The exceptional morphology of Tura numerals and restrictors: Endoclitics, infixes and pseudowords

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Abstract

This paper offers a comprehensive account of the exceptional morphosyntactic behaviour of Tura numerals. It explores the ability of the roots of Tura numerals to be split up by the so-called “intensifiers”, or better “restrictors”, which, remarkably, are neither affixes nor clitics in other contexts. This typologically rare phenomenon proves to have interesting implications for morphology, syntax and pragmatics. I claim that some of these constructions result from conventionalization and subsequent univerbation of certain pragmatically marked collocations. The others are a product of reanalysis by analogy that occurred in one specific syntactic environment. The need for an adequate synchronic morphological analysis of the constructions at issue made it necessary to address some theoretical questions, such as endoclisis, word integrity, and constancy of the morphological status of linguistic entities. In most cases when restrictors are used in a numeral-internal position, they are claimed to be infixed roots or

1. Tura is a Niger-Congo language of the Southern subbranch of the Eastern branch of the Mande family. It is spoken by approximately 60,000 persons in a small mountainous region to the Northeast of the town of Man in Ivory Coast. The Tura dialect dealt with in this paper is Nao (Nâò). One of the previous versions of the present paper was presented at the Workshop on Numerals in the World’s Languages held at the Max Planck Institute for Evolutionary Anthropology, Leipzig, 29–30 March 2004. The data discussed in the present paper were gathered in Ivory Coast in February–April 2002. This fieldtrip was conducted as part of the project “Lexicology of Eastern Mande languages in the context of Mande linguistic comparison” (http://www.unizh.ch/spw/afrling/prjbsch/mande.htm) funded by the Swiss National Science Foundation. An important assistance to the project was also given by the Ivorian branch of the Summer Institute of Linguistics. I would also like to express here my gratitude to the Tura people I worked with for their valuable assistance and time. Particularly to Goh Soupou Mardoché, from the village of Kpata, and Gilbert Bakayoko, from the village of Dio. Furthermore, special thanks are due to Thomas Bearth, Mark Van de Velde, Valentin Vydrine, and an anonymous JALL reviewer for their helpful comments on the previous drafts of the present paper. Any faults that remain are, of course, my own responsibility.
infixes. In addition, the notion of “pseudoword(form)” is proposed to account for some of the facts attested. The typologically highly interesting category of restrictors is also examined in detail from syntactic, semantic, etymological and morphological perspectives.

1. Introduction

In Tura basic numerals from two to five behave in an exceptional way as far as their morphological unity is concerned. The roots of these numerals, which are supposed to be a unity, can be split up by some other words, as illustrated in (1) where the numeral *pììlê* ‘two’ is split up by the word *lef* ‘even (as an adverb)’. Note that there are certain syntactic restrictions on the use of the forms involving split-insertion and that even when they are possible their usage is never obligatory.

(1) [A: There are two persons in the room, I think. B:] wàâ pìì lef lê
3PL.SUBJ.NEG.TAM t[wo] even t[wo]
‘They are not even two/ they are not two at all [but just one].’

The split-insertion is in certain cases accompanied by partial reduplication. The words that can be inserted when such a split takes place form a small closed lexico-grammatical class of restrictors (traditionally called *intensifiers*), such as ‘only’, ‘also’, ‘first of all’, etc. Remarkably, restrictors cannot be considered clitics in Tura.

The structure of the paper is as follows. By way of introduction, I will present some general characteristics of the Tura numeration system in Section 2. In Section 3 an overview of the special formal features of the numerals from two to five will be given. Then, Section 4 will familiarize the reader with the highly interesting category of restrictors. In particular, restrictors will be analysed in detail from syntactic, semantic, etymological and morphological perspectives. In Section 5, various aspects of the [numeral + restrictor] combinatorics will be put under scrutiny. Some interesting implications for morphology, syntax and pragmatics will be discussed as well. In Section 6 a diachronically oriented explanation of the unusual formal properties of the Tura numerals will

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2. In conformity with the practical orthography, tones in the examples are marked as follows: á (high tone), ã (mid-high tone), a (mid-low tone), à (low tone); …’ (high or mid-high tone clitic), …- (low tone clitic). Parts of a morpheme that happened to be discontinuous in a given example are glossed twice with square brackets including in each case the “lacking part”. For the sake of uniformity, I arbitrarily decided to square bracket everything that follows the first letter in the case of the leftmost of the two glosses and the first letter in the case of the rightmost of the two glosses.
be proposed. Finally, in Section 7 I propose an analysis of the morphological status of the elements that constitute various types of [numeral + restrictor] combinations involving split-insertion(-reduplication). I discuss the notion of endoclisis and propose a term pseudoword. The reader interested only in these morphological issues may wish to skip Sections 4.2–5.6 but should acquaint him/herself with Tables 1–5 and section 5.1 where the organization of these tables is explained.

2. General characteristics of the Tura numeration system

Tura has a decimal numeration system, as illustrated in (2).

(2)  
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<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>dô</td>
<td>6</td>
<td>sààdô</td>
</tr>
<tr>
<td>2</td>
<td>pïïïê</td>
<td>7</td>
<td>sààpïïïê</td>
</tr>
<tr>
<td>3</td>
<td>yàkâ</td>
<td>8</td>
<td>sààkâ</td>
</tr>
<tr>
<td>4</td>
<td>yïïïê</td>
<td>9</td>
<td>sïïïïê</td>
</tr>
<tr>
<td>5</td>
<td>sôlô (sôlû, sôolû)³</td>
<td>10</td>
<td>buu</td>
</tr>
</tbody>
</table>

However, one cannot help noticing some elements of a quinary system present here. The numerals sààdô ‘six’, sààpïïïê ‘seven’, sààkâ ‘eight’ and sïïïïê ‘nine’ are clearly etymologically compound and are formed on the following model: sàà- ‘five plus’ & a numeral from 1 to 4. In the case of sààkâ ‘eight’ and sïïïïê ‘nine’ a subsequent fusion took place between sàà- and yàkâ ‘three’ and between sàà- and yïïïê ‘four’, respectively. Furthermore, comparative data convincingly show that the numerals from 6 to 9 must have already been compounds at least on the Proto-South Mande level. As to the element sàà- in these numerals, I believe that it goes back to a combination of the numeral ‘five’, presumably *sààdô ‘above; on’ used as a connective element there. Thus, for instance, the numeral sààdô ‘six’ should be reconstructed as something like *sààdô-*tà-dô ‘one above five’.

From the synchronic point of view, the element sàà- ‘five plus’ in sààdô ‘6’ and sààpïïïê ‘7’ is best analyzed as a bound numeral root always being part of a numeral compound. Even though the relations between the elements of such a numeral compound are apparently syntactically coordinative and semantically additive, we are really dealing with a compound and not a phrase for instance because the conjunction ni ‘and’ cannot be inserted between the two elements. As to the numerals sààkâ ‘8’ and sïïïïê ‘9’, due to the fusion that took place between their etymological components it seems best to treat them as morphologically unanalysable simple numerals.

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3. The form sôlû is somewhat less common than sôlô. The form sôolû is dated.
Numerals above 10 in Tura are formed according to the following models. From 11 to 19: **buu** ‘10’ + (ni ‘and’) + (wéé ‘unit’, lit. ‘grain’) + a number from 1 to 9.

(3) **buu ni wéé pùìlê**
‘12’

From 20 to 99: **kûà(n)** ‘ten’ + a multiplier (here, a number from 2 to 9) + (ni ‘and’) + (wéé ‘unit’) + a number from 1 to 9.

(4) **kûà pùìlê ni wéé pùìlê**
‘22’

From 100 to 999: **kàîn** ‘hundred’ + a multiplier (here, a number from 2 to 9) + (ni ‘and’) + **kòò** ‘ten’ (lit. ‘arm; hand’) + a multiplier (from 1 to 9) + (ni ‘and’) + (wéé ‘unit’) + a number from 1 to 9.

(5) **kàîn pùìlê ni kòò pùìlê ni wéé pùìlê**
‘222’

The only exception here is the numeral ‘100’, **kàîn-dìnì**, instead of the expected form **kàîn-dò** (cf. also 5.2).

Above 1000: **wáá** ‘thousand’ + a multiplier (here, a number from 1 to 999) + (ni ‘and’) + **tà** ‘hundred’ (lit. ‘surface’) + a multiplier (from 1 to 9) + (ni ‘and’) + **kòò** ‘ten’ + a multiplier (from 1 to 9) + (ni ‘and’) + (wéé ‘unit’) + a number from 1 to 9.

(6) **wáá pùìlê ni tà pùìlê ni kòò pùìlê ni wéé pùìlê**
‘2222’

The numeral meaning ‘1000’ is regularly expressed as **wáá dò**, but the form **wáá-dìnì**, clearly parallel to **kàîn-dìnì** ‘100’, is also attested.

Note that the element **wéé** ‘unit’ is normally not obligatory in the numerals above 10. Note also that there are three words for ‘ten’ in Tura: **buu** for numerals from 11 to 19, as in (3), **kûà(n)** for numerals from 20 to 99, as in (4), and **kòò** for numerals starting from 110, as in (5) or (6). In complex numerals starting from 110 that end in a number from 10 to 19 the word **kòò** can optionally be replaced by **buu**. There are two words for ‘100’ in Tura: **kàîn** for numerals from 100 to 999, as in (5), and **tà** for numerals starting from 1100.

Let us now consider the morphological status of the Tura numerals above 10. These numerals, with the exception of the multiples of ten, hundred and thousand, are first of all coordinative constructions involving additive semantic relations, as the possibility of the use of the conjunction ni ‘and’ between the expressions for units, tens, hundreds and thousands clearly indicates. As far as the morphological status of the expressions for units and for multiples of ten,
hundred and thousand is concerned, it seems most appropriate to analyze them as quantified-quantifier phrases, some of which are idiomatic. There are only two exceptions to this generalization: kàîn-dìnì ‘100’ and a rare form wáá-dìnì ‘1000’, where we are dealing with a so-called “syntagme spécificatif” (Beareth 1971: 119–122). The relations between the constituents of this type of phrase can be roughly described as modifier-modified. For more details about these exceptions, “syntagme spécificatif” and the word dìnì, see 5.2.

I believe that the expressions for units and for multiples of ten, hundred and thousand are best analyzed as quantified-quantifier phrases for the following reasons. Note that kàîn ‘hundred’, wáá ‘thousand’ and most likely also kûà(n) ‘ten’ can be used in the same meaning without a multiplier. This can be illustrated, for instance, by a construction like kàîn kpáâ ‘(several) hundreds’, where kpáâ is an adjective meaning ‘big’ or ‘many; several’. In other words, one can claim that structurally a phrase like kàîn pììlˆE ‘200 = 2 hundreds’ hardly differs from a phrase like yílí pììlˆE ‘2 trees’. As to the expressions consisting of tà ‘hundred’, kO ‘ten’ or wéé ‘unit’ and a multiplier, they are best treated as idioms. Note that these three elements are restricted in their use in these meanings to the position of a lower addend within a complex numeral. They can be regarded as bound, but not as much to the multiplier that follows them but to the complex numeral construction as a whole. Thus, wéé pììlˆE if taken out of kàîn pììlˆE ni wéé pììlˆE ‘202’, where it means ‘2’ or ‘2 units’, will mean ‘2 grains’, whereas kàîn pììlˆE even if taken out of the same complex numeral ‘202’ will still mean ‘200’. Therefore, wéé pììlˆE in kàîn pììlˆE ni wéé pììlˆE ‘202’ is an idiomatic syntagm and not a compound. The elements tà ‘hundred’, kO ‘ten’ and wéé ‘unit’ always occupy a well defined slot in a complex numeral construction. What is more, they cannot occur in the same meaning anywhere else than in this slot. In other words, a semantic shift from their original construction-independent meaning to a new construction-bound meaning necessarily takes place when they occur in a construction-bound position: construction-bound tà ‘hundred’ vs. construction-independent tà ‘surface’, construction-bound kO ‘ten’ vs. construction-independent kO ‘arm; hand’, construction-bound wéé ‘unit’ vs. construction-independent wéé ‘grain’.

In conclusion, let us have a brief look at the syntactic behaviour of the Tura numerals. Numerals in Tura can have four different syntactic functions. First, a numeral can be an attribute of an NP, as illustrated in (7). In this case the plural marker -bò is not normally used. Second, a numeral can function as a nominal predicate, as demonstrated in (8). The subject can be in singular as well. Furthermore, a numeral can sometimes be used as an object or a subject, as in (9). Finally, it can function as an adverbial adjunct, as in (10).
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(7)  bhâa
xen tî (bô) pîlê
man black pl. two
‘two Africans’

(8)  wo / e pîlê
3pl.sbj.tam 3sg.sbj.tam two
‘They are two.’

(9)  e bhô pîlê tâ-lèè bhâ
3sg.sbj.tam reach\tam two meet-place\on
‘They are almost two.’

(10)  Nâjîlé lôó ni Têî lôó, àŋ le wô nûû
Nannê market and Tê market 3pl. F1 3pl.sbj.tam was
lôó kpâkpâa.bô le.á Wrenê zê pîlê kweí le
market big:big-pl. F2-with Tura.region here two so tm
‘The markets in Nannê and Tê were the two big markets of the Tura
region.’ (Bearth 1999: 24)

3. An overview of the special formal features of the numerals from 2 to 5

The numerals from two to five, i.e., pîlê ‘two’, yàkâ ‘three’, yîsê ‘four’, and sôlô/sôlû/sôlû ‘five’, are rather remarkable as compared to the rest of the Tura lexicon.

First, these are disyllabic words in the otherwise predominantly monosyllabic language. The two syllables they consist of cannot be attached any meaning of their own (either lexical or functional) from a synchronic point of view and, therefore, they must be considered a single root. Moreover, comparative data give rather strong evidence that it has always (up to the Proto-Eastern Mande or even Proto-Mande levels) been the case, which suggests that they should be considered as a single root from a diachronic point of view as well.

For instance, compare two numerals, fîlê ‘two’ and dûuru ‘five’, from Banmana, a Western Mande language, and their respective Tura counterparts, pîlê and sôlô/sôlû/sôlû. As to the numerals yàkâ ‘three’ and yîsê ‘four’, these are in all probability Eastern Mande innovations but there is no indication either that they have ever been compounds.

4. The backslash is used to separate the category label and the stem gloss when a given grammatical category is signalled by a tonal change of the stem.

