

# The exceptional morphology of Tura numerals and restrictors: Endoclitics, infixes and pseudowords<sup>1</sup>

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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 endoclitisis, 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 infixes or*

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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* (Nâô).

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/afirling/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 **pùilê** ‘two’ is split up by the word **leftu** ‘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**                    **pùilê**    **leftu**    **lê**  
 3PL.SUBJ.NEG.TAM    t[wo]    even    [t]wo  
 ‘They are not even two/ they are not two at all [but just one].’<sup>2</sup>

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), **â** (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)	1	<b>dô</b>	6	<b>sáàdô</b>
	2	<b>pùlê</b>	7	<b>sáàpùlê</b>
	3	<b>yàkâ</b>	8	<b>sáàkâ</b>
	4	<b>yìsê</b>	9	<b>sôisê</b>
	5	<b>sólú (sólú, sóólú)<sup>3</sup></b>	10	<b>buu</b>

However, one cannot help noticing some elements of a quinary system present here. The numerals **sáàdo** ‘six’, **sáàpùlê** ‘seven’, **sáàkâ** ‘eight’ and **sôisê** ‘nine’ are clearly etymologically compound and are formed on the following model: **sáà-** ‘five plus’ & a numeral from 1 to 4. In the case of **sáàkâ** ‘eight’ and **sôisê** ‘nine’ a subsequent fusion took place between **sáà-** and **yàkâ** ‘three’ and between **sáà-** and **yìsê** ‘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 **sáà-** in these numerals, I believe that it goes back to a combination of the numeral ‘five’, presumably *\*sóódfú* or alike, and a postposition *\*tà* ‘above; on’ used as a connective element there. Thus, for instance, the numeral **sáàdô** ‘six’ should be reconstructed as something like *\*sóódfú-tà-dô* ‘one above five’.

From the synchronic point of view, the element **sáà-** ‘five plus’ in **sáàdô** ‘6’ and **sáàpùlê** ‘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 **sáàkâ** ‘8’ and **sôisê** ‘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 **sólú** is somewhat less common than **sólú**. The form **sóólú** 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 pùlê**  
‘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 pùlê ni wéé pùlê**  
‘22’

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

- (5) **kâin pùlê ni kɔɔ pùlê ni wéé pùlê**  
‘222’

The only exception here is the numeral ‘100’, **kâin-dìni**, instead of the expected form **kâin dô** (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’) + **kɔɔ** ‘ten’ + a multiplier (from 1 to 9) + (**ni** ‘and’) + (**wéé** ‘unit’) + a number from 1 to 9.

- (6) **wáá pùlê ni tà pùlê ni kɔɔ pùlê ni wéé pùlê**  
‘2222’

The numeral meaning ‘1000’ is regularly expressed as **wáá dô**, but the form **wáá-dìni**, clearly parallel to **kâin-dìni** ‘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 **kɔɔ** 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 **kɔɔ** can optionally be replaced by **buu**. There are two words for ‘100’ in Tura: **kâin** 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-dìni** ‘100’ and a rare form **wáá-dìni** ‘1000’, where we are dealing with a so-called “syntagme spécifique” (Beard 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 spécifique” and the word **dìni**, 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 **kùà(n)** ‘ten’ can be used in the same meaning without a multiplier. This can be illustrated, for instance, by a construction like **kàîn kpáá** ‘(several) hundreds’, where **kpáá** is an adjective meaning ‘big’ or ‘many; several’. In other words, one can claim that structurally a phrase like **kàîn pùlê** ‘200 = 2 hundreds’ hardly differs from a phrase like **yíí pùlê** ‘2 trees’. As to the expressions consisting of **tà** ‘hundred’, **kɔɔ** ‘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 pùlê** if taken out of **kàîn pùlê ni wéé pùlê** ‘202’, where it means ‘2’ or ‘2 units’, will mean ‘2 grains’, whereas **kàîn pùlê** even if taken out of the same complex numeral ‘202’ will still mean ‘200’. Therefore, **wéé pùlê** in **kàîn pùlê ni wéé pùlê** ‘202’ is an idiomatic syntagm and not a compound. The elements **tà** ‘hundred’, **kɔɔ** ‘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 **kɔɔ** ‘ten’ vs. construction-independent **kɔɔ** ‘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).

- (7) **bhâaèn tíí** (<sup>??</sup>bò) **pùlê**  
 man black PL two  
 ‘two Africans’
- (8) **wo** / **e** **pùlê**  
 3PL.SUBJ.TAM 3SG.SUBJ.TAM two  
 ‘They are two.’
- (9) **e** **bhô** **pùlê** **tâ-lèè** **bhà**  
 3SG.SUBJ.TAM reach\TAM two meet-place\L on  
 ‘They are almost two.’<sup>4</sup>
- (10) **Náǵlé lóó ni Tèi lóó, àǵ le wó núú**  
 Nanné market and Té market 3PL F1 3PL.SUBJ.TAM was  
**lóó kpákpâa.bò le.á Wɛenlê zé pùlê kwei le**  
 market big:big-PL F2-with Tura.region here two so TM  
 ‘The markets in Nanné and Té were the two big markets of the Tura  
 region.’<sup>5</sup> (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., **pùlê** ‘two’, **yàkâ** ‘three’, **yisê** ‘four’, and **sólú/sólú/sólú** ‘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, **filá** ‘two’ and **dúuru** ‘five’, from Bamana, a Western Mande language, and their respective Tura counterparts, **pùlê** and **sólú/sólú/sólú**. As to the numerals **yàkâ** ‘three’ and **yisê** ‘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 **kpákpâa.bò** 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 **yàkâ** ‘three’ and **yìsê** ‘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 **yàkâ** ‘three’ and **yìsê** ‘four’, as well as **pìlê** ‘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 **yàkâ** ‘3’ and **yìsê** ‘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:

<b>kini</b> , <b>lekini/leŋ</b> , <b>lekinilèkini/leŋlèŋ</b> <sup>6</sup>	‘exactly; really; only; [...-]self; also’
<b>súsú</b> ( <b>súsú</b> , <b>sósó</b> ), <b>lesúsú</b>	‘always, constantly; completely; exclusively’

6. The forms **leŋ** and **leŋlèŋ** are just contractions of the derived forms **lekini** and **lekinilèkini**, respectively.

**leftu** ‘even (as an adverb)’

**lefóólé** ‘first (as an adverb); for a start’

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 adverbializing 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).<sup>7</sup> 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’**      **bhô.à,**      **bhè**      **î.bhà**      **ló**  
 really-smell\N    F2-PM    appear-TAM    2SG.SUBJ.TAM    2SG-POSS    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<sup>8</sup> verb or adverb.

