìəʔ, a miaŋò mona bwa ʔnɛn, à menyama húlənə nà mesona, à bala m̀sona ó windi ó m̀n. [...]’

‘Non. Il y a quelqu’un qui, lorsque je me suis comme toujours au travail, porte pour moi l’enfant dans ses bras, il apporte de la viande et des plantains murs et donne de ceux-ci à l’enfant. [...]’

‘No. There is someone who, as I am always at work, carries the child in their arms for me, brings meat and ripe plantains and gives these to the child. [...]’

[Bihiomb, 223.16]

In this example, the speaker is informing her husband that, contrary to his assumption, she had not been collecting all the foodstuff they were eating

17 I copy Dugast’s transcription of Tunen, which differs from my own system in several ways. The most important thing for readers to be aware of is that Dugast only uses tonal diacritics when the tone changes. In square brackets, I give the name of the *conteur* (one who told the *conte*), together with the page number and line reference.

each night for dinner herself, but was in fact given it by a particular person (*mòndo ɔmɔté*), so, a specific referent. This is clearly detailed earlier in the story. In fact, the referent is a chimpanzee, so the use of the phrase *mòndo ɔmɔté* ‘somebody’ could be motivated by the desire not to give away too much information about the actual referent.¹⁸ We therefore have a case that is **postnominal** and **specific**. We will come back to the implications of such examples once the other tags have been illustrated.

(ii) *Postnominal + numeral*

- (21) *àta bolíá bomɔ́tɛ bó sà tikən ò yéy ebok; m̀səku kahó ‘nòkɔ’ mʷəkɪm.*

‘Pas un arbre ne restait debout à cet endroit, l’éléphant les avait tous cassés.’

‘Not even one tree stayed standing in that place; the elephant had destroyed them all.’

[Ngɔmən, 67.18-19]

Here, *-mɔ́tɛ* is postnominal, agreeing in class 14 with the head noun *bolíá* ‘tree’. The *conteur* is describing the destruction caused by an elephant, who destroyed everything: *àta bolíá bomɔ́tɛ* ‘even one tree’ is a clear numeral reading conveying the extent of the destruction. This example is therefore tagged as **postnominal** and **numeral**.

(iii) *Postnominal + unclear*

The phrase *ebók ɛmɔ́tɛ* appeared in several *contes*. While the meaning was sometimes clear, it received multiple different translations in the French, sometimes as ‘un seul endroit’ (‘one single place’), sometimes as ‘à la meme endroit’ (‘at the same place’), and sometimes as ‘ensembles’ (‘together’). Because *-mɔ́tɛ* seems to behave differently in these cases, the tag *unclear* was given.

Now we can turn our attention to the cases of prenominal *-mɔ́tɛ*. As there are only 4 of them in the sample, I will quote them all here, with English translations of my own added to aid the reader.

(iv) *Prenominal + specific*

- (22) *wʰɔ́mɔ́tɛ muə́ndu níaya níny á M̀ukólon; wò’ mɔ́tɛ tonà² á Nyòkenyok.*

‘L’une s’appelait Mukolong, l’autre Nyokenyok.’

‘One of the women was called Mukolong, the other [was called] Nyokenyok.’

[Bəhəken, 87.1-2]

¹⁸ The fact that the human animate class 1 is used for an animal likely reflects the personification of animals in Tunen narrative genre and/or withholding information from the speaker’s husband.

- (23) à ná **w'** òmɔ́tɛ́ mona wà Yálá nìak, à n̄n.
 'Il mangea le coeur d'un enfant de Yal qui mourut.'
 'He ate the heart of one of Yal's children, who died.'
 [Babulə, 177.18]
- (24) mbà m' òndi ò **yemɔ́tɛ́ menyàma mb'** ǎ fàmbák
 'Je donnerai à un autre animal pour qu'il le boucane.'
 'I will give it to another animal so that it smokes dry.'
 [Ngɔmɛn, 195.5]

We see that prenominal *-mɔ́tɛ́* is used by 3 different *conteurs*, suggesting that it is used more widely in the language. Although precise ages are not known for most *conteurs*, Dugast describes the familial relations and identifies the older speakers with the title *vieillard* ('old man') in her metadata (Dugast 1975: 14-26), allowing us to approximate their ages. It is interesting to note that Bòhòkɛn and Babulə are both older speakers (Ngɔmɛn is from a younger generation). Furthermore, Dugast writes that Babulə is "at least 90 years old" (Dugast 1975: 14), meaning that prenominal *-mɔ́tɛ́* has been attested in the speech of someone born in the 1800s. This suggests that the syntactic reanalysis of *-mɔ́tɛ́* was already underway a century before the fieldwork study presented in Section 3.