5. Dots, as in kpâkpâa.bô or le.á in (10), are used in Tura examples to separate two morphemes within one orthographic word. I do not resort to hyphens in such cases because hyphens are already used in Tura orthography for other purposes.
Attention should also be drawn to the presence of the intervocalic voiceless consonants k and s in the numerals yàkà ‘three’ and yìsè ‘four’. The consonants here are remarkable because intervocalic voiceless consonants are very atypical for disyllabic words in Tura, with the exception of ideophones. In addition, note that a rising combination of tones as found in yàkà ‘three’ and yìsè ‘four’, as well as pììlè ‘two’, is rather unusual for Tura where the overwhelming majority of roots is characterized by a falling or flat tonal contour.

Finally, the roots of these numerals, which are supposed to be a unity both synchronically and diachronically, can be split up by restrictors, having such meanings as ‘only’, ‘also’, ‘even’, ‘first of all’, etc. This was already illustrated in (1). In all probability, it was the possibility of splitting that helped to preserve such atypical word-internal intervocalic voiceless consonants as k and s in yàkà ‘3’ and yìsè ‘4’. Note that restrictors cannot be considered clitics or affixes in Tura when they are used in a numeral-external position (cf. 4.1). In other words, one is tempted to say that in Tura a root can be split up by another word. Such a possibility inevitably raises a series of questions on the morphological status of the numeral roots that are split up. These questions will be dealt with in more detail in Section 7.

4. Restrictors

In the present section I will examine the highly interesting category of restrictors, called intensifiers (”les intensifs”) by Bearth (1971: 189–192). By way of introduction, the inventory of restrictors in Tura will be presented in Section 4.1. In addition, I will briefly discuss their morphological status. Then, in Section 4.2 distributional properties of restrictors will be considered. In 4.3, an analysis of their semantics will be proposed. A detailed illustration of this analysis on the example of (le)kini will be provided as well. Finally, in Section 4.4 the etymology and derivational potential of restrictors will be examined.

4.1. Inventory and morphological status

Restrictors form a small closed lexico-grammatical class including the following lexemes:

<table>
<thead>
<tr>
<th>Lexeme</th>
<th>Meaning</th>
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<tbody>
<tr>
<td>kini, lekini/leŋ, lekinilèkini/leŋlèŋ</td>
<td>‘exactly; really; only; [...]self; also’</td>
</tr>
<tr>
<td>sósó (súsú, sosó), lestésé</td>
<td>‘always, constantly; completely; exclusively’</td>
</tr>
</tbody>
</table>

6. The forms leŋ and leŋlèŋ are just contractions of the derived forms lekini and lekinilèkini, respectively.
In many of the world’s languages (especially in Samoyedic and Altaic languages) elements comparable to Tura restrictors function as clitics or affixes of the modified elements they precede or follow. This is not the case in Tura. First, they are not affixes because just as other words they can serve as a base for a regular morphological derivation. In particular, they can be used to produce derivatives by means of an adverbalizing suffix -wô, nominalizing-adjectivizing suffix -yè or a diminutive suffix -né (see 4.4). Second, they are not clitics because they are prosodically independent: they are characterized by a lexical tone of their own, no vowel reduction or consonant lenition or any other comparable process is attested for the restrictors or words they are used with. Moreover, they can sometimes be used without anything preceding them, as the use of leŋ illustrates in (11). Finally, restrictors are clearly perceived as words by Tura speakers themselves. For a discussion of the morphological status of restrictors in the numeral-internal positions, see Section 7.

(11) leŋ-wàà le' bhê3.à, bhê ï.bhà ló
really-smell\lt. f2-PM appear-TAM 2SG.SUBJ.TAM 2SG-POS.SG go wô!
TR
‘If (you think that) it stinks (at my place), then get lost!’ (Bearth 1971: 173)

Restrictors should be regarded as a separate part-of-speech class on distributional, semantic and morphological grounds. In what follows I further elucidate this issue.

4.2. Distributional properties

Restrictors modify the lexical word they follow. This word can be a noun, pronoun, demonstrative determiner, adjective, numeral and a nominalized or transposed\(^8\) verb or adverb.

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7. Note that the hyphen in leŋ-wàà in (11) is nothing but an orthographical convention. It is used as an additional highlighter of the grammatical low tone on the noun at its right side.
8. The terms transposed and transposition come from Bearth (1971). Transposition can be described as a syntactic process that enables a verb or an adverb to take adnominal modifiers. Thus, from a functional point of view, transposition can be regarded as more or less equal to nominalization. Transposed forms do not however have certain typical morphological characteristics of nominalizations such as a nominalizing suffix -yè. For a verb, transposition consists in placing the verb in object position of an auxiliary verb wô ‘accomplish, do’ which
Bearth (1987–1988) classifies restrictors as a special subclass of adjectives. However, I cannot entirely agree with this subcategorization. It is true that both restrictors and adjectives are modifiers. But restrictors are also capable of modifying an adjective, a numeral or a demonstrative determiner, that is an element which is an adnominal modifier itself, whereas adjectives cannot be used this way. In other words, whereas restrictors can function both as “primary” and as “secondary” modifiers in an NP, adjectives can only be “primary” adnominal modifiers. In this respect, restrictors rather resemble a focus particle le, as in (10), than adjectives. Furthermore, they can largely be compared to such English words as only or even, as in even/only a child can do this, there are even/only good houses in this street or he even/only begged from his neighbours. One important difference between restrictors and their possible English counterparts is that restrictors in Tura cannot modify verbs, unless the latter are normalized or transposed. In other words, bare restrictors cannot be used as adverbs in Tura.

Summarizing, restrictors should be clearly distinguished from adjectives or adverbs as far as their distributional characteristics are concerned. There is, to my knowledge, no syntactic term that could encompass the two syntactic functions restrictors can have. It does not matter that much from a descriptive point of view because a clear definition of the possible syntactic functions of restrictors can in principle be sufficient. Yet, one could try to coin a separate label for the set of syntactic functions that restrictors in Tura can have, for instance, something like general adnominal modifiers. General modifier can be

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9. A more usual designation for what is here called secondary modifiers may be submodifiers.
10. Unless, of course, one uses a term modifier for both a word like good and a word like only as in only good houses, without any further specification. However, this option does not look very appealing to me from a descriptive point of view because it would result in an important lack of differentiation between different lexicogrammatical classes.
a sort of cover term for both secondary/second-order and primary/first-order modifiers in a given phrase.\textsuperscript{11}

4.3. Semantics

Restrictors can be set apart as a class of their own not only due to their common distributional characteristics, but also due to the existence of a certain common semantic denominator in their meanings. This common semantic element all restrictors share can be formulated as \([\{x \text{ is } a\} \text{ AND NOT } \{x \text{ is NOT } a\}]\), where \(x\) represents the element modified by a restrictor and \(a\) represents the value ascribed to \(x\). This can be paraphrased as follows: a restrictor confirms part of a presupposition and at the same time restricts it via negation. All restrictors thus operate on different presuppositions in principally one and the same way, namely they restrict a given presupposition. However, they primarily differ in presuppositions on which they can operate. In other words, the restrictors make different assertions on the output level chiefly because they have different presuppositions. Therefore, to describe the meanings of a restrictor, one needs to determine the possible presuppositions on which a given restrictor can operate.

The term \textit{restrictor} seems to suit best for designation of the elements at issue because their primary function is to restrict the presupposed value of a variable they modify. Bearth (1971: 189–192) uses the term \textit{intensifiers} (“les intensifs”) when speaking about the elements that I prefer to call restrictors. Admittedly, restrictors can to a certain extent be regarded as intensifiers of a given presupposition. Nevertheless, the use of the term \textit{intensifier} does not seem to be justified. First, intensification here is only a possible by-product of restriction via negation. Second, the use of the term \textit{intensifier} could be rather misleading in the case of Tura because in the general linguistic literature this term is regularly associated with words like English \textit{very}, whereas one does not find such meanings among the Tura restrictors. On the other hand, the term \textit{restrictor}, besides adequately describing the semantics of the elements at issue, is also usually assigned in the literature to words like English \textit{only} and this is exactly one of the meanings we find for the Tura restrictors.

\textsuperscript{11} In my opinion, the creation of a term like \textit{general modifier} may prove to be very useful not only for Tura. In very many languages one finds words like Tura restrictors or like English \textit{only} or \textit{even} that the existing grammatical descriptions rather often subcategorize together with adverbs (as in traditional English grammar) or adjectives (as in Tura) despite the distributional discrepancies attested.
Speaking about terminology, it might be worth mentioning that in the linguistic literature operators comparable to the Tura restrictors are sometimes defined as a special class of “logical words” (or “logical particles”) or “communicative auxiliary words” (see, for instance, Krivonosov 1979, Boguslavsky 1985, Panfilov 1993).

By way of illustration of the proposed unified semantic analysis of restrictors, let us now consider the semantics of the restrictor *kini* in more detail. For convenience sake, *kini* (and its derivatives) will be uniformly glossed as ‘exactly’ throughout the text. In the present section discussion will mostly be confined to the cases when *kini* modifies a term other than a numeral. See Sections 5.2–5.5 for some peculiarities of the use of *kini* and other restrictors with numerals, as well as for a more thorough semantic analysis of the rest of restrictors.

First, *kini* can mean ‘exactly; really’, as illustrated in (12) and (13).

(12) e à pè *kini* wô’
3SG.SUBJ.TAM 3SG say exactly TR\TAM-TAM
‘He really said it.’ (Bearth 1971: 190)

(13) wo kûà *kini* yàkà, ké wàâ
3PL.SUBJ.TAM ten exactly three but 3PL.SUBJ.NEG.TAM
máà à bháálà lâà bhà
can-TAM job this on
‘They are exactly 30, but they can not do this job.’ (that is, ‘They are really 30, but...’; ‘Although they are 30, ...’) (GM)

The presupposition of both examples can be represented as [[x is a] or [x is not a]], where x represents the element modified by *kini* and a represents the value ascribed to x. For (13) the presupposition can be paraphrased as follows: the number is or is not 30. The use of *kini* implies that this presupposition is restricted via negation and results in a statement [[x is a] AND NOT [x is not a]] on the output level. In the case of (13) this statement can be paraphrased as follows. The number is 30 and nothing else but 30.

Second, one can use *kini* in the meaning of ‘only; [...]self’, as illustrated in (14) and (15). It should be mentioned that in this meaning *kini* most often shows up in its derived form *lekini*/*le* (see also Section 4.4). The presupposition of these examples can be represented as [[x is a] AND [x is b], etc.], where x is the variable in question about which it is presupposed that it has at least two values, a and b, which can be specified if necessary. For (14) the presupposition can be paraphrased as follows: everybody should work at least for two persons, himself (a) and somebody else (b). The use of (le)kini implies that this presupposition is restricted via negation and results in a statement [[x is a] AND NOT [x is a] AND [x is b], etc.]. In the case of (14) this means that everybody should work for himself and not both for himself and somebody else.
‘The forced labour must be abolished and everybody should work for himself only.’ (Bearth 1999: 21)

‘You’d better take care of yourselves!’ (Bearth 1971: 191)

Note that the translation ‘[...]-self’ appears when lekini modifies a pronoun co-referential to another constituent in the same clause. In Tura, such co-referentiality can be expressed in roughly two ways. First, one can simply use an ordinary non-subject pronoun of the same person and number as the element it should be co-referential with, as in (16). Second, in the case of the third person, where rather often a danger exists that the use of the first option might cause a certain ambiguity, a special logophoric third person pronoun tends to be used instead as a kind of reflexive pronoun, as in (14).

In both cases the speaker can also use the restrictor lekini after a pronoun which is already co-referential, as can be seen in (14) and (15). In other words, the restrictor seems to function as a kind of additional marker of reflexivity. This additional marking appears to be superfluous at first sight, but I have a strong impression that lekini is normally used as an additional marker of reflexivity in cases when there is a possible corresponding background against which lekini can be contrastively interpreted. That is, a sentence like (15), ‘You’d better take care of yourselves!’, seems to imply a certain contrastive inference, something like “and let others take care of themselves” or “and the others are not really your business”. In the same vein, (14) means that everybody should work for himself and not both for himself and somebody else. Compare sentence (16) where no such contrastive inference is expected.

Such a contrastive interpretation of the reflexive usage of lekini also seems to fit very well with the general semantics of restrictors. Thomas Bearth (personal communication) expressed certain doubts on the contrastive interpretation proposed here. He expects that one has to use some sort of focus marking in order to obtain the contrasting effect. However, the focus marking he would expect to see for a contrastive interpretation to be possible is already there, in the form of the prefix le- of lekini. This derivational prefix found only on restrictors originates from a focus particle le which can generally be defined
as a counter-inferential focus marker (Bearth 1987–1988), that is something like ‘it is so, but...’. I believe that one can then reasonably assume that the focus meaning of the particle le “persists” in the prefix le-, especially when one takes into consideration the semantics of restrictors. Note, in this respect, that Bearth (1987–1988) himself explicitly states that words like lekini in Tura should be considered as closely related to the domain of focalization; particularly, he mentions their possible counter-presuppositional value. For more information on the prefix le-, see Section 4.4.

The third meaning of kini, or better lekini, for I have not encountered a single case of the usage of the non-prefixed form in this function, is ‘also’, as illustrated in (17) and (18).

(17) à lekini’ nû’
   3SG exactly-PM come\tAM-TAM
   ‘He also came.’ (Bearth 1987–1988)

(18) Wélé é, na kâ lej kâ à le
    wealth this so 2PL exactly 2PL\SUBJ.TAM 3SG F1
    guo\j é la!
    look.for-TAM this TM
    ‘But you yourselves, it is exactly for the wealth that you are looking??’
    (Bearth 1999: 28); a better translation might be:
    ‘But you as well [and do not deny this], it is exactly for the wealth that
    you are looking??’

The presupposition of these examples can be represented as \[[x \text{ is } b] \text{ and } \[x \text{ is } a \text{ or } \text{not } x \text{ is } a]]\], where \(x\) is the variable in question about which it is presupposed that it has a value \(b\) but it is not known for sure whether it has a value \(a\) in addition. For (17) the presupposition can be paraphrased as follows: it is known that somebody else than \(a\) came, that is \(b\), but it is not known whether \(a\) came in addition. The use of lekini implies that this presupposition is restricted via negation and results in a statement \[[x \text{ is } b] \text{ and } [x \text{ is } a \text{ and not } x \text{ is } \text{not } a]]\]. In the case of (17) this means that not only somebody else than \(a\), that is \(b\), came but both \(a\) and \(b\) came.

If we compare the three meanings of (le)kini analysed above, we can notice that all three can be reduced to a general formula \[[x \text{ is } a] \text{ and not } [x \text{ is } \text{not } a]]\), quod erat demonstrandum.