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,<sup>9</sup> 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 nominalized 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.<sup>10</sup> 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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in turn takes all the TAM marking of the verb, as for instance in (12). For convenience sake, this auxiliary verb can be called something like (*verb*) *transposer*. As to an adverb, it can be transposed in two different ways. First, an adverb can be shifted to complement position of a postposition *bhà* ‘on’, as in (27), which then functions as a kind of auxiliary postposition, alias (*adverb*) *transposer*. Second, it can be shifted to complement position of an auxiliary postposition *wô*, alias (*adverb*) *transposer*, which is however not found as postposition anywhere else in the language. Note that *wô*, as a transposer, should be normally distinguished from an adverbializer *-wô*, as in an adverb *dééwô* ‘again’ derived from an adjective *déé* ‘new’ or in an adverb *lefuwô* ‘even’, as in (21), from a restrictor *lefu* ‘even’. Despite being formally identical, these two morphemes are functionally somewhat different. Whereas the former is used to give an adverb or a predicate some of the combinatorial possibilities of a noun, the latter’s function is to make it possible for a restrictor or an adjective to be used as an adverb. However, since both morphemes are used to give words of one category combinatorial possibilities of another category, on a certain level of abstraction they both can be considered as similar kinds of operators, namely as some sort of transpositional or category-changing operators.

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 lexico-grammatical classes.

a sort of cover term for both secondary/ second-order and primary/ first-order modifiers in a given phrase.<sup>11</sup>

### 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 *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 *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 *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 *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 *very*, whereas one does not find such meanings among the Tura restrictors. On the other hand, the term *restrictor*, besides adequately describing the semantics of the elements at issue, is also usually assigned in the literature to words like English *only* and this is exactly one of the meanings we find for the Tura restrictors.

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11. In my opinion, the creation of a term like *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 *only* or *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 pê kini wô’**  
 3SG.SUBJ.TAM 3SG say exactly TR\TAM-TAM  
 ‘He really said it.’ (Bearth 1971: 190)
- (13) **wo kûà kini yâkâ, ké wââ**  
 3PL.SUBJ.TAM ten exactly three but 3PL.SUBJ.NEG.TAM  
**mɔɔ.ì bháálá láà 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  $[[x \text{ IS } a] \text{ OR } [x \text{ IS NOT } a]]$ , 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  $[[x \text{ IS } a] \text{ AND NOT } [x \text{ IS NOT } a]]$  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/lej** (see also Section 4.4). The presupposition of these examples can be represented as  $[[x \text{ IS } a] \text{ AND } [x \text{ IS } b], \text{ etc.}]$ , 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  $[[x \text{ IS } a] \text{ AND NOT } [[x \text{ IS } a] \text{ AND } [x \text{ IS } b], \text{ etc.}]]$ . In the case of (14) this means that everybody should work for himself and not both for himself and somebody else.

- (14) [Pólólónè láà è káán] kê mēḡlò- bháálá kêε  
 and everybody-PM work do  
 wô leḡ pe.á  
 3PL.LOGOPHORIC exactly part-with  
 ‘The forced labour must be abolished and everybody should work for  
 himself only.’ (Bearth 1999: 21)
- (15) kà kâ leḡ kún sè.â!  
 2PL.SUBJ.TAM 2PL exactly seize good-with  
 ‘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).

- (16) kà kâ tà gâ!  
 2PL.SUBJ.TAM 2PL surface cause.to.die  
 ‘Keep quiet! (or ‘Shut up!’)’ (Bearth 1971: 271)

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 leŋ kâ à le**  
 wealth this so 2PL exactly 2PL.SUBJ.TAM 3SG F1  
**guo.ì 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  $[[x \text{ IS } b] \text{ AND } [[x \text{ IS } a] \text{ OR } [x \text{ IS NOT } a]]]$ , 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  $[[x \text{ IS } b] \text{ AND } [x \text{ IS } a] \text{ AND NOT } [x \text{ IS NOT } a]]$ . 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  $[[x \text{ IS } a] \text{ AND NOT } [x \text{ IS NOT } a]]$ , *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 **súsú** ‘always, constantly; completely; exclusively’ is a

non-derived form. The restrictor **lefóólé** ‘first (as an adverb); for a start’ is derived from an adverb/adjective **fóólé** ‘first; before, in the past’, which itself is derived from an adjective/adverb **fóó** ‘first; before, in the past’. The word **leftu** ‘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 **lábhíli lekiniyè** ‘a real miracle’. This nominalizing-adjectivizing suffix is otherwise regularly used to derive participles from verbs, such as **gâyè** ‘dead/dying’ from **gâ** ‘to die’ or **dôyè** ‘built/ being built’ from **dô** ‘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**, **lesúsú**, **leftu** or **lefóólé**, 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 **leftu** ‘even’ and **lefóólé** ‘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



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**                      **pùlê leftu.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 *\*lefóóléwô* can probably be explained by the fact that there already exist such adverbs as *fóólé* ‘first (in an ordered set of occurments); before, in the past’ and *líê* ‘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) **wò**                      **pùlê lefóólé’ 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 líê**  
 2SG friend-PM come first  
 ‘First (in the first place), your friend must come.’
- (24) **î bhá lefóólé- nû**  
 2SG friend first-PM come  
 ‘Let your friend come first.’
- (25) **î bhá- nû fóólé**  
 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 F1 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**            **pùlê kini'**        **wô le**  
 3PL.SUBJ.TAM two exactly-F1 TR TM
- b. **wò**            **pù kini pùlê'**        **wô le**  
 3PL.SUBJ.TAM t[wo] exactly two-F1 TR TM
- c. \***wò**            **pùlê kini.wô'**        **wô le**  
 3PL.SUBJ.TAM two 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., **lejđô** 'only (marks uniqueness together with exclusiveness)', as in (27), that results from a combination of the restrictor **lej** '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 **lefujló** '[not] even at all', as in (28), that results from a combination of the restrictor **lefú** 'even' plus **àj** 'they' and **tó** 'all'.

- (27) **è**            **lò**            **boí lejđô'**        **bhà le**  
 3SG.SUBJ.TAM go\TAM field:in 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) **wòô**            **waa lefujló**        **wô Dùikwê símá**  
 3PL.SUBJ.NEG.TAM arrive even.at.all TR Duékoué equivalent  
**bhà 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 + **súsú**], in 5.4 [numeral + **lefú**] and in 5.5 [numeral + **lefóólé**].

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.<sup>13</sup> Note that due to phonotactic reasons a CV numeral **dô** ‘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 judgements 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 semi-column 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.

### 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 **pù kini lê** ‘exactly two’, and the ones involving both split-insertion and partial distant reduplication, as in **pù kini pùlê** ‘exactly two’. Note that the forms involving split-insertion only are rejected by one of the two informants, namely GB. 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

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13. Note that in Tables 1–4 the numeral ‘five’ is given only in the forms **sóló** and **sóólú**, since the form **sólú** behaves identically to **sóló**.