While these 3 instances of prenominal *-mɔ́tɛ́* support the proposal in Sections 3 and 4 above in showing specific indefinite (or at least presentative) uses, there was 1 prenominal case that was tagged as nonspecific. This is given below.

(v) *Prenominal + non-specific*

- (25) *Hífakafakà kàbíànà bãna balan. Wówò nátwà'nà motetè, bá lɛ wèyà lubun. Bá twənəkin ònìà², a si á twə'nà², bá sè²: « Héke, hɔalena hɔy. ɟmɔ́tɛ́ mòndo wáo e? »*
 'La chauve-souris mit au monde cinq enfants. L'une resta petite et les autres ne la respectaient pas. Lorsque tous s'asseyèrent pour manger et qu'elle aussi voulait s'asseoir, ils lui disaient : « Va-t-en, lève-toi de là. Es-tu un homme, toi ? »'
 'The bat brought five children into the world. One of them remained small and the others did not respect her. When they all sat down to eat and she also wanted to sit down, they told her: "Go away, get up from there. Are you a man, huh?"'
 [Yit, 79.2]

In this case, the context is the runt of a litter of bats being bullied by the rest, who tell it not to feed with them, and ask "Are you a man?". As far as I understand this context, the question is rhetorical and not asking about a particular man, but the status of being a man (with the contrast being between being a strong member of the pack and a runt to be cast aside). It is

therefore a case of prenominal *-m̀t́é* that has a non-specific reading, which I do not have an account for. One point to bear in mind for future accounts is that this question has no main verb, consisting solely of *-m̀t́é*, the noun, the second person possessive pronoun *wáó*, and the question particle *e*.

Turning back to the postnominal specific cases, it is important to note that many of the tokens occur in the same type of phrase, with the most commonly occurring types *m̀ndo ɔm̀t́é* ‘a man’ (26 tokens) and by *búsɛ bom̀t́é* ‘a day’ (26 tokens). The former is a common way of starting the story, and the latter is used at the start of a sentence to start describing events that happened after a period of time had passed. I tagged these as specific because the speaker is referring to a particular man, who is the subject of the story, or a particular day on which a notable event takes place. Given the discourse-prominent nature of the referents introduced, the marker could also be termed a presentative, at Stage 2 of Heine (1997)’s grammaticalisation path. I chose to treat them all as specific as the data do not show a clear distinction between these two stages; the rest of the sentence often goes on to name the subject or otherwise identify him, as exemplified in (26) below. Such continuations support a specific reading, echoing the fieldwork data from Section 3. I therefore tagged these as specific.

(26) *M̀ndo ɔm̀t́é², níaya niny ũmbʷə'kùk, à kabélèna bʷəndú bàlál.*

‘Un homme qui s’appelait Umbʷəkuk était marié avec trois femmes.’
[Bəhəken, 87.1]

We saw in Table 5 that 58 of the 61 specific occurrences of *-m̀t́é* (= 95%) were postnominal. That is different from the findings from the 2019 fieldwork study discussed in Section 3. However, it is not incompatible with the grammaticalisation pathway proposed in Section 4, as I argued that the semantic change must have occurred before the syntactic change, in order to trigger reanalysis. The Tunen recorded in the Dugast corpus therefore looks to be an earlier stage of the grammaticalisation, where the semantic change had taken place but the syntactic change to prenominal position was only partially underway. We can use this to (tentatively) date the change from Stage II to Stage III of Table 3 above as within the last century.