4.4. Etymology and derivational potential

Restrictors as a group are very heterogeneous in their origins. Apparently, of all the restrictors only süsü ‘always, constantly; completely; exclusively’ is a
non-derived form. The restrictor lef5l̩é ‘first (as an adverb); for a start’ is derived from an adverb/adjective f5l̩é ‘first; before, in the past’, which itself is derived from an adjective/adverb f5 ‘first; before, in the past’. The word lef̩u ‘even (as an adverb)’ originates in an adjective fu ‘empty’. The etymological source for (le)kini ‘exactly; really; only; [...]self; also’ is a verb kini ‘encircle; surround’. Besides the formal resemblance between the verb and the restrictor, this etymology is further supported by the fact that of all the restrictors, it is only from lekini that one can derive an adjective by means of a nominalizing-adjectivizing suffix -yè, as in lábhili lekiniyè ‘a real miracle’. This nominalizing-adjectivizing suffix is otherwise regularly used to derive participles from verbs, such as gāyè ‘dead/dying’ from gā ‘to die’ or dīyè ‘built/ being built’ from dī ‘to build’. Thomas Bearth (personal communication) agrees with this etymology and suggests that the reasoning behind the transition from the verb kini ‘encircle; surround’ to the whole spectrum of meanings of kini as restrictor might best be perceived in a metaphor of circle as a figure which leads one back to the point where one started. Basing himself on Culioli’s (1995: 76–78) metaphor of “parcours” (or “scanning” in English), Bearth suggests that in cognitive terms the operation of restriction in the case of kini can thus be described as the following process: after going through all the alternative possibilities one comes full swing back to the point of departure, retaining only the latter for assertion.

As for the prefix le- in lekini, lesésé, lefu or lef5l̩é, this derivational affix is found only on restrictors. Bearth (1971: 190) suggests that the prefix le- “implique une nuance absolue ou augmentative”, but the data do not seem to support this characterization. The prefix le- originates from a focus particle le which can generally be defined as a counter-inferential focus marker (Bearth 1987–1988), that is something like ‘it is so, but …’. This kind of contrastive focalization is very similar to the semantics of restrictors as operators that aim to confirm a part of the presupposition while restricting it via negation. One could go even further and argue that the prefix le- just makes the semantics of restrictors formally prominent and is therefore a simple marker of the lexico-grammatical class of restrictors. This is true indeed in the case of lef̩u ‘even’ and lef5l̩é ‘first; for a start’ which simply cannot be used as restrictors without le-. However, for the other restrictors the situation is more complicated.

As to the pair lekini vs. kini ‘exactly; really; only; [...]self; also’, the prefixed form lekini tends to replace the non-prefixed form kini. The more complex the expressed meaning is, the more likely it is that the prefixed form will be used. Thus, I have not encountered a single case of the non-prefixed form being used in the meaning ‘also’. On the other hand, occurrences of the non-prefixed form in the meaning ‘ [...]self’ and especially ‘only’ happened to be not that uncommon and in the meaning ‘exactly; really’ the non-prefixed form proved to be even absolutely regular. These facts may be considered as a rather
strong argument in favour of the assumption that in the case of lekini the prefix le- functions not only as a simple marker of the lexico-grammatical class of restrictors but that it also adds a certain meaning of its own to the semantics of kini, presumably some sort of contrastive or counter-presuppositional inference. Should this prove to be the case, one will have to consider the prefixed form lekini and the non-prefixed kini as two different lexemes and not as free variants of one and the same word.

As to the pair lesó/le só ‘always, constantly; completely; exclusively’, these forms are in all probability differentiated in the same way as lekini and kini, i.e., the prefix le- adds some sort of contrastive or counter-presuppositional inference besides indicating the lexico-grammatical class of lesó. However, due to a lack of examples I prefer to keep myself from making any final statements on this issue.

Now let us have a quick look at the derivational potential of restrictors, already touched upon in the present section. For instance, recall that lekini is the only restrictor from which one can derive an adjective by means of a nominalizing-adjectivizing suffix -yè, as in lábhílí lekiniyè ‘a real miracle’. Another unique derivation among the restrictors is represented by lefúnè, intensified form of the restrictor lef ‘even’ derived by means of the diminutive suffix -nè; cf. (19) and (20). Comparably to lekiniyè, the possibility to derive a special diminutive form only from lefu can be explained by the etymology of this restrictor, namely by the fact that lefu originates from an adjective fu ‘empty’. Diminutives are regularly derived from adjectives with the help of the diminutive suffix -nè, as in dósó ‘a bit distant’ from dósó ‘distant; long’.

One can derive an adverb from any restrictor (except lefó/leló) with the help of a regular adverbalizing suffix -wô (see also Note 8). Thus, one finds forms like kiniwô (lekiniwô, etc.), sósówô (lesósówô) and lefwô, which have the same meaning as the corresponding underived restrictors and differ from the

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12. 100 francs is expressed by the numeral 20 because the Tura count money by 5 francs.
latter only in their syntactic properties. Compare (1) and (21), which have the same meaning.

(21) [A: There are two persons in the room, I think. B:] 
  wàâ pûlë lefu.wô 
  3PL.SUBJ.NEG.TAM TWO even-ADV
  ‘They are not even two/they are not two at all [but just one].’

The absence of an adverbial form *lefôlêwô can probably be explained by the fact that there already exist such adverbs as fôlê ‘first (in an ordered set of occurrents); before, in the past’ and liê ‘first, in the first place, for a start (as a prerequisite to anything else); first, at first, in the beginning (opposed to something different that follows or as a signal of inversion of order)’. Compare (22) and (23) with (24) and (25).

(22) wô pûlë lefôlê wô le 
  3PL.SUBJ.TAM TWO first-F1 TR TM
  ‘First (for a start), they are two [and this is my first possible counter-argument].’

(23) î bhá- nû liê 
  2SG friend-PM come first
  ‘First (in the first place), your friend must come.’

(24) î bhá lefôlê- nû 
  2SG friend first-PM come
  ‘Let your friend come first.’

(25) î bhá- nû fôlê 
  2SG friend-PM come first
  ‘Let your friend come first.’

These adverbial forms of restrictors sometimes prove to be very helpful. For instance, if one wants to modify a numeral functioning as a nominal predicate with a restrictor one has to use either an adverbial form of the restrictor, as in (21), provided of course such a form is available, or a form involving split-insertion(-reduplication), as in (1), again provided that such a form is available. Another option would be to have recourse to transposition (cf. Note 8), as in (22) or (26), but in this case the phrase including a restrictor seems to be regularly accompanied by some kind focus marking, such as a fl tone clitic (*) and a terminal marker le in (22, 26). The regular presence of this additional focus marking implies that from a semantic point of view the latter option is not always exactly equivalent to the first two options. Note also that whereas transposition can be perfectly combined with forms involving split-insertion(-reduplication), it is not combinable with adverbial forms of restrictors, as illustrated in (26). The reason for the latter restriction seems to lie in the fact
that one would presumably seek to avoid a sequence of two homophonous morphemes, which can moreover be regarded as functionally analogous to one another at a certain level of abstraction (cf. Note 8).

(26) a. \(wò\) \(plorer\) \(kini\) \(wò\) \(le\) \\
\(3PL.\text{SUBJ.TAM}\) \(two\) \(\text{exactly-F1}\) \(TR\) \(TM\)

b. \(wò\) \(pù\) \(kini\) \(pler\) \(wò\) \(le\) \\
\(3PL.\text{SUBJ.TAM}\) \(\{\text{two}\}\) \(\text{exactly}\) \(\text{two-F1}\) \(TR\) \(TM\)

c. \(wò\) \(plorer\) \(kini\).\(wò\) \(wò\) \(le\) \\
\(3PL.\text{SUBJ.TAM}\) \(two\) \(\text{exactly-ADV-F1}\) \(TR\) \(TM\)

‘[A: How many people are there in the room, 3 or 4? B: No,] there are only two.’ (GM)

Besides the morphological derivatives just discussed, one also finds in Tura several compounds formed with the help of restrictors, e.g., \(le\)\(dô\) ‘only (marks uniqueness together with exclusiveness)’, as in (27), that results from a combination of the restrictor \(le\) ‘exactly’ (the contracted form of \(lekini\)) and \(dô\) ‘one (numeral); the same (adjective); to such an extent that (adjective); once (adverb); suddenly (adverb); still (adverb)’. Another example is \(lenjlo\) ‘[not] even at all’, as in (28), that results from a combination of the restrictor \(left\) ‘even’ plus \(à\) ‘they’ and \(tó\) ‘all’.

(27) \(è\) \(lò\) \(bôi\) \(le\)\(dô\) \(bà\) \(le\) \\
\(3SG.\text{SUBJ.TAM}\) \(go\)\(\text{TAM}\) \(field:in\) \(\text{only-F1}\) \(TR\) \(TM\)

‘It is only to the field that he goes/He does not go anywhere else than to the field.’ (Bearth 1971: 191)

(28) \(wò\) \(waa\) \(lenjlo\) \(wò\) \(Duékoué\) \(simá\) \\
\(3PL.\text{SUBJ.NEG.TAM}\) \(arrive\) \(\text{even.at.all}\) \(TR\) \(Duékoué\) \(\text{equivalent}\)
\(bà\) \(bhê\) \(on\) \(yet\)

‘They have not even at all got as far as from here to Duékoué yet.’
(Bearth 1971: 192)

5. [Numeral + Restrictor] combinatorics

5.1. Some preliminaries

In the present section I am going to explore various aspects of the [numeral + restrictor] combinatorics. The section is organized as follows. The first four sections, 5.2–5.5, deal with the interaction between numerals and a particular restrictor. Thus, in 5.2 [numeral + \(kini\)] combinatorics will be discussed, in 5.3 [numeral + \(sósê\)], in 5.4 [numeral + \(left\)] and in 5.5 [numeral + \(le\)\(fô\)\(lé\)].
Every section from 5.2 to 5.5 begins with a table summarizing possible forms of combinations of a given restrictor with numerals involving split-insertion only, both split-insertion and reduplication, or sometimes reduplication only (non-split and/or non-reduplicated forms are also given when these are the only possible forms). I do this on the example of numerals from 1 to 10 and numerals 30, 32, 100, and 200.\footnote{Note that due to phonotactic reasons a CV numeral dō ‘one’ and a CVV numeral buu ‘ten’ cannot be split up. Nevertheless, these numerals are given in the tables for the sake of uniformity and because they can lend themselves to reduplication. In every table the [numeral + restrictor] combinations are divided into two columns. The first column gives the forms that were considered by my informants to be good, the second column gives the forms my informants considered acceptable, but not very good. Among the latter if a given form was accepted only by one of the informants, this informant is specially indicated in parentheses after the form. The forms rejected by both informants are normally not given in the tables, except when relevant. The sign (*) is then used to mark such a rejected form. Note also that where several forms of combinations of one and the same numeral and a given restrictor are found in the tables, the best form, according to the judgments of the informants, is presented first. A comma is then used to separate forms which were considered by the informants to be equally good and a semicolon is used to separate forms which the informants found to sound less good. In Section 5.6 syntactic constraints on split-insertion(-reduplication) are discussed.}

In Section 5.6 syntactic constraints on split-insertion(-reduplication) are discussed.

5.2. Numerals and kini ‘exactly’

As can be observed, there are three types of forms in Table 1: the ones involving distant (or detaching) reduplication, as in the case of buu kini buu ‘exactly ten’, the ones involving split-insertion only, as in pìì kini lÈ ‘exactly two’, and the ones involving both split-insertion and partial distant reduplication, as in pìì kini plÈ ‘exactly two’. Note that the forms involving split-insertion only are rejected by one of the two informants, namely gm. As to the other informant, gm, even though he finds them acceptable, he emphasizes that forms with reduplication are better because, as he puts it, “c’est un nombre complet qu’on a et on n’a pas besoin de chercher un complément pour comprendre la phrase”. gm has also provided a pair of examples, one with a form involving reduplication

\footnote{Note that in Tables 1–4 the numeral ‘five’ is given only in the forms sélè and sóllù, since the form sóllù behaves identically to sélè.}
<table>
<thead>
<tr>
<th>Numeral</th>
<th>[Numeral + kini] forms</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>good</td>
</tr>
<tr>
<td>1</td>
<td>dô</td>
</tr>
<tr>
<td>2</td>
<td>piül</td>
</tr>
<tr>
<td>3</td>
<td>yákâ</td>
</tr>
<tr>
<td>4</td>
<td>yisè</td>
</tr>
<tr>
<td>5</td>
<td>sél</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>sáàdô</td>
</tr>
<tr>
<td>7</td>
<td>sáàplê</td>
</tr>
<tr>
<td>8</td>
<td>sáàkâ</td>
</tr>
<tr>
<td>9</td>
<td>sósè</td>
</tr>
<tr>
<td>10</td>
<td>buu</td>
</tr>
<tr>
<td>30</td>
<td>kùà yákâ</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>kùà yákâ wée</td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>100</td>
<td>kàîn-dìnì</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>200</td>
<td>kàîn piül</td>
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<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note that following the practical orthography of Tura the final n must be used in din to mark nasalization of the vowel because since in the non-split form din both vowels are nasal, their nasalization is supposed to be preserved in both parts of the split form as well.

(30) and one with a form without reduplication (29). These examples have different translations. In (29) and (30), numerals kùà yákâ ‘thirty’ and sáàplê ‘seven’ are used for the purpose of illustration.
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(29)  

a.  wo  kùâ  kini  
   3PL.SUBJ.TAM  ten  exactly  
   yàkà[ké wàâ mòëbháálå láà à bhà] 
   three

b.  wo  kùâ  yà  kini  kà  [...]  
   3PL.SUBJ.TAM  ten  t[three]  exactly  [t]three

c.  *wo  kùâ  yà  kini  yàkâ  [...]  
   3PL.SUBJ.TAM  ten  t[three]  exactly  three
   ‘They are exactly thirty [but they cannot do this job]’ or, in other 
words, ‘They are really thirty [but they cannot do this job]’ or 
else ‘Although they are thirty [they cannot do this job]’ (GM)

Examples (29d, e, f, g) are the same as (29a, b, c), except that the numeral 
sààpììlë ‘seven’ is used instead of kùà yàkà ‘thirty’. The sign (*') means that 
GM was not as categorical in rejecting a given example as when the sign (*) is 
used.

(29)  

d.  wo  sàà  kini  pììlë  [ké wàâ mòëbháálå láà à bhà]  
e.  wo  sààpìì  kini  lë  [...]  
f.  ??’wo  sàà  kini  sààpììlë  [...]  
g.  ??’wo  sààpìì  kini  pììlë  [...]  
   ‘They are exactly seven [but they cannot do this job]’ or, in other 
words, ‘They are really seven [but they cannot do this job]’ or 
else ‘Although they are seven [they cannot do this job]’ (GM)

Examples (30a–g) correspond to (29a–g), except that reduplicated forms are 
preferred in the former contrary to the latter.