Table 1. Numerals and **kini** ‘exactly’

Numeral	[Numeral + <b>kini</b> ] forms	
	good	(un)acceptable
1 <b>dô</b>	<b>dô kini dô/dò</b>	
2 <b>pùlê</b>	<b>pùlê kini pùlê</b>	<b>pùlê kini lê</b> (GM)
3 <b>yàkâ</b>	<b>yà kini yàkâ</b>	<b>yà kini kâ</b> (GM)
4 <b>yìsê</b>	<b>yì kini yìsê</b>	<b>yì kini sê</b> (GM)
5 <b>sólú (sóólú)</b>	<b>sú kini sólú</b> ( <b>sóó kini sóólú</b> )	<b>sú kini lú (sóó kini lú)</b> (GM)
6 <b>sáàdô</b>	<b>sáà kini sáàdô</b>	<b>sáà kini dô</b> (GM)
7 <b>sáàpùlê</b>	<b>sáà kini sáàpùlê;</b> <b>sáàpùlê kini pùlê</b>	<b>sáà kini pùlê</b> (GM) <b>sáàpùlê kini lê</b> (GM)
8 <b>sáàkâ</b>	<b>sáà kini sáàkâ</b>	<b>sáà kini kâ</b> (GM)
9 <b>sóìsê</b>	<b>sóì kini sóìsê</b>	<b>sóì kini sê</b> (GM)
10 <b>buu</b>	<b>buu kini buu</b>	
30 <b>kùà yàkâ</b>	<b>kùà yà kini yàkâ</b>	<b>kùà kini yàkâ</b> (GM) <b>kùà yà kini kâ</b> (GM) <b>*kùà kini kùà yàkâ</b> (GM)
32 <b>kùà yàkâ wéé pùlê</b>	<b>kùà yàkâ wéé pùlê kini pùlê</b>	<b>kùà yàkâ wéé pùlê kini pùlê</b> (GM) <b>kùà yà kini yàkâ wéé pùlê</b> (GM) <b>kùà kini yàkâ wéé pùlê</b> (GM) <b>kùà yà kini kâ wéé pùlê</b> (GM) <b>*kùà yàkâ kini wéé pùlê</b>
100 <b>kâîn-dìnì</b>	<b>kâîn kini kâîn-dìnì</b>	<b>*kâîn kini dìnì,</b> <b>*kâîn dìn<sup>a</sup> kini dìnì</b> <b>*kâîn dìnì kini nì</b>
200 <b>kâîn pùlê</b>	<b>kâîn pùlê kini pùlê</b>	<b>kâîn kini pùlê</b> (GM) <b>kâîn pùlê kini lê</b> (GM) <b>*kâîn kini kâîn pùlê</b>

a Note that following the practical orthography of Tura the final **n** must be used in **dìn** to mark nasalization of the vowel because since in the non-split form **dìnì** 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 yàkâ** ‘thirty’ and **sáàpùlê** ‘seven’ are used for the purpose of illustration.

- (29) a. **wo kûà kini**  
 3PL.SUBJ.TAM ten exactly  
**yàkâ [ké wàâ mɔɔì bháálá láà à bhà]**  
 three
- b. **wo kûà yà kini kâ [...]**  
 3PL.SUBJ.TAM ten t[hree] exactly [t]hree
- c. \***wo kûà yà kini yàkâ [...]**  
 3PL.SUBJ.TAM ten t[hree] 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 **sáàpùlê** ‘seven’ is used instead of **kûà yàkâ** ‘thirty’. The sign (<sup>??</sup>) means that GM was not as categorical in rejecting a given example as when the sign (\*) is used.

- (29) d. **wo sáà kini pùlê [ké wàâ mɔɔì bháálá láà à bhà]**  
 e. **wo sáàpùlê kini lê [...]**  
 f. <sup>??</sup>**wo sáà kini sáàpùlê [...]**  
 g. <sup>??</sup>**wo sáàpùlê kini pùlê [...]**  
 ‘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 kûà yà kini**  
 3PL.SUBJ.TAM ten t[hree] exactly  
**yàkâ [ké wo mɔɔ’ bháálá láà à bhà]**  
 three
- b. <sup>??</sup>**wo kûà kini yàkâ [...]**  
 3PL.SUBJ.TAM ten exactly three
- c. <sup>??</sup>**wo kûà yà kini kâ [...]**  
 3PL.SUBJ.TAM ten t[hree] exactly [t]hree  
 ‘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)<sup>14</sup>

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14. Note that there is another theoretically possible form with reduplication: **kûà kini kûà yàkâ**.

- d. **wo sàà kini sààpùlê** [ké wo mɔɔ' bháálá láà à bhà]  
 e. **wo sààpù kini pùlê** [...] <sup>15</sup>  
 f. ??**wo sàà kini pùlê** [...]   
 g. ??**wo sààpù kini lê** [...]   
 '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 translation 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 presuppositions. 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 presuppositions correspond to the following statements. The number IS 30 AND NOT [the number IS NOT 30] in the case of (29), and the number IS 30 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 **kini** and **leftu** 'even' (see Section 5.4) are used with numerals, typically numeral relations, as 'x IS MORE THAN a' ('x > a') and 'x IS LESS THAN a' ('x < a'), are more prominent than the more general relations 'x IS a' and 'x IS NOT a'. Note furthermore that when there is only a minimal context available and both interpretations (that is, either 'x IS a' and 'x IS NOT a' or 'x > a' and 'x < a') turn out to be theoretically possible for a given [numeral + **kini**] or [numeral + **leftu**] 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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I do not mention it here because it was always rejected by the informants, independent of the context where it was presented. See below for a possible explanation.

15. Note that it is not only in this particular example that the form **sààpù kini pùlê** is preferred to the form **sàà kini sààpùlê**, even though both forms are characterized as good by the informants. See below for a possible explanation.

the informants out of any context, they regularly translate **kini** by *seulement* ‘only’.