One complexity should however be borne in mind in any attempt at dating this change, and that is the nature of the texts used. When looking at the 58 specific occurrences of *-m̀t́é*, we find that many are the same phrase, as noted above for *m̀ndo ɔm̀t́é* ‘un homme’, ‘a man’, which is used to introduce a character, and *búsɛ bom̀t́é* ‘un jour’, ‘one day’, which is used at the start of a sentence to move the narrative onwards to a new event. Because of the high frequency of these phrases, I hypothesise that they may be remembered as set phrases used in Tunen narratives, and therefore represent more historic forms of the language. This means that the change to prenominal *-m̀t́é* may have been further underway than these results show, as narratives often preserve older forms of the language than other speech types. One interesting question for future research is whether the consultants I worked with for the fieldwork

study who had the prenominal specific *-m̀tɛ́* system would also use the postnominal variants in a storytelling context, or whether this has changed in the half-century since the Dugast texts were transcribed.

5.4 Section summary

In this section, I tested the proposal made in Section 4 about the grammaticalisation of prenominal *-m̀tɛ́* in Tunen using a corpus from the oldest available texts. While these only let us look a few generations back in time, the results showed interesting differences from the fieldwork study presented in Section 3. Out of 96 occurrences of *-m̀tɛ́* adjacent to a noun, 4 prenominal instances were found, of which 3 were specific (as expected), and 1 was non-specific (unexpected). 58 postnominal uses of *-m̀tɛ́* were identified as having a specific interpretation, often used presentatively to introduce a character or timeframe. This suggested that the syntactic change to prenominal *-m̀tɛ́* was not fully underway in the 1970s, but has since become robust. However, I noted that the nature of the texts as *contes* (folk tales) and the high frequency of particular phrases likely means that the language is more historic, and so the grammaticalisation of a prenominal marker was likelier further developed than these texts show. One possible avenue for future research is to study a similar genre of text with modern-day Tunen speakers, to see whether they also use postnominal *-m̀tɛ́* to mark specific indefinites within this speech style.

6 Implications

Before concluding this article, it is worth considering the implications of this study. If Tunen has developed a prenominal specific indefinite marker derived from the numeral ‘one’, was this a fully language-internal development, or was it driven by language-external factors, i.e. language contact? While the cross-linguistic commonality of the grammaticalisation path in Section 4 above has been claimed to be sufficient to justify a language-internal account (e.g. Ionin 2013), and so I do not make this question the main focus of this article, language contact is still a likely factor in the grammaticalisation. In this section I will conduct a preliminary review of some related languages to Tunen and highlight interesting areas to explore in future study on languages of this region.

Mous (2003) gives Nyokon, Nomaande, Bonek, Gunu, Yambasa, and Basaá as examples of languages Tunen has been in close contact with. I conducted a brief survey of the literature of these languages, adding Eton and Douala as they have also had contact with Tunen, and due to limited resources found for the other languages. For each language, I identified key sources and looked for occurrences of forms related to the numeral ‘one’. I observed whether the interpretation was commented on, and whether the form occurred prenominally or postnominally. The languages and sources for

which I found relevant information are shown below, alongside the source consulted and results of the study.¹⁹

Table 6
Survey overview for neighbouring Cameroonian Bantu languages.

Language	Guthrie no.	Source(s)	‘one’ prenominally?	‘one’ → spec. indefinite?
Basaá	A43a	Makasso and Lee (2015), Hyman (2003), Moreton and Njock (1968)	no	some evidence
Douala	A24	Ittmann (1978)	no	some evidence
Eton	A71	Van de Velde (2008)	no	some evidence
Nomaande	A46	Wilkendorf (2001)	no	no relevant discussion

As Table 6 shows, I did not find any language which matched Tunen in having a *prenominal* form derived from the numeral ‘one’. The syntactic change from a postnominal numeral to a prenominal determiner therefore appears to be Tunen-specific, at least within this small sample.

However, there was some evidence for an interpretative change from a numeral to a (specific) indefinite marker. For instance, in Ittmann (1978)’s grammar of Douala, there is brief discussion that the numeral ‘one’ can occur with plural agreement to mean ‘some’, just as we saw with the prenominal determiner in Tunen, and in Eton, the same phenomenon occurs:²⁰

- (27) *mukom’ mǒ*
1.slave 1.one
‘un esclave’
‘one slave’
- (28) *bato bǒ*
2.person 2.one
‘quelques gens’
‘some people’
Douala; Ittmann (1978: 90)

¹⁹ Guthrie codes are taken from Maho (2003, 2009).