(30)  

a.  wo  kùâ  yà  kini  
   3PL.SUBJ.TAM  ten  t[three]  exactly  
   yàkà[ké wo mà’bháálå láà à bhà] 
   three

b.  ??’wo  kùâ  kini  yàkà  [...]  
   3PL.SUBJ.TAM  ten  exactly  three

c.  ??’wo  kùâ  yà  kini  kà  [...]  
   3PL.SUBJ.TAM  ten  t[three]  exactly  [t]three
   ‘They are exactly thirty [but they managed to do this (big) job]’ 
or, in other words, ‘They are only thirty [but they managed to 
do this job]’ or else ‘Although they are thirty [they managed to 
do this job]’ (GM)14

14. Note that there is another theoretically possible form with reduplication: kùà kini kùà yàkà.
d. \( \text{wo sàà kini sààpììlˆ [ké wo mɔɔ' bháálá làà à bhà]} \)
e. \( \text{wo sààpìì kini pììlˆ [...]} \)
f. \( ?'\text{wo sàà kini pììlˆ [...]} \)
g. \( ?'\text{wo sààpìì kini ḷ[...]} \)

"They are exactly seven [but they managed to do this (big) job]

or, in other words, 'They are only seven [but they managed to
do this job]' or else 'Although they are seven [they managed to
do this job]' (GM)

As can be observed, the forms without reduplication are translated with 'really'
and the forms with reduplication are translated with 'only'. The latter transla-
tion might help us to understand what GM’s description "un nombre complet"
means. I suppose that ‘complete number’ simply means that you cannot add
anything more to this number in the situation at issue, in other words, that it
is only that number that is true and not any higher number, not anything more
than this number.

The difference in meaning between the initial parts of (29) and (30) can be
explained easily if one assumes that (29) and (30) have two different presuppo-
sitions. Whereas the presupposition of (29) is that the number of participants
is or is not 30, the presupposition of (30) is that the number of participants
is more than 30. Note also that in the latter case the presupposition imposes
a broader restriction on possible values of the number of participants. On the
output level, fully in conformity with the semantics of restrictors, these presup-
positions correspond to the following statements. The number is 30 \text{ and not }
the number is not 30 in the case of (29), and the number is 30 \text{ and not }
the number is more than 30 in the case of (30). Note that these two statements
have the same value and the only difference between them is in their logically
superfluous specifying part in brackets determined by their presuppositions.

As is easy to see, in cases when \text{kini} and \text{lefu} ‘even’ (see Section 5.4) are
used with numerals, typically numeral relations, as ‘\(x \text{ is more than } a’\) (‘\(x > a’\)) and ‘\(x \text{ is less than } a’\) (‘\(x < a’\)), are more prominent than the more general
relations ‘\(x \text{ is } a’\) and ‘\(x \text{ is not } a’\). Note furthermore that when there is only a
minimal context available and both interpretations (that is, either ‘\(x \text{ is } a’\) and ‘\(x
\text{ is not } a’\) or ‘\(x > a’\) and ‘\(x < a’\)) turn out to be theoretically possible for a given
[numeral + \text{kini}] or [numeral + \text{lefu}] combination, the preference regularly
goes to the interpretation specific to numerals, namely to the relation ‘be more
than’ or ‘be less than’. Thus, when an example like (31) is presented to

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15. Note that it is not only in this particular example that the form \text{sààpìì kini pììlˆ} is preferred
to the form \text{sàà kini sààpììlˆ}, even though both forms are characterized as good by the infor-
mants. See below for a possible explanation.
the informants out of any context, they regularly translate kini by *seulement* ‘only’.

(31) wo pìì kini pììlê
3PL.SUBJ.TAM [two] exactly two
‘They are only two.’

Table 1 allows for a generalization in terms of a positive correlation between presence of reduplication in a given [numeral + kini] combination and acceptability of such a combination. Another interesting point about the reduplicated forms in Table 1 is that with the exception of the numerals dô ‘one’ and buu ‘ten’ we are dealing with simultaneously occurring partial and distant reduplication. In a cross-linguistic or at least cross-African perspective, such a simultaneous usage of partial and distant reduplications is rare. Thus, Rozhansky (2000) in his overview of reduplication in the languages of West Africa does not mention even the possibility of such a combination of reduplication mechanisms. As far as I know, such a combination is not found in any other Mande language either. Note also that in Tura this combination of partial and distant reduplications is attested only for numerals.

Moreover, the reduplication in the case at issue has a right-to-left direction, that is the reduplicant is preposed to its base, as in pìì kini pììlê ‘only two’ where pìì is the reduplicant and pììlê is the base. This right-to-left direction of reduplication is exceptional for Tura as may be illustrated by some more typical reduplicated forms. Consider, for instance, a reduplicated form kpáâlákpâà ‘very big’ derived from kpáâ ‘big’ by means of distant reduplication, low tones on both vowels of the reduplicant and a connective element -là/-tà- (going back to a postposition tà ‘above’). Another typical example is kpákpâa ‘big (plural)’ derived from the same word kpáâ ‘big’ by means of reduplication, subsequent truncation of the second vowel of the base and lowering of the tones on the reduplicant.

The use of reduplication for meanings ‘only’ and ‘really, exactly’ can be regarded as an instance of iconicity, in the same sense as the use of reduplication with adjectives to express intensity of the degree of a quality is generally believed to be iconic. Furthermore, reduplication is in a certain sense much more “natural” than splitting. As a result, there are much less syntactic constraints on the use of [numeral + kini] combinations involving split-insertion and reduplication as compared to the [numeral + restrictor] combinations where only split-insertion is involved. For more details on these syntactic constraints, see Section 5.6.

Now let us consider the combination of the numeral dô ‘one’ and the restrictor kini ‘exactly; only’ involving reduplication. Two forms differing in their last tone are given for this combination in Table 1, dô kini dô with a mid-high tone on the second ‘one’ and dô kini dô with a low tone on the second ‘one’.
I would like to thank Thomas Bearth for drawing my attention to the existence of this final low tone form dô kini dô and also to the fact that it is this form that is used in all contexts except before a high-tone clitic (‘). The two variants are illustrated in (32) and (33).

(32) ò dô kini dô ké nû,yêà
    3SG one exactly one\l PM come-TAM
    ‘He has come absolutely alone/Only one has come.’

(33) ò dô kini dô’ nû
    3SG one exactly one-PM come\TAM-TAM
    ‘He came absolutely alone/Only one came.’

The lowering of the tone of the second element is a widespread pattern in Tura reduplication. Recall, in this respect, the reduplicated forms kpââlâkpââ ‘very big’ or kpâkpâa ‘big (plural)’, both derived from kpâa ‘big’ by means of lowering of the tones on the reduplicant among other things. It is noteworthy that such lowering takes place in only one of the [numeral + kini] combinations involving reduplication. The reasons for such an exceptional behaviour of dô kini dô ‘only one’ may lie in the fact that this combination happened to become more strongly lexicalized than, for instance, buu kini buu ‘only ten’, no doubt due to a higher discourse frequency of the collocation ‘only one’ as compared to all the other [numeral + kini] combinations. One should not therefore be surprised to see the reduplicated form of ‘only one’ being represented by Bearth (1971: 188) as a compound written in one word, dôkinidô. After all, the tonal assimilation in a lexicalized phrasal construction such as the reduplicated form of ‘only one’ parallel to typical lexicalized reduplicated constructions like kpââlâkpâa ‘very big’ seems to represent a natural development.

Thanks to the lowering at issue we can establish the direction of reduplication in dô kini dô/dô ‘only one’ and by analogy also in buu kini buu ‘only ten’. Reduplication has a left-to-right direction here. Even though this is fully in accordance with what we can generally observe in Tura reduplications, this left-to-right direction of reduplication in ‘only one’ (and most likely also ‘only ten’) is inconsistent with the right-to-left direction of reduplication found in combinations of kini with other numerals.

Table 1 allows us to make some observations on the possible positions of split-insertion (and about what element exactly is reduplicated) in the [numeral + kini] combinations where the numeral has three or more syllables. Combinations where the numeral has two syllables only do not need to be specially considered, since there is only one possible split-insertion position in such a numeral, namely between the two syllables.

First, in numerals starting from 20 kini is not inserted between the ten’s and the unit’s place or the hundred’s and the ten’s place. That is, there are no forms
like *kùà yàkà kini wéé pììlè ‘only 32’ from [kùà yàkà wéé pììlè ‘32’ + kini ‘only; exactly’]. At the same time, kini is regularly inserted in the multiplier of a numeral designating round tens (20, 30, and so on up to 90) or round hundreds (200, 300, and so on up to 900), as in kùà yà kini yàkà ‘only 30’ from [kùà yàkà ‘30’ + kini ‘only; exactly’] which is strongly preferred to the variant kùà kini yàkà (accepted only by GM) or *kùà kini kùà yàkà (rejected by both informants; see below for a possible explanation of why the latter form is impossible). There is only one exception here, kàîn kini kàîn-dìnì ‘only 100’ from [kàîn-dìnì ‘100’ + kini ‘only; exactly’], which I will discuss a bit later.

In the case of numerals starting from 20 that do not designate round tens or hundreds, as kùà yàkà wéé pììlè ‘32’, the restrictor is preferably inserted not in the multiplier of tens (or hundreds), which in the case of ‘32’ is yàkà ‘3’, but in the unit, that is in the rightmost element, which in the case of ‘32’ is pììlè ‘2’. As a result, one normally finds a form like kùà yàkà wéé pìì kini pììlè ‘only 32’ instead of kùà yà kini yàkà wéé pììlè ‘only 32’.

Another observation to be made in connection with numerals starting from 20 and reduplication is as follows. The elements kùà ‘ten’ and kàîn ‘hundred’ are not reduplicated when split-insertion takes place, contrary to the element sàà ‘five plus’ which in this case is regularly reduplicated. In other words, whereas there are no forms like *kùà kini kùà yàkà ‘only 30’ or *kàîn kini kàîn pììlè ‘only 200’, one finds forms like sàà kini sààdô ‘only 6’ or sàà kini sààpììlè ‘only 7’. The only exception is the form kàîn kini kàîn-dìnì ‘only 100’ from [kàîn-dìnì ‘100’ + kini ‘only; exactly’]. Interestingly, the element dìnì in kàîn-dìnì ‘100’ is exceptional in other aspects as well. For instance, it can never be split. That is, there are no forms like *kàîn dìn kini dìnì or *kàîn dìn kini ni meaning ‘only 100’. These “irregularities” of dìnì can be explained by the fact that dìnì is not a real numeral but a so called “specified noun”. The latter is a noun which is used in combination with another, ”specifying” noun to form a syntagmatic unit, the so-called “syntagme spécificatif” (Beart 1971: 119–122), marked by a grammatical low tone on the specified noun, as in lò`N-yìlì ‘hevea, rubber tree’ from lò`N ‘caoutchouc’ and yìlì ‘tree’. As to dìnì, besides in kàîn-dìnì ‘100’ it is also used in the sense of ‘the other (of two)’ in such phrases as kpú´N-dìnì ‘the other (opposite) bank (of river)’. It should be mentioned that, contrary to such words as yìlì ‘tree’ in lò`N-yìlì ‘rubber tree’, dìnì is used as a specified noun only, in all probability due to its semantics.

The aforementioned discrepancy with respect to reduplication between kùà ‘ten’ and kàîn ‘hundred’, on the one hand, and sàà ‘five plus’, on the other, can be explained as follows. First, note that the operations involved in the two cases at issue are different. The element right-adjointed to kùà ‘ten’ and kàîn ‘hundred’ quantifies the head. That is, it can be regarded as an element of another level, whereas in the case of a simple numeral right-adjointed to sàà ‘five
Tura numerals and restrictors

55

plus' there is no effect of quantification of the first term by the second. In other words, both terms can be regarded as elements of the same level. Furthermore, the \([kûâ + \text{Num}]\) and the \([kàîn + \text{Num}]\) combinations differ from the \([sâà- + \text{Num}]\) combinations in that they have a phrasal status, whereas the latter combinations are compounds (cf. Section 2).

All the previous observations on possible positions for split-insertion in the \([\text{numeral} + kini]\) combinations where a numeral has three or more syllables can be reduced to one general principle which can be formulated as follows. It is normally the rightmost element of such a numeral that undergoes split-insertion and, accordingly, it is the first syllable of this rightmost element that is reduplicated. For instance, if one wants to modify a numeral like \(kûâ \ yàkâ \ wéé \ pììlê \ '32'\) by means of \(kini \ 'only'\; exactly' using split-insertion and reduction, one should apply these operations to the rightmost element of the numeral \(32', i.e. to \(pììlê \ '2'\), what will result in a form \(kûâ \ yàkâ \ wéé \ pìì \ kini \ pììlê \ 'only \ 32'\).

I found only two exceptions to this general principle. The first one is the form \(kàîn \ kini \ kàîn-\dìnì \ 'only \ 100'\) instead of the expected forms like \(*kàîn \ dìn \ kini \ \dìnî\). This exception has already been explained. The second exception can be seen in the fact that the informants prefer the form \(sâà \ kini \ sâàpììlê \ 'only \ 7'\) to the form \(sâàpìì \ kini \ pììlê \ 'only \ 7'\), which would otherwise be expected in accordance with the general principle established above. Note that at the same time they consider both forms to be good. The preference for the form \(sâà \ kini \ sâàpììlê\) can in all probability be explained by paradigmatic factors. All other 'five plus' based numerals have only two syllables: \(sâàdô \ '6', \ sâàkâ \ '8', \ and \ sôsô \ '9'\). Therefore, when they are modified by \(kini\), it is naturally always the first element \(sâà-\)/\(sô-\) 'five plus' that is reduplicated and detached so that after \(kini\) is inserted we still find a whole numeral left intact at the right side of \(kini\). That is, we find forms such as \(sâà \ kini \ sâàdô \ 'only \ 6', \ sâà \ kini \ sâàkâ \ 'only \ 8', \ and \ sôi \ kini \ sôsô \ 'only \ 9'\). Hence, it can be argued that the shift in preference from \(sâàpìì \ kini \ pììlê\) to \(sàà \ kini \ sâàpììlê\) has been caused by analogy to the distantly partially reduplicated forms of the rest of the 'five plus' based numerals.

5.3. Numerals and \(sôsô\) 'always'

There are only two types of forms in Table 2: the ones involving split-insertion, as in \(pìì \ sôsô \ lê \ 'always \ two'\), and the ones without split-insertion, as in \(dô \ sôsô \ 'always \ one'\).