- (31) **wo**            **pù**    **kini**    **pùlê**  
 3PL.SUBJ.TAM    t[wo]    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 **pù kini pùlê** ‘only two’ where **pù** is the reduplicant and **pùlê** 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 **kpáâlàkpàà** ‘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 dò** 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) **à dô kini dô ké nû.yêâ**  
 3SG one exactly one\L PM come-TAM  
 'He has come absolutely alone/Only one has come.'
- (33) **à 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 **kpáâlàkpàâ** 'very big' or **kpákpâa** 'big (plural)', both derived from **kpââ** '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 **kpáâlàkpàâ** '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 \***kûà yàkâ kini wéé pùlê** ‘only 32’ from [**kûà yàkâ wéé pùlê** ‘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 **kûà yà kini yàkâ** ‘only 30’ from [**kûà yàkâ** ‘30’ + **kini** ‘only; exactly’] which is strongly preferred to the variant **kûà kini yàkâ** (accepted only by GM) or \***kûà kini kûà yàkâ** (rejected by both informants; see below for a possible explanation of why the latter form is impossible). There is only one exception here, **kâîn kini kâîn-dìni** ‘only 100’ from [**kâîn-dìni** ‘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 **kûà yàkâ wéé pùlê** ‘32’, the restrictor is preferably inserted not in the multiplier of tens (or hundreds), which in the case of ‘32’ is **yàkâ** ‘3’, but in the unit, that is in the rightmost element, which in the case of ‘32’ is **pùlê** ‘2’. As a result, one normally finds a form like **kûà yàkâ wéé pùlê kini pùlê** ‘only 32’ instead of **kûà yà kini yàkâ wéé pùlê** ‘only 32’.

Another observation to be made in connection with numerals starting from 20 and reduplication is as follows. The elements **kûà** ‘ten’ and **kâîn** ‘hundred’ are not reduplicated when split-insertion takes place, contrary to the element **sâà** ‘five plus’ which in this case is regularly reduplicated. In other words, whereas there are no forms like \***kûà kini kûà yàkâ** ‘only 30’ or \***kâîn kini kâîn pùlê** ‘only 200’, one finds forms like **sâà kini sâàdô** ‘only 6’ or **sâà kini sâàpùlê** ‘only 7’. The only exception is the form **kâîn kini kâîn-dìni** ‘only 100’ from [**kâîn-dìni** ‘100’ + **kini** ‘only; exactly’]. Interestingly, the element **dìni** in **kâîn-dìni** ‘100’ is exceptional in other aspects as well. For instance, it can never be split. That is, there are no forms like \***kâîn dìn kini dìni** or \***kâîn dìn kini nì** meaning ‘only 100’. These “irregularities” of **dìni** can be explained by the fact that **dìni** 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 spécifique” (Beard 1971: 119–122), marked by a grammatical low tone on the specified noun, as in **lòḡ-yìlì** ‘hevea, rubber tree’ from **lòḡ** ‘caoutchouc’ and **yìlì** ‘tree’. As to **dìni**, besides in **kâîn-dìni** ‘100’ it is also used in the sense of ‘the other (of two)’ in such phrases as **kpúḡ-dìni** ‘the other (opposite) bank (of river)’. It should be mentioned that, contrary to such words as **yìlì** ‘tree’ in **lòḡ-yìlì** ‘rubber tree’, **dìni** is used as a specified noun only, in all probability due to its semantics.

The aforementioned discrepancy with respect to reduplication between **kûà** ‘ten’ and **kâîn** ‘hundred’, on the one hand, and **sâà** ‘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-adjoined to **kûà** ‘ten’ and **kâîn** ‘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-adjoined to **sâà** ‘five



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 [**kùà** + Num] and the [**kàìn** + Num] combinations differ from the [**sáà**- + 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 [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 **kùà yàkà wéé pùlê** ‘32’ by means of **kini** ‘only; exactly’ using split-insertion and reduplication, one should apply these operations to the rightmost element of the numeral ‘32’, i.e. to **pùlê** ‘2’, what will result in a form **kùà yàkà wéé pùlê kini pùlê** ‘only 32’.

I found only two exceptions to this general principle. The first one is the form **kàìn kini kàìn-dìnì** ‘only 100’ instead of the expected forms like \***kàìn dìn kini dìnì** or \***kàìn dìn kini nì**. This exception has already been explained. The second exception can be seen in the fact that the informants prefer the form **sáà kini sáàpùlê** ‘only 7’ to the form **sáàpùlê kini pùlê** ‘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 **sáà kini sáàpùlê** can in all probability be explained by paradigmatic factors. All other ‘five plus’ based numerals have only two syllables: **sáàdô** ‘6’, **sáàkà** ‘8’, and **sôisê** ‘9’. Therefore, when they are modified by **kini**, it is naturally always the first element **sáà-/sôì-** ‘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 **sáà kini sáàdô** ‘only 6’, **sáà kini sáàkà** ‘only 8’, and **sôì kini sôisê** ‘only 9’. Hence, it can be argued that the shift in preference from **sáàpùlê kini pùlê** to **sáà kini sáàpùlê** has been caused by analogy to the distantly partially reduplicated forms of the rest of the ‘five plus’ based numerals.

### 5.3. Numerals and **súsú** ‘always’

There are only two types of forms in Table 2: the ones involving split-insertion, as in **pùlê súsú lê** ‘always two’, and the ones without split-insertion, as in **dô súsú** ‘always one’.

I have encountered only one restriction on split of disyllabic numerals by **súsú** ‘always’. For the numeral **súlú** ‘5’, the split form **sú súsú lú** ‘always 5’ was considered acceptable, but not good by one informant (GB) and completely

Table 2. Numerals and *súsú* (*sósó*, *súsú*) ‘always’

Numeral	[Numeral + <i>súsú</i> ] forms	
	good	(un)acceptable
1 <b>dô</b>	<b>dô súsú</b>	
2 <b>pìlê</b>	<b>pìlê súsú lê</b>	
3 <b>yàkâ</b>	<b>yà súsú kâ</b>	
4 <b>yìsê</b>	<b>yì súsú sê</b>	
5 <b>súlú (sóólú)</b>	<b>súlú súsú (sósó súsú lú)</b>	<b>sú súsú lú (GB)</b>
6 <b>sáàdô</b>	<b>sáà súsú dô</b>	
7 <b>sáàpìlê</b>	<b>sáàpìlê súsú lê</b>	<b>sáà súsú pìlê</b>
8 <b>sáàkâ</b>	<b>sáà súsú kâ</b>	
9 <b>sóisê</b>	<b>sóis súsú sê</b>	
10 <b>buu</b>	<b>buu súsú</b>	
30 <b>kùà yàkâ</b>	<b>kùà yà súsú kâ</b>	<b>kùà súsú yàkâ</b>
32 <b>kùà yàkâ wéé pìlê</b>	<b>kùà yàkâ wéé pìlê súsú lê</b>	<b>kùà yà súsú kâ wéé pìlê</b> <b>kùà súsú yàkâ wéé pìlê</b> <b>*kùà yàkâ súsú wéé pìlê</b>
100 <b>kâin-dìni</b>	<b>kâin-dìni súsú</b>	<b>*kâin súsú dìni</b> <b>*kâin òn súsú nì</b>
200 <b>kâin pìlê</b>	<b>kâin pìlê súsú lê</b>	<b>kâin súsú pìlê</b>

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 *súsú* ‘always’ is acceptable for the form *sóólú* ‘5’.