²⁰ Noun classes and an English translation have been added to the Douala examples, and the notational changes have been made for the Eton data.

- (29) *tíd pwág*
 /tíd póg/
 9.animal 9.one
 ‘one animal’
- (30) *bòd bèvwág*
 /b-òd bà-vóg/
 2-person 2-one
 ‘some people’
 Eton; Van de Velde (2008: 161)

These examples are reminiscent of what was reported for Tunen in Dugast (1971), where the numeral ‘one’ was said to be possible with plural nouns. Nothing is said about a non-cardinal use of the marker with singular nouns, so further study is required to see whether this is possible like it is in Tunen.

In Basaá, slightly more detail is given, with a marker from the numeral ‘one’ contributing what looks like referential specificity. This marker is permissible for both singular and plural nouns, as below.

- (31) *mùt wàdá*
 1.person 1.one
 ‘un certain homme’, ‘un homme’
 ‘a certain person’, ‘one person’
- (32) *bòt bàdá*
 2.person 2.one
 ‘certains hommes’
 ‘some people (in particular)’
 Basaá; Moreton and Njock (1968: 296, 382)

The Basaá case differs from Tunen in that the marker is postnominal, as was seen for Douala and Eton. For these languages, a detailed look into their nominal syntax is required to understand the syntactic status of the marker derived from numeral ‘one’. It may be the case that these languages differ from Tunen in having a postnominal D position. Another interesting point to look at is how other (specific) indefinite markers interact with this one, which requires study of the expression of definiteness and specificity more generally in these languages.

To conclude this short survey, I have found no language that has a prenominal marker derived from numeral ‘one’ as in Tunen. However, there is evidence that a similar semantic change has taken place in languages with which Tunen has been in contact. For Douala and Eton, this was seen for plural nouns, and for Basaá, there was evidence of a specific indefinite marker derived from the numeral ‘one’ compatible with singular nouns as well. Further study on these Cameroonian Bantu languages could shed light on the grammaticalisation that Tunen underwent by showing the extent to which the changes that led to prenominal *-mòté* were driven through language-external pressure. Further

study on Tunen's neighbours will also give more detail on referentiality in these languages than is currently available through grammatical sketches.

7 Conclusion

In summary, we have seen that Tunen has a prenominal form *-m̀tɛ́* that marks a noun as a specific indefinite and is derived from the cardinal numeral 'one', which is synchronically found as *-m̀tɛ́* in a postnominal context. I argue that this prenominal use of *-m̀tɛ́* is a determiner rather than a true numeral, having grammaticalised along the grammaticalisation path ONE > PRESENTATIVE MARKER > SPECIFIC INDEFINITE MARKER > INDEFINITE MARKER (Givón 1981; Heine 1995, 1997), with the semantic change preceding the syntactic change. I tested this proposal by means of a corpus study with Tunen texts collected in the 20th century (Dugast 1975), with results supporting this proposal. The fact that evidence for this grammaticalisation path has been found from many different language families across the world suggests that the change in meaning is a natural semantic shift that can occur language-internally, as has also been argued for other languages (e.g. Ionin (2013) on Russian). However, it is possible that the change was not unique to Tunen, and so I conducted a brief survey of neighbouring languages, finding no language with a prenominal marker derived from the numeral 'one', although there was evidence of similar semantic changes. Further research could therefore investigate the syntactic status of such markers in neighbouring languages in order to see whether they have also grammaticalised into determiners. For Tunen, an interesting addition to the current study would be to look into how modern-day speakers use *-m̀tɛ́* in narrative contexts and compare this to the speakers recorded in the 20th century texts.

Abbreviations

1, 2, 3 = Bantu noun class marker; 1SG = 1st person singular; COP = copula; DEM = demonstrative; NEG = negation; PRS = present tense; PROX = proximal deixis; POSS = possessive pronoun; REL = relative marker; SM = subject marker.

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