I have encountered only one restriction on split of disyllabic numerals by \(sôsô \ 'always'\). For the numeral \(sôlê \ '5'\), the split form \(sô \ sôsô \ lô \ 'always \ 5'\) was considered acceptable, but not good by one informant (GTR) and completely
Table 2. Numerals and sêsê (sósó, susú) ‘always’

<table>
<thead>
<tr>
<th>Numeral</th>
<th>[Numeral + sêsê] forms</th>
<th>(un)acceptable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 dô</td>
<td>dô sêsê</td>
<td></td>
</tr>
<tr>
<td>2 pîlê</td>
<td>pù sêsê lê</td>
<td></td>
</tr>
<tr>
<td>3 yàkâ</td>
<td>yà sêsê kâ</td>
<td></td>
</tr>
<tr>
<td>4 yîsê</td>
<td>yî sêsê sê</td>
<td></td>
</tr>
<tr>
<td>5 sêlé (sóólú)</td>
<td>sêlé sêsê (sóó sêsê lû)</td>
<td>sê sêsê lô (GB)</td>
</tr>
<tr>
<td>6 sààdô</td>
<td>sàà sêsê dô</td>
<td></td>
</tr>
<tr>
<td>7 sààpîlê</td>
<td>sààpù sêsê lê</td>
<td>sàà sêsê pîlê</td>
</tr>
<tr>
<td>8 sààkà</td>
<td>sàà sêsê kâ</td>
<td></td>
</tr>
<tr>
<td>9 sûsê</td>
<td>sû sêsê sê</td>
<td></td>
</tr>
<tr>
<td>10 buu</td>
<td>buu sêsê</td>
<td></td>
</tr>
<tr>
<td>30 kûà yàkâ</td>
<td>kûà yà sêsê kâ</td>
<td>kûà sêsê yàkâ</td>
</tr>
<tr>
<td>32 kûà yàkâ</td>
<td>kûà yàkâ wéé pù sêsê lê</td>
<td>kûà yà sêsê kà wéé pîlê</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*kûà yàkâ sêsê wéé pîlê</td>
</tr>
<tr>
<td>100 kàîn-dìnì</td>
<td>kàîn-dìnì sêsê</td>
<td>*kàîn sêsê dìnì</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*kàîn dìn sêsê nî</td>
</tr>
<tr>
<td>200 kàîn pîlê</td>
<td>kàîn pù sêsê lê</td>
<td>kàîn sêsê pîlê</td>
</tr>
</tbody>
</table>

rejected by the other (gm). Apparently, the reason for this restriction is simple dissonance (or a certain difficulty of pronunciation) of such a sequence of identical syllables. This assumption is supported by the fact that split-insertion by means of sêsê ‘always’ is acceptable for the form sóólû ‘5’.

As to the possible positions for split-insertion in the [numeral + sêsê ‘always’] combinations where a numeral has three or more syllables, the same principle is applicable here as was established for [numeral + kîni ‘exactly’] combinations in 5.2. It is first of all the rightmost element of such a numeral that undergoes split-insertion. There is only one exception here and it is again the numeral kàîn-dìnì ‘100’. There is no way for this numeral to be split by sêsê ‘always’. In addition, just as in the case of kîni ‘exactly’, in numerals starting from 20 sêsê is not inserted between the ten’s and the unit’s place or the hundred’s and the ten’s place. That is, there are no forms like *kûà yàkâ sêsê wéé pîlê ‘always 32’.

Note that for the numeral sààpîlê ‘7’ there is only one good split form in combination with sêsê ‘always’: sààpù sêsê lê ‘always 7’. This is obviously in contrast to the preference for the form sàà kîni sààpîlê ‘only 7’ instead of sààpù kîni pîlê discussed in 5.2. This discrepancy can be explained as follows.
Contrary to **kini** ‘exactly’ when sésô ‘always’ is inserted in the numerals 6, 7, 8 and 9, even though it is still always the first element sáà/sô– ‘five plus’ that is detached, we do not find a whole numeral left intact at the right side of sésô anymore, for there is no reduplication involved. That is, we find forms like sáà sésô dô ‘always 6’, sáà sésô kâ ‘always 8’ and sáà sésô sê ‘only 9’. Obviously, it is the form sáàpìì sésô lê ‘always 7’ that fits this series best, and not sáà pììlê ‘always 7’.

The alternative forms from the “acceptable” column, as sáà sésô pììlê ‘always 7’ and kûà sésô yàkà ‘always 30’, are possible only when the numeral modified by sésô ‘always’ is in the position of a predicate (also a transposed one). But this is not connected to any difference in meaning, as illustrated in (34) and (35), contrary to the comparable [numeral + **kini** ‘exactly; only’] combinations as in (29) vs. (30). The “good” variant (as given in Table 2) is just more preferable.

(34) \[
\text{[aŋ kê-á sí à tà, aŋ kê-á daa à tà,]}
\]
\[\text{wo kûà yà sésô kâ}
\]
3PL.SUBJ.TAM ten [three] always [three]
‘[Their number does not diminish and does not increase,] they are always 30.’ (GM)

(35) \[
\text{[aŋ kê-á sí à tà, aŋ kê-á daa à tà,] wo kûà sésô yàkà}
\]
‘[Their number does not diminish and does not increase,] they are always 30.’ (GM)

This can be explained by the fact that when sésô ‘always’ is used only one presupposition is possible: \[[x \text{ is } a] \text{ and sometimes/somewhere } [x \text{ is not } a]\]. On the output level, this corresponds to the statement \[[x \text{ is } a] \text{ and not } [\text{sometimes/somewhere } [x \text{ is not } a]]\] or, reformulated, \[[x \text{ is } a] \text{ and never/nowhere } [x \text{ is not } a]\].

No special semantic difference seems to exist between the use of sésô ‘always’ with numerals and the use of sésô ‘always’ with any other term, as illustrated in (34–37).

(36) \[
\text{... ke è à sèsè sésô’ pê}
\]
and 3SG.SUBJ.TAM 3SG good-good always-F1 say\text{TAM}
le [kê àâ à le kû, à le àâ sêà]
TM
‘... and if it is always good things that he says [, but (at the same time) he does not do this, it is not good].’ (Bearth 1971: 190)
5.4. Numerals and *leftu* 'even (as an adverb)'

In Table 3 we find the same two types of forms as in Table 2: those involving split-insertion, as in *pìì leftu lè* 'even two', and those without split-insertion, as in *buu leftu* 'even ten'. The only difference between the two tables is that in the case of *leftu* 'even' no restriction on split of *sëlë* '5' is found, as is illustrated by a "good" form *së leftu lè* 'even 5'.

The usage of *leftu* 'even' with numerals is exemplified in (38) and (39), the latter is a reproduction of (1); cf. also (40) and (41), a reproduction of (19), as well as examples (20, 21) above.

<table>
<thead>
<tr>
<th>Numeral</th>
<th>[Numeral + leftu] forms</th>
<th>good</th>
<th>(un)acceptable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 dô</td>
<td>dô leftu</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 pììlë</td>
<td>pìì leftu lè</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 yàkâ</td>
<td>yà leftu kà</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 yisê</td>
<td>yi leftu sê</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 sëlë (sóó)</td>
<td>së leftu lè (sóó leftu lú)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 sààdô</td>
<td>sàà leftu dô</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 sààpììlë</td>
<td>sààpìì leftu lè</td>
<td></td>
<td>sà leftu pììlë</td>
</tr>
<tr>
<td>8 sààkâ</td>
<td>sàà leftu kà</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 sësê</td>
<td>sü leftu sê</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 buu</td>
<td>buu leftu</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30 kùù yàkâ</td>
<td>kùù yà leftu kâ</td>
<td>kùù leftu yàkâ</td>
<td></td>
</tr>
<tr>
<td>32 kùù yàkâ</td>
<td>kùù yàkâ wëë pì leftu lè</td>
<td>kùù yà leftu kà wëë pìëlë</td>
<td>kùù leftu yàkâ wëë pìëlë</td>
</tr>
<tr>
<td>100 kàîn-dìnì</td>
<td>kàîn-díni leftu</td>
<td>*kàîn leftu díni,</td>
<td>*kàîn dí leftu ní</td>
</tr>
<tr>
<td>200 kàîn pìëlë</td>
<td>kàîn pì leftu lè</td>
<td></td>
<td>kàîn leftu pìëlë</td>
</tr>
</tbody>
</table>
(38) [A: This man, is he alone there? B:] ááwà, wo pìì left ìì 'No, there are actually two persons.' (lit. ‘No, they are even two.’)

(39) [A: There are two persons in the room, I think. B:] wàâ 3pl.subj.neg.tam t[wo] even t[wo] ‘They are not even two/they are not two at all (but just one).’

In kûà yà left ká ‘even 30’ vs. kûà left yaká ‘even 30’, left ‘even’ behaves in the same way as sêsê ‘always’ and for the same reason. When left ‘even’ is used, only one presupposition is possible. The form of the presupposition and of the statement corresponding to it depend on whether the clause containing a [numeral + left ‘even’] combination is negative or affirmative and whether left ‘even’ modifies a numeral or any other term.

When left ‘even’ modifies a numeral, the presupposition is [x is less than a] in the case of a statement containing affirmation, as in (38), or [x is a] in the case of a statement containing negation, as in (39). In other words, the presupposition of (38) is that the number of persons in the room is less than 2, and the presupposition of (39) is that their number equals 2. On the output level, the former corresponds to the statement [[x is a] and not [x is less than a]] and the latter to the statement [[x is less than a] and not [x is a]]. That is, (38) says that the number of persons equals 2 and that, contrary to what is presupposed, it is not less than 2, and (39) says that the number of persons is less than 2 and consequently, contrary to what is presupposed, it does not equal 2. Note that the statement [[x is less than a] and not [x is a]] of the negative example (39) is just a negated variant of the statement [[x is a] and not [x is less than a]] and the latter to the statement [[x is less than a] and not [x is a]]. That is, if we take [not [x is a] and not [x is less than a]] and open the brackets, the result we get is [[x is less than a] and not [x is a]].

When left ‘even’ modifies a term other than a numeral the presupposition is [[[x is b] or [x is not b]] and [x is c] or [x is not c]], etc., and [x is not a]] in the case of a statement containing affirmation, as in (40), or [[[x is b] or [x is not b]] and [x is c] or [x is not c]], etc., and [x is a]] in the case of a statement containing negation, as in (41). Here, x represents the element modified by left ‘even’, b, c, etc. stand for all but one possible values that x is supposed to be able to take and a represents the value which is in fact ascribed to x. In other words, the presupposition of (40) is that there is a group of persons (including him) which can presumably take part in the action of coming, and that it is not known whether each and every person of this group came or not, but it is presupposed that he surely did not come. Correspondingly, the presupposition of (41) is that there is a group of tasks that the person at issue
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is presumably able to carry out and work is among these tasks, and that it is not known whether the person can carry out every and each of these tasks, but it is presupposed that he surely can work.

(40) à leftu.né’ nù’
   3SG even-DIM-PM come\TAM-TAM
   ‘Even he came’ (Bearth 1987–1988)

(41) àà mòó bhâálâ lefu kër.a
   3SG.SUBJ.NEG.TAM can\TAM work even do-with
   ‘He cannot even work.’ (Bearth 1971: 191)

On the output level, the former presupposition corresponds to a statement \[[x is b] and [x is c], etc., and not [x is not a]], that is \[[x is b] and [x is c], etc., and [x is a]], and the latter to the statement \[[x is not b] and [x is not c], etc., and not [x is a]], that is \[[x is not b] and [x is not c], etc., and [x is not a]]. That is, (40) says that all persons of the group at issue came and, contrary to what is presupposed, he came as well. (41) says that none of the tasks at issue can be carried out by the person in question and, contrary to what is presupposed, work cannot be carried out either.

5.5. Numerals and leftsél ‘first (as an adverb); for a start’

In Table 4 we find the same two types of forms as in Tables 2 and 3: the ones involving split-insertion, as in pìì leftsél ‘two, for a start’, and the ones without split-insertion, as in buu leftsél ‘ten, for a start’. However, split-insertion is hardly ever used in [numeral + leftsél ‘first’] combinations: split-insertion is considered more or less acceptable by both informants only for the numerals pììl ‘2’ and yàkà ‘3’.

I believe that such “deficiency” in split-inserted forms in the case of leftsél ‘first’ as compared to other restrictors indicates that this word is only a recent innovation and that it is not well established in all restrictor functions yet. This assumption is supported by the existence of the source-form, the adverb/adjective fãsél ‘first; before, in the past’. Interestingly, the latter is sometimes even (quasi)synonymous to the restrictor leftsél ‘first’, as was illustrated in (22, 24, 25). Note that for other restrictors either such source-form is not present in the language, as in the case of súm ‘always’, or the meanings of the source-form and of the corresponding restrictor have already diverged to a considerable extent, as in the case of kini ‘exactly’ as a restrictor vs. kini ‘encircle; surround’ as a verb or leftsél ‘even’ as a restrictor vs. fù ‘empty’ as an adjective (cf. Section 4.4). The assumption that leftsél ‘first’ is a recent innovation is further supported by the fact that the possibility of split-insertion in [numeral + leftsél] combinations is subject to the largest number of syntactic
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Table 4. Numerals and \textit{lefɔšlé} ‘first (as an adverb); for a start’

<table>
<thead>
<tr>
<th>Numeral</th>
<th>[Numeral + \textit{lefɔšlé}] forms</th>
<th>good</th>
<th>(un)acceptable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 dô</td>
<td>dô \textit{lefɔšlé}</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 pùlɛ</td>
<td>pùlɛ \textit{lefɔšlé}</td>
<td>pù \textit{lefɔšlé} lɛ</td>
<td></td>
</tr>
<tr>
<td>3 yàkà</td>
<td>yàkà \textit{lefɔšlé}</td>
<td>yà \textit{lefɔšlé} kà</td>
<td></td>
</tr>
<tr>
<td>4 yisɛ</td>
<td>yisɛ \textit{lefɔšlé}</td>
<td>yì \textit{lefɔšlé} sɛ (GB)</td>
<td></td>
</tr>
<tr>
<td>5 sùlɛ (sóólù)</td>
<td>sùlɛ (sóólù) \textit{lefɔšlé}</td>
<td>sè \textit{lefɔšlé} lò</td>
<td></td>
</tr>
<tr>
<td>6 sààdô</td>
<td>sààdô \textit{lefɔšlé}</td>
<td></td>
<td>(sóó \textit{lefɔšlé} lú) (GB)</td>
</tr>
<tr>
<td>7 sààpùlɛ</td>
<td>sààpùlɛ \textit{lefɔšlé}</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 sààkà</td>
<td>sààkà \textit{lefɔšlé}</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 sààsɛ</td>
<td>sààsɛ \textit{lefɔšlé}</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 buu</td>
<td>buu \textit{lefɔšlé}</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30 kùà yàkà</td>
<td>kùà yàkà \textit{lefɔšlé}</td>
<td></td>
<td></td>
</tr>
<tr>
<td>32 kùà yàkà wéé pùlɛ</td>
<td>kùà yàkà wéé pùlɛ \textit{lefɔšlé}</td>
<td></td>
<td></td>
</tr>
<tr>
<td>100 kààn-dìnì</td>
<td>kààn-dìnì \textit{lefɔšlé}</td>
<td></td>
<td></td>
</tr>
<tr>
<td>200 kààn pùlɛ</td>
<td>kààn pùlɛ \textit{lefɔšlé}</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

constraints as compared to the combinations of numerals with other restrictors; for more details, see Section 5.6. Finally, one can consider the discrepancy between the two informants as for the number of numerals for which they accept split-insertion by means of \textit{lefɔšlé} ‘first; for a start’ as evidence of a gradual expansion of the domain of applicability of \textit{lefɔšlé}’s ability to split up the numerals: from the lowest, apparently the most basic and presumably the most frequent numerals to the higher, apparently less basic and presumably less frequent numerals.