As to the possible positions for split-insertion in the [numeral + *súsú* ‘always’] combinations where a numeral has three or more syllables, the same principle is applicable here as was established for [numeral + *kini* ‘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 *kâin-dìni* ‘100’. There is no way for this numeral to be split by *súsú* ‘always’. In addition, just as in the case of *kini* ‘exactly’, in numerals starting from 20 *súsú* 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 yàkâ súsú wéé pìlê* ‘always 32’.

Note that for the numeral *sáàpìlê* ‘7’ there is only one good split form in combination with *súsú* ‘always’: *sáàpìlê súsú lê* ‘always 7’. This is obviously in contrast to the preference for the form *sáà kini sáàpìlê* ‘only 7’ instead of *sáàpìlê kini pìlê* discussed in 5.2. This discrepancy can be explained as follows.

Contrary to **kini** ‘exactly’ when **súsú** ‘always’ is inserted in the numerals 6, 7, 8 and 9, even though it is still always the first element **sáà-/sôì-** ‘five plus’ that is detached, we do not find a whole numeral left intact at the right side of **súsú** anymore, for there is no reduplication involved. That is, we find forms like **sáà súsú dô** ‘always 6’, **sáà súsú kâ** ‘always 8’ and **sôì súsú sê** ‘only 9’. Obviously, it is the form **sáàpìlè súsú lè** ‘always 7’ that fits this series best, and not **sáà súsú pìlè** ‘always 7’.

The alternative forms from the “acceptable” column, as **sáà súsú pìlè** ‘always 7’ and **kùà súsú yàkâ** ‘always 30’, are possible only when the numeral modified by **súsú** ‘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) [àṅ kē-á sí à tà, àṅ kē-á daa à tà,]  
 wo kùà yà súsú kâ  
 3PL.SUBJ.TAM ten t[hree] always [t]hree  
 ‘[Their number does not diminish and does not increase,] they are always 30.’ (GM)
- (35) [àṅ kē-á sí à tà, àṅ kē-á daa à tà,] wo kùà súsú yàkâ  
 ‘[Their number does not diminish and does not increase,] they are always 30.’ (GM)

This can be explained by the fact that when **súsú** ‘always’ is used only one presupposition is possible: [[*x* IS *a*] AND SOMETIMES/SOMEWHERE [*x* IS NOT *a*]]. On the output level, this corresponds to the statement [[*x* IS *a*] AND NOT [SOMETIMES/SOMEWHERE [*x* IS NOT *a*]]] or, reformulated, [[*x* IS *a*] AND NEVER/NOWHERE [*x* IS NOT *a*]].

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

- (36) ... kē è à sè.sè súsú’ pē  
 and 3SG.SUBJ.TAM 3SG good-good always-F1 say\TAM  
 le [kē àà à le kēe, à le àà sèà]  
 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)

- (37) **ân**            **lò'**            **lóó**    **gí,** **ân**            **nàànâa**  
 1SG.SUBJ.TAM go\TAM-TAM market in 1SG.SUBJ.TAM pineapple  
**pùilê** **súsú'**    **lô**            **le**  
 two always-F1 buy\TAM TM  
 'When I go to the market, it is always two pineapples that I buy.'

#### 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 **pùilê leftu lê** '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 **sólú** '5' is found, as is illustrated by a "good" form **sú leftu lú** '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 3. Numerals and *leftu* 'even (as an adverb)'

	Numeral	[Numeral + <i>leftu</i> ] forms	
		good	(un)acceptable
1	<b>dô</b>	<b>dô leftu</b>	
2	<b>pùilê</b>	<b>pùilê leftu lê</b>	
3	<b>yàkâ</b>	<b>yà leftu kâ</b>	
4	<b>yìsê</b>	<b>yì leftu sê</b>	
5	<b>sólú (sóólú)</b>	<b>sú leftu lú (sóó leftu lú)</b>	
6	<b>sáàdô</b>	<b>sáà leftu dô</b>	
7	<b>sáàpùilê</b>	<b>sáàpùilê leftu lê</b>	<b>sáà leftu pùilê</b>
8	<b>sáàkâ</b>	<b>sáà leftu kâ</b>	
9	<b>sôisê</b>	<b>sôilê leftu sê</b>	
10	<b>buu</b>	<b>buu leftu</b>	
30	<b>kùà yàkâ</b>	<b>kùà yà leftu kâ</b>	<b>kùà leftu yàkâ</b>
32	<b>kùà yàkâ wéé pùilê</b>	<b>kùà yàkâ wéé pùilê leftu lê</b>	<b>kùà yà leftu kâ wéé pùilê</b> <b>kùà leftu yàkâ wéé pùilê</b> <b>*kùà yàkâ leftu wéé pùilê</b>
100	<b>kâîn-dìnì</b>	<b>kâîn-dìnì leftu</b>	<b>*kâîn leftu dìnì,</b> <b>*kâîn dìn leftu nì</b>
200	<b>kâîn pùilê</b>	<b>kâîn pùilê leftu lê</b>	<b>kâîn leftu pùilê</b>

- (38) [A: This man, is he alone there? B:]  
**ááwà, wo pìì lefu lê**  
 no 3PL.SUBJ.TAM t[wo] even [t]wo  
 ‘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 pìì lefu lê**  
 3PL.SUBJ.NEG.TAM t[wo] even [t]wo  
 ‘They are not even two/they are not two at all (but just one).’

In **kùà yà lefu kâ** ‘even 30’ vs. **kùà lefu yàkâ** ‘even 30’, **lefu** ‘even’ behaves in the same way as **súsú** ‘always’ and for the same reason. When **lefu** ‘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 + **lefu** ‘even’] combination is negative or affirmative and whether **lefu** ‘even’ modifies a numeral or any other term.

When **lefu** ‘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  $a$ ]] of the affirmative example (38). 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 **lefu** ‘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 **lefu** ‘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

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 lefu.né' nû'**  
           3SG even-DIM-PM come\TAM-TAM  
           'Even he came' (Bearth 1987–1988)
- (41)    **àà mɔɔ bháálá lefu kêɛ.á**  
           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  $[[x \text{ IS } b] \text{ AND } [x \text{ IS } c], \text{ etc.}, \text{ AND NOT } [x \text{ IS NOT } a]]$ , that is  $[[x \text{ IS } b] \text{ AND } [x \text{ IS } c], \text{ etc.}, \text{ AND } [x \text{ IS } a]]$ , and the latter to the statement  $[[x \text{ IS NOT } b] \text{ AND } [x \text{ IS NOT } c], \text{ etc.}, \text{ AND NOT } [x \text{ IS } a]]$ , that is  $[[x \text{ IS NOT } b] \text{ AND } [x \text{ IS NOT } c], \text{ etc.}, \text{ AND } [x \text{ IS NOT } a]]$ . 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 *lefóólé* '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 **pù lefóólé lé** 'two, for a start', and the ones without split-insertion, as in **buu lefóólé** 'ten, for a start'. However, split-insertion is hardly ever used in [numeral + *lefóólé* 'first'] combinations: split-insertion is considered more or less acceptable by both informants only for the numerals **pùlé** '2' and **yàkà** '3'.