Let us now discuss the semantics of \textit{lefɔšlé}. The restrictor \textit{lefɔšlé} can express two different meanings: ‘first (as an adverb)’ as in (42), reproduced here as (42), or as in (44a) and ‘for a start, for one thing, first’ as in (22), reproduced here as (43), or as in (44b).

\begin{center}
\begin{tabular}{|c|c|c|}
\hline
   & \textit{lefɔšlé} & \textit{nù} \\
\hline
2\textsubscript{SG} friend first-PM come & \begin{tabular}{l}
\begin{tabular}{l}
Let your friend come first.
\end{tabular}
\end{tabular} \\
\hline
\end{tabular}
\end{center}

\begin{center}
\begin{tabular}{|c|c|c|}
\hline
   & \textit{lefɔšlé} & \textit{wò le} \\
\hline
3\textsubscript{PL SUBJ.TAM} two first-F1 TR TM & \begin{tabular}{l}
\begin{tabular}{l}
First (= for a start), they are two (and this is my first possible counter-argument).
\end{tabular}
\end{tabular} \\
\hline
\end{tabular}
\end{center}
This semantic difference seems to result from a difference in presuppositions. Thus, in (42) and (44a) it is presupposed that the variable $x$ can take several values, $a$, $b$, $c$, etc., and that these values should form an ordered set, but the exact order is not presupposed. On the output level, this corresponds to the statement [[$a$ is the first value of $x$] and not [$b$ is the first value of $x$] and not [$c$ is the first value of $x$], etc.]. In the presuppositions of (43) and (44b) several variables are set and certain values are ascribed to every variable, that is [$x$ is $a$], [$y$ is $b$], [$z$ is $c$], etc. Then, one of the variables, for instance $x$, is chosen and the interlocutor is reminded that [[$x$ is $a$] and not [$x$ is not $a$]] and therefore the interlocutor’s conclusion cannot be true and this is the first possible counter-argument the speaker can suggest. Thus, a possible context for (43) could be the following situation. A prepared some food and let it stay in the kitchen. When s/he is back there and sees that all the food has been eaten up, s/he comes to a conclusion: “I think I know who did this. It is for sure those two men who came to repair the kitchen”. But $B$ says to $A$: “Well, for a start, they are two [and two persons just can not eat that much at a time] (and this is my first possible counter-argument)”.

5.6. Syntactic constraints on split-insertion(-reduplication) in [numeral + restrictor] combinations

Split-insertion(-reduplication) in [numeral + restrictor] combinations appears to be possible only in certain syntactic positions. These syntactic constraints are different for each restrictor and are summarized in Table 5 below. Four syntactic positions of the phrases including a [numeral + restrictor] combination are distinguished: transposed predicate (cf. Examples 22; 26a, b; see Note 8 for an explanation of the term “transposed”), predicate (cf. Examples 1, 38), subject (cf. Examples 32, 33), and direct or indirect object (DO/IO; cf. Examples 20, 37). The plus sign means that the form involving split-insertion(-reduplication) is considered to be good. The minus sign means that it is considered unacceptable. I use two rows for kini ‘exactly’: the first one for variants with reduplication of the numeral root, as in pìì kini pììlë ‘only two’, and the second one
Table 5. Syntactic constraints on split-insertion(-reduplication) in [numeral + restrictor] combinations

<table>
<thead>
<tr>
<th>Restrictor</th>
<th>Split-insertion</th>
<th>Reduplication</th>
<th>DO/IO</th>
<th>Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>kini</em> ‘exactly’ with reduplication</td>
<td>++</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td><em>kini</em> ‘exactly’ without reduplication</td>
<td>++</td>
<td>−</td>
<td>−</td>
<td>−</td>
</tr>
<tr>
<td><em>lef</em> ‘even’</td>
<td>+</td>
<td>+</td>
<td>−</td>
<td>−</td>
</tr>
<tr>
<td><em>šsš</em> ‘always’</td>
<td>+</td>
<td>+</td>
<td>−</td>
<td>−</td>
</tr>
<tr>
<td><em>lefššle</em> ‘first’</td>
<td>+</td>
<td>???</td>
<td>−</td>
<td>−</td>
</tr>
</tbody>
</table>

for variants without reduplication of the numeral root (i.e., with split-insertion only), as in *piš kini le* ‘only two’. Two question marks (??) indicate that my informants consider split-insertion to be on the limit of acceptability.

Note that the “acceptable” forms from Tables 1–4 are possible only when a [numeral + restrictor] combination is used in the position of a predicate or a transposed predicate.

Interestingly, for *kini* ‘exactly’ the forms involving both split-insertion and reduplication are marked with plus signs in all four columns, whereas the forms involving only split-insertion are good in the first two columns only. What is more, with the four restrictors split-insertion appears to be generally restricted to the first two columns. This distribution corresponds very well to the observation (cf. Section 5.2) that reduplication is in a certain sense much more “natural” than splitting. The fact that the transposed predicate position is the only position where split-insertion is considered to be good with all the four restrictors does not seem to be fortuitous either. One of the most common uses of the predicate-transposing construction is for the purposes of predicate focus (cf. Examples 22, 26a, b). Thus, the correlation between the transposed predicate position and split-insertion can be regarded as an additional illustration of the existence of close relations between restrictors and focalization in Tura (cf. also 4.2–4.4). See 6.1 for further discussion on why split-insertion is primarily restricted to the (transposed) predicate position.

6. Explaining the exceptional morphology of Tura numerals

In the present section I will try to propose an explanation for the unusual morphosyntactic properties of Tura numerals and restrictors. First, the development of the split-insertion pattern not involving reduplication will be discussed. Then, the same will be done for the split-insertion pattern accompanied by partial reduplication. In each case I will argue for an independent path of devel-
opment. However, the possibility cannot be completely excluded that one of
the two split-insertion patterns at issue has had some stimulating impact on the
development of the other pattern or that a certain degree of interaction between
the split-insertion patterns has taken place in both directions.

6.1. The development of the split-insertion pattern not involving reduplication

The following hypothesis can be proposed for the cases where split-insertion
is not accompanied by reduplication. Split-insertion in [numeral + restrictor]
combinations must have evolved in predicatively used numerals as a result
of reanalysis by analogy with a subtype of the verb-transposing construction,
namely the one involving the verbs ending in [|-LÁ|]. The notation [|-LÁ|] here
stands for -LÁ after ə, as in dʒiŋ ‘stop’ (related to the verb dʒ ‘stand’), for -ná
after a nasal vowel, as in ʒínná ‘put down; come/go down, descend’ (related
to an intransitive verb ʒín ‘touch’), and for -liá elsewhere, as in ʃeelá ‘turn’.
In order to explain what kind of reanalysis I have in mind, I will first demon-
strate what is so special about the verb-transposing construction involving the
verbs ending in [|-LÁ|]. Then, I will show how the latter construction can be
structurally compared to split-insertion in [numeral + restrictor] combinations.
Finally, I will discuss a reanalysis path that can be induced from the structural
parallels observed between the two constructions.

Besides the regular transposition by means of wó (cf. Note 8), which is il-
lustrated in (45) on the example of the verb ʒínná ‘go down’, the Tura verbs
ending in [|-LÁ|] can be transposed in one more way. The element [|-LÁ|] can
itself be used as a transposer instead of the regular transposer wó so that the
first part of the verb starts functioning as complement of [|-LÁ|], as illustrated
in (46) on the example of the same verb ʒínná ‘go down’. The two kinds of
verb-transposing construction are not related to any difference in meaning, ex-
cept in one case. According to Bearth (1971: 174–175), in a certain type of
subordinate clauses the “wó-transposition” of a verb ending in [|-LÁ|] implies
a causal since-reading of the subordinate clause at issue, as illustrated in (47),
whereas the “[|-LÁ|]-transposition” of a verb ending in [|-LÁ|] implies a temporal
when-reading of the same subordinate clause, as illustrated in (48).

(45) oó zínná leftu wó’
3SG.SUBJ.NEG.TAM go.down even TR\TAM-TAM
‘He did not even go down.’

(46) oó zín leftu ná’
3SG.SUBJ.NEG.TAM go.down even [g]o.down\(or TR)\TAM-TAM
‘He did not even go down.’
Tura numerals and restrictors

(47) 3sg.subj.tam go.down-f1 tm
‘Since he went down . . . ’ (Bearth 1971: 175)

(48) 3sg.subj.tam go.down(or tr)tm
‘When he went down . . . ’ (Bearth 1971: 175)

I believe that the [-LÁ]-transposition must have evolved as a result of a certain reanalysis by analogy with the ordinary wô-transposition. But I will not go into details about this (see Idiatov 2003 for a discussion).

More important for us about the [-LÁ]-transposition is that from a structural point of view a predicatively used split form of the numeral pììlˆ ‘two’, as in (49), can be regarded as similar to the [-LÁ]-transposition, as found in (46). That is, in (49) lˆ of pììlˆ ‘two’ can be regarded as a kind of transposer and pìì as a transposee almost in the same way as in (46) nâ of zînná ‘go down’ functions as a transposer and zîn as a transposee. However, an important difference from what we observe in numerals is that in (46) the inserted part coincides with a morpheme boundary. Whereas the analogy is that full words or even phrases of a restricted paradigm disrupt an otherwise close-knit word level construction.16

(49) 3pl.subj.neg.tam [two] lê
‘They are not even two/ they are not two at all [but just one].’

Examples (50)–(53) below illustrate in more detail how the parallel between the predicatively used numerals and the verbs ending in [-LÁ] might have evolved. First, note that in an example like (50) wô would normally be analysed as an adverbalizer, but in principle it can also be analysed as a transposer. In the latter case, (50) turns out to be structurally very similar to an example like (51), with a wô-transposed verb in [-LÁ].17 Now, if one recalls that an example

16. Some other minor differences between the two cases at issue can be found. For instance, a predicatively used numeral can be split up only by a restrictor, whereas inside a “[-LÁ]-transposed” verb such as zînná ‘go down’ one can also found a focus clitic (‘), as in (49), an adjective, a plural marker, etc., that is any nominal modifier or morpheme. Furthermore, the “transposer” [-LÁ] can, if needed, be inflected for various TAM categories, as in (46, 48), whereas the “transposer” lê cannot. These discrepancies are in fact not that important. Most of the restrictions in the case of the numerals “transposed” by means of split-insertion can be easily dismissed as being of a purely semantic origin, that just by saying that the restrictions are as they are because we are dealing with numerals and not with verbs. Thus, one can say that some of the adnominal modifiers, such as for instance adjectives, are never inserted in a predicatively used numeral simply because a numeral is not normally modified by an adjective elsewhere in the language either. One can also say that TAM contexts in which lê can be used are simply the same as those in which a numeral can be used predicatively.
like (51) can be reformulated by means of |-LÁ|-transposition in (52) without any difference in meaning, a parallel reformulation of (50b) into (53) becomes easy to conceive and is no more really surprising.

(50) a. \( \text{wàà} \quad \text{piùlê} \quad \text{leftu\.wô} \)  
   \[
   \begin{array}{ll}
   \text{3PL.SBJ.NEG.TAM} & \text{two} \\
   \text{even-ADV} & \end{array}
   \]

b. \( \text{wàà} \quad \text{piùlê} \quad \text{leftu\.wô} \)  
   \[
   \begin{array}{ll}
   \text{3PL.SBJ.NEG.TAM} & \text{two} \\
   \text{even TR\{TAM} & \end{array}
   \]

‘They are not even two/ they are not two at all [but just one].’

(51) \( \text{wàà} \quad \text{žinná} \quad \text{leftu\.wô} \)  
   \[
   \begin{array}{ll}
   \text{3PL.SBJ.NEG.TAM} & \text{go.down} \\
   \text{even TR\{TAM} & \end{array}
   \]

‘They do not even go down.’

(52) \( \text{wàà} \quad \text{žin} \quad \text{leftu\.ná} \)  
   \[
   \begin{array}{ll}
   \text{3PL.SBJ.NEG.TAM} & \text{go.down} \\
   \text{even [g]o.down(or TR)\{TAM} & \end{array}
   \]

‘They do not even go down.’

(53) \( \text{wàà} \quad \text{pù} \quad \text{leftu\.lê} \)  
   \[
   \begin{array}{ll}
   \text{3PL.SBJ.NEG.TAM} & \text{two} \\
   \text{even [t]wo (= TR} & \end{array}
   \]

‘They are not even two/ they are not two at all [but just one].’

The plausibility of the hypothesis that it is the |-LÁ|-transposition that served as a model for the development of the split-insertion not involving reduplication is further supported by the fact this hypothesis can help us to account in a rather straightforward way for some aspects of morphosyntactic and syntactic behaviour of the split-insertion pattern at issue.

First, the analogy with the |LÁ|-transposition helps us to understand why it is preferably the rightmost element of numerals that undergoes split-insertion and, more generally, why the restrictor is preferably inserted before the last syllable of polysyllabic numerals. This is so simply because then the structural analogy to a |LÁ|-transposed verb, as in (52), is the most complete: the restrictor is inserted before the last syllable and the latter functions then as a kind of transposer just as in the case of a |LÁ|-transposed verb.

Second, the analogy with the |LÁ|-transposition helps us to understand why the split-insertion in [numeral + restrictor] combinations is restricted, as was demonstrated in 5.6, to the (transposed) predicate position. This is so, I believe, because the |LÁ|-transposition itself is restricted to the predicate position. The use of the split-insertion pattern at issue in the position of a transposed predicate seems to represent a further independent development. Note, however,

17. Note that wô in (51) cannot be analysed as an adverbalizer even within the limits of this example. Should one do so, one would inevitably have to mark the verb žinná ‘go down’ for the same TAM value as that of wô in (51), what would result in the form žinnâ glossed as ‘go.down\{TAM’ instead of the form žinná used in (51).
that the case of lefšišé ‘first; for a start’ in Table 5 seems to indicate that the transposed predicate position has now become the primary, the most typical position for the split-insertion within the [numeral + restrictor] combinations. In all probability, this has happened due to the rather marked, emphatic nature of the split-inserted [numeral + restrictor] combinations, which appears to fit the strong correlation between transposition and focus very well (cf. Section 5.6).

6.2. The development of the split-insertion pattern accompanied by partial reduplication

In all probability, partially distant reduplicated forms of numerals with a restrictor inserted inside them such as pìì kini pììlˆ ‘only, exactly 2’ developed in a way different from forms like pìì s´ Forget ‘always two’, which do not involve reduplication. Besides the different morphosyntactic properties, this assumption is further supported by the fact that the [numeral + restrictor] combinations involving partial distant reduplication are not restricted to the (transposed) predicate position, contrary to the combinations not accompanied by reduplication (cf. 5.6). In what follows I will discuss a possible scenario of how the forms like pìì kini pììlˆ ‘only, exactly 2’ could have evolved. Admittedly, certain points of this scenario are somewhat speculative as compared to the solid evidence we have for the hypothesis discussed in Section 6.1.

The first step of the hypothesis I am proposing is to assume that a possibility existed in Tura to echo the basic numeral modified by the restrictor kini ‘only; exactly’ after the restrictor in order to show that the speaker strongly insists on the exact value of the numeral even more. In other words, I suppose that it was possible in Tura to say something like (54), where a pause must have been separating kini from the repeated numeral. The latter numeral was then in an appositional relation to the [numeral + restrictor] combination.

(54) (yílí) dô kini, dô!
   tree one exactly one
   ‘Only/exactly one (tree), one!’

Eventually, the construction at issue must have got conventionalized and as a result prosodically unified. Then, the usage domain of this conventionalized construction must have been gradually extended to the higher numerals. In the case of the numerals above 10, apparently only the rightmost digit making part of such a numeral became reduplicated: *buu ni w´ Forget ‘only, exactly 12’, *kůà pììlˆ kini pììlˆ ‘only, exactly 20’, etc. This is in fact not that surprising if one recalls that these numerals are phrases, not words. Particularly, note that structurally a phrase like kůà pììlˆ kini ‘only, exactly 20 = only, exactly 2 tens’ hardly differs from a phrase like yílí pììlˆ kini ‘only, exactly
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2 trees'. Therefore, should a phrase like yîlí pîlê kini pîlê ‘only, exactly 2 trees' ever become possible, then it must be fairly natural, I believe, to expect a phrase like *kûà pîlê kini pîlê ‘only, exactly 20 = only, exactly 2 tens' to become possible as well. As to numerals like buu ni wée pîlê ‘12', first recall that they as a whole represent a coordinative-additive construction (cf. 2), that is buu ni wée pîlê is literally '10 and 2 units'. In such a coordinative-additive construction the last added phrase, such as wée pîlê ‘2 units' in buu ni wée pîlê ‘12', does not actually differ from a phrase like kûà pîlê ‘20 = 2 tens', which has been just discussed. Hence, it is also to be expected that a phrase like *buu ni wée pîlê kini pîlê ‘only, exactly 12 = 10 and only, exactly 2' will develop parallelly to a phrase like *kûà pîlê kini pîlê ‘only, exactly 20 = only, exactly 2 tens'.

Interestingly, the *[Num + kini + Num] construction that must have appeared as a result of the development just described bears a striking structural resemblance to the Tura distributive [N + ö + N] construction, as in mēre ó mēre ‘whoever, anybody’ (where mēre is ‘person’) or kwī kwī ‘whatever house, any house’. In particular, kini in *[Num + kini + Num] can be regarded as a kind of linking element similar to the linking element ó in the distributive [N + ö + N] construction. Note in this respect that the two constructions at issue can even be analysed as having a certain common semantic denominator. Both the operation expressed by a [N + ö + N] construction and the operation expressed by a *[Num + kini + Num] construction can in cognitive terms be described as somehow based on the notion of “scanning” mentioned in 4.4. Thus, one can say that both operations are based on the scanning of all the alternative possibilities and retention of only one of them for assertion. For the operation expressed by a [N + ö + N] construction the scanning is done within one closed set each member of which is supposed to be equal so that the question of where to start the scanning and which member of the set to retain for assertion is represented as a matter of free choice. For the operation expressed by a *[Num + kini + Num] construction the scanning is done within an open set each member of which is different so that one has to start the scanning at a certain precise point and after going through all the alternative possibilities come full swing back to the point of departure, retaining only the latter for assertion.

The subsequent development of the *[Num + kini + Num] construction must have included the truncation of the syllable preceding the restrictor in the case of polysyllabic reduplicated numerals, what resulted in such apparently right-to-left partially reduplicated forms as pî ñù kini pîlê ‘only, exactly 2', *sáapì kini sáapîlê ‘only, exactly 7', buu ni wée pî ñù kini pîlê ‘only, exactly 12', kûà pî ñù kini pîlê ‘only, exactly 20’, etc. I dare suppose that the truncation

18. The distributive construction at issue is very typical for the Mande languages in general.
at issue took place in order to bring the number of syllables in the *[Num + kini + Num] combinations to an odd number by analogy with the distributive construction of the *mér ó mér* ‘whoever, anybody’ type, where the number of syllables is always odd as well. Moreover, the fact that it was the last syllable of the base and not the first syllable of the reduplicant that was truncated can to a certain extent be considered as parallel to the rather typical truncation of the last vowel of the base in reduplicated CVV adjectives. Recall in this connection the reduplicated form *kpâkpâ* ‘big (plural)’ derived from the word *kpâ* ‘big’ by means of reduplication, subsequent truncation of the second vowel of the base and lowering of the tones on the reduplicant (cf. 5.2).19

In the forms *sâyà kini sâyâkâ* ‘only, exactly 8’ and *sâyî kini sâyîsê* ‘only, exactly 9’ just as in their source forms *sââ yâkâ* ‘8’ or *sââ yîsê* ‘9’ the fusion between sââ and yâ-, on the one hand, and sââ and yî-, on the other, took place, what resulted in such split-inserted forms sââ kini sââkâ ‘only, exactly 8’ and sî kini sîsê ‘only, exactly 9’. The reconstructed form *sââpiî kini sââpiîlê* ‘only, exactly 7’ has evolved into two directions: first, by analogy with sââ kini sââdô ‘only, exactly 6’, sââ kini sââkâ ‘only, exactly 8’ and sî kini sîsê ‘only, exactly 9’ (cf. 5.2) in the form sââ kini sââpiîlê and, second, by analogy with the pî kini pîlê ‘only, exactly 2’ in the form sââpiî kini pîlê.

All the processes just described have led to the development of the following common pattern of partial distant reduplication for all polysyllabic numerals: the penultimate syllable of a polysyllabic numeral is reduplicated and the reduc-}

7. The morphological status of the elements that constitute the [numeral + restrictor] combinations involving split-insertion(-reduplication)

7.1. Theoretical preliminaries

In the previous sections various morphosyntactic peculiarities of the split-insertion patterns of [numeral + restrictor] combinations in Tura have been discussed in detail, as well as their origins. However, an important question has remained unanswered: What is the exact morphological status of the numeral roots and the restrictors that split them up? Of course, any answer one gives

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19. Note that the tonal change in the case of *kpâkpâ* ‘big (plural)’ can be regarded as sufficient evidence of preservation of the original left-to-right direction of reduplication. At the same time, in the case of a form like pî kini pîlê ‘only, exactly 2’ it seems most logical to speak about a shift to the right-to-left reduplication pattern since it is the right part of the reduplicated form that coincides with the source form pîlê ‘2’.
to this question will inevitably depend on how one defines a word, an affix, a clitic, or speaking in more general terms, on what kind of morphological entities one chooses to distinguish and, respectively, what criteria one uses to distinguish these entities. Here, I follow the general principles of differentiation of morphological entities proposed by Mel’čuk (1993–2000) and elaborated by Plungian (2000). Basing primarily on criteria such as ability of autonomous usage, separability, transposability (as an ability to change the relative place), prosodic boundness and categorial (un)restrictedness, Plungian (2000: 18–35) following Mel’čuk (1993–2000) distinguishes the following three classes of morphological entities: wordforms\(^20\) (including strongly and weakly autonomous wordforms), clitics (including clitics proper and “half-clitics”) and (morphologically) bound morphemes (including “formants” and affixes; formants can be further subdivided in “transcategorial”, “additive”, “group” and “externalized” formants). Clitics are defined as prosodically bound morphological entities that do not coincide with wordforms proper or with (morphologically) bound morphemes (Plungian 2000: 28). In fact, clitics can be considered as not full-fledged wordforms or as “mot-formes dégénérés” as Mel’čuk (1993: 225) puts it.

Another important part of my further argumentation consists in the premise that a given linguistic element does not always need to have one and the same morphological status. This implies among other things that once a clitic does not necessarily mean always a clitic. This can be easily illustrated on the example of some of the Polish person-number markers of preterit verbs which can sometimes be clitics and sometimes suffixes.

In Polish word stress falls on the penultimate syllable of a word. Thus, if a derivational or inflectional monosyllabic suffix is added, the stress also moves to the right by one syllable in order to stay on the penult. A preterit verb marked by the first person singular marker in Standard Polish follows this pattern, i.e. the stress is placed on the syllable immediately preceding the person-number marker, as illustrated in (55) where the stress is marked by a (‘) sign before the vowel. In other words, the person-number marker in (55) is a suffix. However, the first person singular marker of a preterit verb can also be encliticized to (roughly speaking) the first word of a clause, as in (56). Note that in (56) the person-number marker at issue is ignored for the purposes of stress unlike any derivational or inflectional suffix even though it is prosodically bound to the preceding adverb wczoraj ‘yesterday’. In other words, in (56) the same person-number marker -em is an enclitic.

\(^{20}\) The “wordform” here is a translation of the Russian term slovoforma which stands for a grammatically fully characterized lexeme.
The simple premise that a given linguistic element does not always need to have one and the same morphological status appears to be rather often neglected. As a result, among other things, one is tempted to postulate the existence of such entities as *intraclitics* or *endoclitics*. The most often cited case of this kind of morphological elements are the so-called “endoclitic” person-number markers of Udi (a Lezgian language of the North East Caucasian language family) described in detail by Harris (2002). An example of such an “endoclitic” is given in (58) where the third person singular marker *ne* is found inside the verb root *aq’* “take” as opposed to (57) where the same marker is encliticized to the word *˙eš* “apple”. To my mind, however, there is no need to resort to the notion of endoclitic here provided of course one agrees that a given linguistic element can have different morphological statuses. Whereas the third person singular marker *ne* in (57) is an enclitic, in (58), according to the general principle I am discussing, the same person-number marker is best analysed as an infix inserted inside the verb root *aq’* “take”.

\[(57) \quad \text{äyel-en p’ā ěš-ne aq’-e} \quad \text{‘The child took two apples.’ (Harris 2002: 55)}\]

\[(58) \quad \text{äyel-en p’ā ěš a-ne-q’-e} \quad \text{‘The child took two apples.’ (Harris 2002: 55)\textsuperscript{21}}\]

### 7.2. An analysis of the Tura data

Having clarified some relevant theoretical notions, we can now return to the Tura [numeral + restrictor] combinations. As was shown in 4.1, restrictors are clearly wordforms and not clitics or affixes in combinations where no split-insertion is involved. However, in [numeral + restrictor] combinations that involve split-insertion restrictors are in most cases best analyzed as infixes or infixed roots.

\[\text{21. In (58) I stick to Harris’ (2002) glossing conventions of the verb stems with an inserted person as: take\textsubscript{1},…, take\textsubscript{2}.}\]
Let us start with the forms involving partial distant reduplication, as in \( \text{pìì kini pùlē} \) ‘only 2’ vs. \( \text{pùlē kini} \) ‘only 2’. I believe that such [numeral + restrictor] combination should be analyzed as one wordform derived by means of partial right-to-left reduplication and subsequent infixation of a restrictor root between the reduplicant and its base. I believe that it is the most appropriate analysis because the reduplicant, such as \( \text{pìì} \) in \( \text{pìì kini pùlē} \) ‘only 2’, does not normally have a meaning of its own. There are only three exceptions to this generalization: \( \text{sàà kini sààdô} \) ‘only 6’, \( \text{sàà kini sààpùlē} \) ‘only 7’ and \( \text{kàîn kini kàîn-dìnì} \) ‘only 100’, where \( \text{sàà} \) and \( \text{kàîn} \) can be attributed a meaning of their own: ‘5 (plus)’ and ‘100’, respectively (cf. Section 2). Nevertheless, these cases still fit the analysis proposed and they are not phrases but single wordforms because one can hardly find any parallels in Tura syntax to the relations between the three elements constituting the forms at issue.

When speaking about the forms involving partial distant reduplication, it is also worth mentioning that the possibility of using a restrictor in such an “internal” position with respect to the element it modifies is highly categorically restricted. It is possible only for numerals. Finally, nothing else can be inserted between the restrictor and the parts of a split numeral.

An alternative analysis of the forms involving partial distant reduplication would be to regard the restrictor in such combinations as a prefix or a (compound forming) preposed root obligatorily accompanied by an automatic and consequently meaningless partial distant right-to-left reduplication. The infixational analysis seems to be more preferable, because only this analysis can provide us with a uniform treatment of the Tura split-inserted [numeral + restrictor] combinations (see below).

The forms involving full reduplication of the numeral, \( \text{dô kini dô/dô} \) ‘only 1’ and \( \text{buu kini buu} \) ‘only 10’, are both best analyzed, for more or less the same reasons as proposed above, as single derived wordforms with an infixed restrictor root. Note also that the elements of the combination \( \text{dô kini dô/dô} \) ‘only 1’ are more strongly bound to each other than in the case of \( \text{buu kini buu} \) ‘only 10’, as the tone lowering in the reduplicant in \( \text{dô kini dô/dô} \) ‘only 1’ indicates. Interestingly, such a lowering is exceptional for the [numeral + restrictor] combinations but quite typical for reduplications in Tura (cf. 5.2). Admittedly, the second \( \text{buu} \) in \( \text{buu kini buu} \) ‘only 10’ can also be analysed as being simply in apposition to an ordinary [numeral + restrictor] combination, \( \text{buu kini} \) ‘only 10’ (cf. also 6.2). However, for the sake of uniformity I prefer to disregard this possibility.