I believe that such "deficiency" in split-inserted forms in the case of *lefóólé* '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 **fóólé** 'first; before, in the past'. Interestingly, the latter is sometimes even (quasi)synonymous to the restrictor *lefóólé* '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 **sóóó** '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 **lefu** 'even' as a restrictor vs. **fu** 'empty' as an adjective (cf. Section 4.4). The assumption that *lefóólé* 'first' is a recent innovation is further supported by the fact that the possibility of split-insertion in [numeral + *lefóólé*] combinations is subject to the largest number of syntactic

Table 4. Numerals and **lefóólé** ‘first (as an adverb); for a start’

Numeral	[Numeral + <b>lefóólé</b> ] forms	
	good	(un)acceptable
1 <b>dô</b>	<b>dô lefóólé</b>	
2 <b>pùlê</b>	<b>pùlê lefóólé</b>	<b>pù lefóólé lê</b>
3 <b>yàkâ</b>	<b>yàkâ lefóólé</b>	<b>yà lefóólé kâ</b>
4 <b>yisê</b>	<b>yisê lefóólé</b>	<b>yì lefóólé sê</b> (GB)
5 <b>súlú (sóólú)</b>	<b>súlú (sóólú) lefóólé</b>	<b>sú lefóólé lú</b> ( <b>sóó lefóólé lú</b> ) (GB)
6 <b>sáádô</b>	<b>sáádô lefóólé</b>	
7 <b>sáàpùlê</b>	<b>sáàpùlê lefóólé</b>	
8 <b>sáàkâ</b>	<b>sáàkâ lefóólé</b>	
9 <b>sóisê</b>	<b>sóisê lefóólé</b>	
10 <b>buu</b>	<b>buu lefóólé</b>	
30 <b>kùà yàkâ</b>	<b>kùà yàkâ lefóólé</b>	
32 <b>kùà yàkâ wéé pùlê</b>	<b>kùà yàkâ wéé pùlê lefóólé</b>	
100 <b>kâin-dìni</b>	<b>kâin-dìni lefóólé</b>	
200 <b>kâin pùlê</b>	<b>kâin pùlê lefóólé</b>	

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 **lefóólé** ‘first; for a start’ as evidence of a gradual expansion of the domain of applicability of **lefóólé**’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 **lefóólé**. The restrictor **lefóólé** can express two different meanings: ‘first (as an adverb)’ as in (24), 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).

(42) **î bhá lefóólé- nû**  
 2SG friend first-PM come  
 ‘Let your friend come first.’

(43) **wò pùlê lefóólé’ 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).’

- (44) **é**                    **lò'**                    **lóó**    **gí, é**                    **nàànáa**  
 3SG.SUBJ.TAM    go\TAM-TAM    market    in    3SG.SUBJ.TAM    pineapple  
**pùlê** **lefóólé'** **lò'**                    **le**  
 two    first-F1    buy\TAM-TAM    TM
- a. 'When he went to the market, it is first two pineapples that he bought (and the rest of the pineapples he bought afterwards).'
- b. 'When he went to the market, it is first (= for a start, for one thing) two pineapples that he bought (and not something else).'

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 **pù kini pùlê** 'only two', and the second one



Table 5. Syntactic constraints on split-insertion(-reduplication) in [numeral + restrictor] combinations

		Transposed predicate	Predicate	DO/IO	Subject
<b>kini</b>	‘exactly’ with reduplication	+	+	+	+
<b>kini</b>	‘exactly’ without reduplication	+	+	–	–
<b>leftu</b>	‘even’	+	+	–	–
<b>súsú</b>	‘always’	+	+	–	–
<b>lefóólé</b>	‘first’	+	???	–	–

for variants without reduplication of the numeral root (i.e., with split-insertion only), as in **pù kini lé** ‘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 **-ló** after **ɔ**, as in **dóló** ‘stop’ (related to the verb **dó** ‘stand’), for **-ná** after a nasal vowel, as in **zînná** ‘put down; come/go down, descend’ (related to an intransitive verb **zîn** ‘touch’), and for **-lá** elsewhere, as in **seelá** ‘turn’. In order to explain what kind of reanalysis I have in mind, I will first demonstrate 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 **wô** (cf. Note 8), which is illustrated in (45) on the example of the verb **zînná** ‘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 **wô** 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 **zînná** ‘go down’. The two kinds of verb-transposing construction are not related to any difference in meaning, except in one case. According to Bearth (1971: 174–175), in a certain type of subordinate clauses the “**wô**-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) **òò zînná leftu wô’**  
 3SG.SUBJ.NEG.TAM go.down even TR\TAM-TAM  
 ‘He did not even go down.’

(46) **òò zîn leftu nâ’**  
 3SG.SUBJ.NEG.TAM g[o.down] even [g]o.down(or TR)\TAM-TAM  
 ‘He did not even go down.’

- (47) **é zînná' wô' láà ...**  
 3SG.SUBJ.TAM go.down-F1 TR\TAM-TAM TM  
 'Since he went down ...' (Bearth 1971: 175)
- (48) **é zîn' nâ' láà ...**  
 3SG.SUBJ.TAM g[o.down]-F1 [g]o.down(or TR)\TAM-TAM 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 **pîlê** 'two', as in (49), can be regarded as similar to the **|-LÁ|**-transposition, as found in (46). That is, in (49) **lê** of **pîlê** 'two' can be regarded as a kind of transposer and **pî** as a transposée almost in the same way as in (46) **nâ** of **zînná** 'go down' functions as a transposer and **zîn** as a transposée. 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.<sup>16</sup>

- (49) **wàâ pî leftu lê**  
 3PL.SUBJ.NEG.TAM t[wo] even [t]wo (= TR)  
 '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 adverbializer, 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|**.<sup>17</sup> 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 find 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 is 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  $|-L\acute{A}|$ -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. **wàâ**                      **pùlê** **leftu.wô**  
           3PL.SUBJ.NEG.TAM    two    even-ADV
- b. **wàâ**                      **pùlê** **leftu wô**  
           3PL.SUBJ.NEG.TAM    two    even    TR\TAM  
           ‘They are not even two/ they are not two at all [but just one].’
- (51) **wàâ**                      **zînná**    **leftu wô**  
           3PL.SUBJ.NEG.TAM    go.down    even    TR\TAM  
           ‘They do not even go down.’
- (52) **wàâ**                      **zîn**        **leftu nâ**  
           3PL.SUBJ.NEG.TAM    g[o.down]    even    [g]o.down(or TR)\TAM  
           ‘They do not even go down.’
- (53) **wàâ**                      **pù**        **leftu lê**  
           3PL.SUBJ.NEG.TAM    t[wo]    even    [t]wo (= TR)  
           ‘They are not even two/ they are not two at all [but just one].’