Let us now consider the cases where a numeral wordform\(^{22}\) undergoes split-insertion without reduplication, as in \( \text{pìì s´Vs`VlˆE} \) ‘always 2’ vs. \( \text{pùlē s´Vs`VlˆE} \) ‘always 2’.

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\(^{22}\) That is, a simple numeral root, such as \( \text{pùlē} \) ‘2’, or a numeral compound, such as \( \text{sààpùlē} \) ‘7’ and not a phrase like \( \text{kûà pùlē} \) ‘20’. For more details, see Section 2.
Tura numerals and restrictors

ways 2’. I believe that, similarly to the cases involving reduplication, such a [numeral + restrictor] combination is best analyzed as one wordform with an infixed restrictor when it is used in the transposed predicate position (see below for possible complications in the case when it is used in the position of a non-transposed, ordinary predicate). This is so, first of all because normally neither the left part of a split numeral, such as pî in pî sêsé le ‘always 2’, nor its right part, such as lê in pî sêsé le ‘always 2’, has any meaning of its own.

There seem to be only two exceptions, the numerals sààdô ‘6 and sààpîlê ‘7’, for which the forms like sàà sêsé dô ‘always 6’ or sàà sêsé pîlê ‘always 7’ are found. In these forms sàà, dô and pîlê can be attributed a meaning of their own: ‘5 (plus)’, ‘1’ and ‘2’, respectively. What is more, the relations between sàà and dô and sàà and pîlê can actually be regarded as coordinative-additive, even though they are somewhat defective because one cannot introduce an additive conjunction like ni ‘and’ between the elements at issue (cf. Section 2). In other words, one might suggest that in a case like sàà sêsé dô ‘always 6’ we are dealing with a word-combination and not a wordform as in almost all other comparable [numeral + restrictor] combinations. This word-combination would just involve shared constituent coordination. That is, sêsé ‘always’ would be a shared constituent of sàà ‘5 (plus)’ and dô ‘1’. In theory, this might have been an acceptable analysis. However, I believe that it is not. First, recall that in numerals where “full-fledged” coordinative-additive relations are found, as in kûà yàkâ (ni) w´É´E pîlê ‘32 = 30 (and) 2’, a restrictor can never be inserted between the coordinated parts. That is, forms like *kûà yàkâ s´ÉÉ s´ÉÉ w´É´E pîlê ‘always 32’ are impossible (cf. Tables 1–4). Second, in a [[modified1 + modifier1] + and + [modified2 + modifier2]] construction only reduction of the first modifier1 can be possible without any change in the overall meaning. Consequently, should one accept the word-combination analysis of a form like sàà sêsé dô ‘always 6’, one would have to accept as well that such a form is extremely exceptional both from a paradigmatic and from a general syntactic point of view. This is very counterintuitive. Therefore, I prefer to analyse it in the same way as the forms like pî sêsé le ‘always 2’.

Let us now consider the cases where the forms like pî sêsé le ‘always 2’ or pî lefú le ‘(not) even 2’ are used in the position of an ordinary, non-transposed predicate. Here we are confronted with certain facts that make the infixational analysis proposed for similar forms in the transposed predicate position far less evident and maybe even inappropriate. To begin with, recall examples (50-54) where a structural parallel was demonstrated between a [-LÁ]-transposed verb, such as zinnà ‘go down’, and a predicatively used split-inserted [numeral + restrictor] combination, such as pî lefú le ‘(not) even 2’. It was also argued that it is exactly the existence of such a structural parallel that made the development of the forms like pî lefú le ‘(not) even 2’ possible at all. In other words, it was claimed that the [numeral + restrictor] combinations must have
been reanalysed in such a way that it became possible to regard the element \( l^\circ \) of \( \pi i\ell^\circ \) ‘2’ as a kind of transposer and \( \pi i\) as a transposee, almost in the same way as in (59 = 52) \( n^\circ \) of \( z\!\!m^\circ \) ‘go down’ functions as a transposer and \( z\!i\!n\) as a transposee. As a result, examples like (60 = 53) became possible. However, in such an example, if we follow the logic of reanalysis consistently, we will have to admit that the elements \( \pi , l^\circ \) and \( l^\circ \) are related by the same syntactic relations as the elements \( z\!i\!n\), \( l^\circ \) and \( n^\circ \) in (59) and ultimately by the same syntactic relations as the wordforms \( z\!i\!n\), \( l^\circ \) and \( w\!o\) in (61), that is as a transposee, its modifier and a transposer, respectively. 23 (Note that the transposer \( w\!o\) is the syntactic head of the whole construction). Moreover, one has to admit that structurally \( \pi \) and \( l^\circ \) are wordforms as well. The only difference is that the transposee \( \pi \) and the transposer \( l^\circ \) taken apart cannot be attributed any meaning of their own besides, of course, their syntactic functions. In other words, we are faced here with a rather bizarre situation when certain linguistic elements can be analysed as words on the level of form but not on the level of meaning. They clearly lack the form-meaning dualism that a typical language sign is supposed to have. Therefore, they should be regarded only as “quasisigns” or “pseudosigns” and can correspondingly be labelled as \textit{quasiword(form)s} or \textit{pseudoword(form)s}. 24

\begin{align*}
(59) & \quad w\!a\!\tilde{a} \quad z\!i\!n \quad l^\circ \quad n^\circ \\
& \quad 3G\text{.SUBJ.NEG.TAM} \quad g[\text{o\text{-}down}] \quad \text{even} \quad g[\text{o\text{-}down(OR \ TR)} \text{\text{-}TAM} \\
& \quad ‘\text{He does not even go down.’} \\
(60) & \quad w\!a\!\tilde{a} \quad \pi \quad l^\circ \quad l\!i\!\tilde{e} \\
& \quad 3P\text{.SUBJ.NEG.TAM} \quad t[\text{wo}] \quad \text{even} \quad t[\text{wo} (= \text{TR})} \\
& \quad ‘\text{They are not even two/ they are not two at all [but just one].’} \\
(61) & \quad w\!a\!\tilde{a} \quad z\!i\!n \quad l^\circ \quad w\!o \quad [\tilde{a} \quad b\!\tilde{a}\!\tilde{a}] \\
& \quad 3P\text{.SUBJ.NEG.TAM} \quad \text{touch} \quad \text{even} \quad \text{TR\text{-}TAM} \quad 3G\text{.ON} \\
& \quad ‘\text{They do not even touch [it].’}
\end{align*}

23. It is important to notice here that this structural parallel is absent when the [numeral + restrictor] combinations involving split-insertion are used in syntactic positions other than that of the non-transposed predicate or when we are dealing with such acceptable, but dispreferred forms as \( s\!a\!\tilde{a} \quad s\!s\!s\!s\!e\!\tilde{s} \quad \pi i\ell^\circ \) ‘always 7’ or \( k\!\tilde{a}\!\tilde{a} \quad s\!s\!s\!s\!e\!\tilde{s} \quad \pi i\ell^\circ \) ‘always 20’. It is also absent in the case of the [numeral + restrictor] combinations involving both split-insertion and (partial) reduplication. Correspondingly, one cannot analyse the latter cases in the same syntactical terms as those that are claimed to be appropriate for cases like (60). Naturally, the argumentation that will follow is restricted to cases like (60).

24. The latter term is to be preferred, because the term \textit{quasiword(form)s} is already found in the literature with a different meaning. It is sometimes used to describe linguistic entities that can be considered intermediate between compounds, as full-fledged word(form)s, and word-combinations from a morphological point of view. See, for instance, Kasevich (1988: 166–171).
Notionally, such quasiewordforms can be compared to the so-called “pseudomorphemes” or “quasimorphemes”, also sometimes called “submorphs”, “morphoids” or “near-morphs”. A pseudomorpheme can be analysed as a meaningless element which is formally comparable to a full-fledged morpheme. In other words, a pseudomorpheme is formally, morphosyntactically and morphophonologically identical to some real, full-fledged bound morpheme but it cannot be assigned any meaning of its own.

An even better parallel may be the so-called “syllabomorpheme”, which Kasevich (1983: 158) defines as a monosyllabic entity which can take part in certain grammatical processes irrespectively of whether it can be attributed a meaning of its own. I will use a small part of the data discussed in Kasevich (1983: 157–161) to illustrate the notion of syllabomorpheme. Specifically, I will reproduce one of his examples from Burmese, a Sino-Tibetan language of Myanmar.

In Burmese, there is an affix ə which is used to derive nominalized forms of verbs, as in la² ‘to come’ → ə-la² ‘coming, arrival’. In the case when the verb is a compound, the affix ə can be attached either to the word as a whole or to each of its roots. Thus, for the verb ne²-t’ai² ‘to live’, which is a compound consisting of the verb ne² ‘to live; to reside’ and the verb t’ai² ‘to sit’, two nominalized forms are possible, ə-ne²-t’ai² or ə-ne²-ə-t’ai² ‘life, living’. In the case of a simple but disyllabic verb, such as h’o³-sa³ ‘to try’, the affix ə is attached in the same way as in the case of a compound verb, such as ne²-t’ai² ‘to live’, namely both a form like ə-h’o³-sa³ and a form like ə-h’o³-ə-sa³ ‘effort, trying’ are possible. The syllables constituting the verbs given above, are said to be syllabomorphemes because they can be “grammatically active” and behave in one and the same way irrespectively of whether they can be attributed a meaning of their own (and correspondingly be analysed as morphemes or words), as in the case of la², ne² and t’ai², or not, as in the case of h’o³ and sa³.

The syllabomorpheme is believed to be the basic linguistic unit of most of the languages of China and continental South-East Asia, which are correspondingly characterized as “syllabomorphic” languages (Kasevich 1988: 171). As far as Tura is concerned, it is clearly not syllabomorphic as such. At the

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25. For examples and further information on pseudomorphemes, submorphs, etc., see (Mel’čuk 1997) and (Plungian 2000: 47–51). In the latter source the reader will also find a brief history of the terms at issue, though exclusively within the Russian linguistic tradition, because it is apparently within this tradition that these notions have been developed.

26. In fact, the notion of syllabomorpheme can be said to have its roots in the linguistic traditions of China and continental South-East Asia. Consider, for instance, a Chinese term ễn, the “word-syllable” in Chao’s (1976) terminology, or a comparable Vietnamese term tiếng.
same time, I strongly believe that the development of such syllabomorpheme-
like entities in Tura as have been discussed above is not purely accidental, for
it fits very well the general line of the evolution of Tura towards an isolating
syllabic (or better, syllabemic) language type, which is primarily represented
exactly by the languages of China and continental South-East Asia.

Now let us come back to the analysis of the Tura [numeral + restrictor] com-
binations involving split-insertion. Only one type of such constructions has not
been discussed so far, namely the forms like kùà sésö pîlè ‘always 20’, where
the restrictor is inserted between the constituents of a quantified-quantifier nu-
meral phrase (see Section 2 for a discussion of the phrasal status of forms like
kùà pîlè ‘20’). Correspondingly, I propose to speak here just about a non-
canonical word order. In all probability, this phrase-internal position became
acceptable for the numeral modifying restrictors under the influence of their
already existing word-internal placement pattern, as in pîi sésö lè ‘always 2’.
Note however that such a deviation from the canonical word order patterns is
highly unusual for Tura, which, as a typical Mande language, is characterized
by a very rigid word order. It is worth reminding in this regard that all the
forms like kùà sésö pîlè ‘always 20’ are considered by the informants to be
acceptable, but not very good (cf. Tables 1-4). Moreover, these forms are most
probably hardly ever used in real discourse and are rather a result of my persis-
tence in eliciting the possible [numeral + restrictor] combinations. The forms
at issue seem to represent the potential of a language, how far the logic of a
given language system allows for the language to be stretched rather than its
actual use.

8. Conclusion

In the present paper I have tried to give a comprehensive account of the ex-
ceptional morphosyntactic behaviour of Tura numerals and restrictors. In par-
ticular, the ability of Tura numeral roots to be split up by restrictors has been
explored in detail. Remarkably, restrictors in Tura appear to be neither affixes
nor clitics in all other contexts.

The need for an adequate synchronic morphological analysis of the construc-
tions at issue made it necessary to address some theoretical questions, such as
endocisis, word integrity, and constancy of the morphological status of linguis-
tic entities. I have tried to show that there is no need for the notion endocisis
provided we simply assume that a given linguistic element does not necessar-
ily need to have one and the same morphological status. I have claimed that in
most cases when restrictors are used in numeral-internal position they are best
analysed as infixed roots or infixes. In addition, the notion pseudoword(form)
has been proposed to account for some of the facts attested. This term is sup-
posed to describe a situation when a certain linguistic element can be analysed as a word on the level of form but not on the level of meaning. Notionally, it happens to be akin to the concept of syllabomorpheme proposed for the description of the isolating syllabemic languages of China and continental South East Asia. This fact is not a mere coincidence, for it fits very well the general line of the evolution of Tura towards the same isolating syllabemic language type as that of the aforementioned Asian languages.

I have also advanced some hypotheses on the possible origins of the exceptional morphosyntactic patterns of the Tura [numeral + restrictor] combinations involving split-insertion(-reduplication). Specifically, I have claimed that the constructions that involve (partial) distant reduplication result from conventionalization and subsequent univerbation of certain pragmatically marked collocations, which were originally aimed to iconically express the reinforcement of the speaker’s insistence on the exact value of the numeral. The constructions that involve only split-insertion have been claimed to be a product of reanalysis by analogy that occurred in one specific syntactic environment.

Finally, the typologically highly interesting category of restrictors has also been examined in detail from syntactic, semantic, etymological and morphological perspectives. From a cross-linguistic perspective, Tura restrictors appear to be very remarkable due to the existence of a clear tendency to their unified formal marking and due to the fact that this marking goes back to a focus marker. The latter link is quite revealing taking into consideration the close semantic relationship that exists between the Tura restrictors and the phenomenon of focalization.

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**Abbreviations**

<table>
<thead>
<tr>
<th>ADV</th>
<th>adverbalizer</th>
<th>NEG</th>
<th>negation</th>
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<td>DIM</td>
<td>diminutive</td>
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<tr>
<td>F1</td>
<td>selective, counter-presuppositional or argumentative focalisation (see Bearth 1987–1988)</td>
<td>PM</td>
<td>predicative marker</td>
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<td>F2</td>
<td>counter-inferential focalisation (see Bearth 1987–1988)</td>
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<td>Goh Soupou Mardoché (informant)</td>
<td>SUBJ</td>
<td>subject</td>
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<td>L</td>
<td>grammatical low tone</td>
<td>TAM</td>
<td>tense-aspect-modality</td>
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<td>TR</td>
<td>“transposer” (see Note 8)</td>
<td>TM</td>
<td>terminal marker (marks certain type of clauses)</td>
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References