The plausibility of the hypothesis that it is the  $|-L\acute{A}|$ -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  $|-L\acute{A}|$ -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  $|-L\acute{A}|$ -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  $|-L\acute{A}|$ -transposed verb.

Second, the analogy with the  $|-L\acute{A}|$ -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  $|-L\acute{A}|$ -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,

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17. Note that **wô** in (51) cannot be analysed as an adverbializer even within the limits of this example. Should one do so, one would inevitably have to mark the verb **zînná** ‘go down’ for the same TAM value as that of **wô** in (51), what would result in the form **zînnâ** glossed as ‘go.down\TAM’ instead of the form **zînná** used in (51).

that the case of **lefóólé** ‘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 **pù kini pùlê** ‘only, exactly 2’ developed in a way different from forms like **pù súsú lê** ‘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 **pù kini pùlê** ‘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 wéé pùlê kini pùlê** ‘only, exactly 12’, **\*kùà pùlê kini pùlê** ‘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 **kùà pùlê kini** ‘only, exactly 20 = only, exactly 2 tens’ hardly differs from a phrase like **yílí pùlê kini** ‘only, exactly

2 trees'. Therefore, should a phrase like **yíí pùlê kini pùlê** 'only, exactly 2 trees' ever become possible, then it must be fairly natural, I believe, to expect a phrase like **\*kùà pùlê kini pùlê** 'only, exactly 20 = only, exactly 2 tens' to become possible as well. As to numerals like **buu ni wéé pùlê** '12', first recall that they as a whole represent a coordinative-additive construction (cf. 2), that is **buu ni wéé pùlê** is literally '10 and 2 units'. In such a coordinative-additive construction the last added phrase, such as **wéé pùlê** '2 units' in **buu ni wéé pùlê** '12', does not actually differ from a phrase like **kùà pùlê** '20 = 2 tens', which has been just discussed. Hence, it is also to be expected that a phrase like **\*buu ni wéé pùlê kini pùlê** 'only, exactly 12 = 10 and only, exactly 2' will develop parallelly to a phrase like **\*kùà pùlê kini pùlê** 'only, exactly 20 = only, exactly 2 tens'.

Interestingly, the  $*[\text{Num} + \text{kini} + \text{Num}]$  construction that must have appeared as a result of the development just described bears a striking structural resemblance to the Tura distributive  $[\text{N} + \text{ó} + \text{N}]$  construction, as in **mêê ó mêê** 'whoever, anybody' (where **mêê** is 'person') or **kwíí ó kwíí** 'whatever house, any house'.<sup>18</sup> In particular, **kini** in  $*[\text{Num} + \text{kini} + \text{Num}]$  can be regarded as a kind of linking element similar to the linking element **ó** in the distributive  $[\text{N} + \text{ó} + \text{N}]$  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  $[\text{N} + \text{ó} + \text{N}]$  construction and the operation expressed by a  $*[\text{Num} + \text{kini} + \text{Num}]$  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  $[\text{N} + \text{ó} + \text{N}]$  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  $*[\text{Num} + \text{kini} + \text{Num}]$  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  $*[\text{Num} + \text{kini} + \text{Num}]$  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 **pù kini pùlê** 'only, exactly 2', **\*sáàpù kini sáàpùlê** 'only, exactly 7', **buu ni wéé pù kini pùlê** 'only, exactly 12', **kùà pù kini pùlê** 'only, exactly 20', etc. I dare suppose that the truncation

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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 **mêê ó mêê** ‘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 **kpákpâa** ‘big (plural)’ derived from the word **kpâa** ‘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).<sup>19</sup>

In the forms **\*sáàyà kini sáyàkâ** ‘only, exactly 8’ and **\*sáàyì kini sáyisê** ‘only, exactly 9’ just as in their source forms **\*sâa yâkâ** ‘8’ or **\*sâa yisê** ‘9’ the fusion between **sâa** and **yâ-**, on the one hand, and **sâa** and **yì-**, on the other, took place, what resulted in such split-inserted forms **sâa kini sâakâ** ‘only, exactly 8’ and **sôì kini sôisê** ‘only, exactly 9’. The reconstructed form **\*sâapùì kini sâapùlê** ‘only, exactly 7’ has evolved into two directions: first, by analogy with **sâa kini sâadô** ‘only, exactly 6’, **sâa kini sâakâ** ‘only, exactly 8’ and **sôì kini sôisê** ‘only, exactly 9’ (cf. 5.2) in the form **sâa kini sâapùlê** and, second, by analogy with the **pùì kini pùlê** ‘only, exactly 2’ in the form **sâapùì kini pùlê**.

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 reduplicant is detached from the base by a restrictor inserted between them. For a discussion of an exception in the case of **kûà-dìni** ‘100’ and a certain deviation in the case of the form **sâa kini sâapùlê** ‘only 7’, see Section 5.2.

## 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

19. Note that the tonal change in the case of **kpákpâa** ‘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 **pùì kini pùlê** ‘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 **pùlê** ‘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<sup>20</sup> (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.

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20. The “wordform” here is a translation of the Russian term *slovoforma* which stands for a grammatically fully characterized lexeme.



- (55) **wcz'oraj przysz'edł-em**  
 yesterday arrived-1SG  
 'I arrived yesterday.' (Andersen 1987: 33)
- (56) **wcz'oraj-em prz'yszedł**  
 yesterday-1SG arrived  
 'I arrived yesterday.' (Andersen 1987: 33)

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 “endoclititic” 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 “endoclititic” 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 **ěš** ‘apple’. To my mind, however, there is no need to resort to the notion of endoclititic 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) **äyel-en p'a ěš-ne aq'-e**  
 child-ERGATIVE two apple=3SG take-AORISTII  
 ‘The child took two apples.’ (Harris 2002: 55)
- (58) **äyel-en p'a ěš a-ne-q'-e**  
 child-ERGATIVE two apple take<sub>1</sub>-3SG-take<sub>2</sub>-AORISTII  
 ‘The child took two apples.’ (Harris 2002: 55)<sup>21</sup>

## 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 infixing roots.

21. In (58) I stick to Harris' (2002) glossing conventions of the verb stems with an inserted person as: take<sub>1</sub>-...-take<sub>2</sub>.

Let us start with the forms involving partial distant reduplication, as in **pù kini pùlê** ‘only 2’ vs. **pùlê 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 **pù** in **pù kini pùlê** ‘only 2’, does not normally have a meaning of its own. There are only three exceptions to this generalization: **sàà kini sààdô** ‘only 6’, **sàà kini sààpùlê** ‘only 7’ and **kàin kini kàin-dini** ‘only 100’, where **sàà** and **kàin** 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 categorially 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, **dô kini dò/dô** ‘only 1’ and **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 **dô kini dò/dô** ‘only 1’ are more strongly bound to each other than in the case of **buu kini buu** ‘only 10’, as the tone lowering in the reduplicant in **dô kini dò/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 **buu** in **buu kini buu** ‘only 10’ can also be analysed as being simply in apposition to an ordinary [numeral + restrictor] combination, **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<sup>22</sup> undergoes split-insertion without reduplication, as in **pù súsú lê** ‘always 2’ vs. **pùlê súsú** ‘al-

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22. That is, a simple numeral root, such as **pùlê** ‘2’, or a numeral compound, such as **sààpùlê** ‘7’ and not a phrase like **kùà pùlê** ‘20’. For more details, see Section 2.

ways 2'. I believe that, similarly to the cases involving reduplication, such a [numeral + restrictor] combination is best analyzed as one wordform with an infixal 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 **pù** in **pù súsú lè** 'always 2', nor its right part, such as **lè** in **pù súsú lè** 'always 2', has any meaning of its own.

There seem to be only two exceptions, the numerals **sáàdô** '6' and **sáàpùlè** '7', for which the forms like **sáà súsú dô** 'always 6' or **sáà súsú pùlè** 'always 7' are found. In these forms **sáà**, **dô** and **pùlè** can be attributed a meaning of their own: '5 (plus)', '1' and '2', respectively. What is more, the relations between **sáà** and **dô** and **sáà** and **pùlè** 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 **sáà súsú 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, **súsú** 'always' would be a shared constituent of **sáà** '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 **kùà yàkà (ni) wéé pùlè** '32 = 30 (and) 2', a restrictor can never be inserted between the coordinated parts. That is, forms like **\*kùà yàkà súsú wéé pùlè** 'always 32' are impossible (cf. Tables 1–4). Second, in a [[modified<sub>1</sub> + modifier<sub>1</sub>] + and + [modified<sub>2</sub> + modifier<sub>1</sub>]] construction only reduction of the first modifier<sub>1</sub> can be possible without any change in the overall meaning. Consequently, should one accept the word-combination analysis of a form like **sáà súsú 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 **pù súsú lè** 'always 2'.

Let us now consider the cases where the forms like **pù súsú lè** 'always 2' or **pù lefu lè** '(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 **zinná** 'go down', and a predicatively used split-inserted [numeral + restrictor] combination, such as **pù lefu lè** '(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 **pù lefu lè** '(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 **lê** of **pîlê** ‘2’ as a kind of transposer and **pîi** as a transposée, almost in the same way as in (59 = 52) **nâ** of **zînnâ** ‘go down’ functions as a transposer and **zîn** as a transposée. 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 **pîi**, **leftu** and **lê** are related by the same syntactic relations as the elements **zîn**, **leftu** and **nâ** in (59) and ultimately by the same syntactic relations as the wordforms **zîn**, **leftu** and **wô** in (61), that is as a transposée, its modifier and a transposer, respectively.<sup>23</sup> (Note that the transposer **wô** is the syntactic head of the whole construction). Moreover, one has to admit that structurally **pîi** and **lê** are wordforms as well. The only difference is that the transposée **pîi** and the transposer **lê** 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 *quasiword(form)s* or *pseudoword(form)s*.<sup>24</sup>

- (59) **wââ**                      **zîn**              **leftu** **nâ**  
 3SG.SUBJ.NEG.TAM    g[o.down]    even    [g]o.down(or TR)\TAM  
 ‘He does not even go down.’
- (60) **wââ**                      **pîi**    **leftu** **lê**  
 3PL.SUBJ.NEG.TAM    t[wo]    even    [t]wo (= TR)  
 ‘They are not even two/ they are not two at all [but just one].’
- (61) **wââ**                      **zîn**    **leftu** **wô**      [**â** **bhâ**]  
 3PL.SUBJ.NEG.TAM    touch    even    TR\TAM    3SG    on  
 ‘They do not even touch [it].’

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 **sââ súsú pîlê** ‘always 7’ or **kûâ súsú pîlê** ‘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 *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 quasiwordforms 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.<sup>25</sup> In other words, a pseudomorpheme is formally, morphosyntactically and morphologically 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.<sup>26</sup> 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  $\text{ə}$  which is used to derive nominalized forms of verbs, as in  $\text{la}^2$  ‘to come’  $\rightarrow$   $\text{ə-la}^2$  ‘coming, arrival’. In the case when the verb is a compound, the affix  $\text{ə}$  can be attached either to the word as a whole or to each of its roots. Thus, for the verb  $\text{ne}^2\text{-t'aiŋ}^2$  ‘to live’, which is a compound consisting of the verb  $\text{ne}^2$  ‘to live; to reside’ and the verb  $\text{t'aiŋ}^2$  ‘to sit’, two nominalized forms are possible,  $\text{ə-ne}^2\text{-t'aiŋ}^2$  or  $\text{ə-ne}^2\text{-ə-t'aiŋ}^2$  ‘life, living’. In the case of a simple but disyllabic verb, such as  $\text{h'o}^3\text{sa}^3$  ‘to try’, the affix  $\text{ə}$  is attached in the same way as in the case of a compound verb, such as  $\text{ne}^2\text{-t'aiŋ}^2$  ‘to live’, namely both a form like  $\text{ə-h'o}^3\text{sa}^3$  and a form like  $\text{ə-h'o}^3\text{-ə-sa}^3$  ‘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  $\text{la}^2$ ,  $\text{ne}^2$  and  $\text{t'aiŋ}^2$ , or not, as in the case of  $\text{h'o}^3$  and  $\text{sa}^3$ .

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 “syllabomorphemic” languages (Kasevich 1988: 171). As far as Tura is concerned, it is clearly not syllabomorphemic as such. At the

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 *zi*, 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] combinations involving split-insertion. Only one type of such constructions has not been discussed so far, namely the forms like **kûà súsú pùlê** ‘always 20’, where the restrictor is inserted between the constituents of a quantified-quantifier numeral phrase (see Section 2 for a discussion of the phrasal status of forms like **kûà pùlê** ‘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 **pùlê súsú lê** ‘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 **kûà súsú pùlê** ‘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 persistence 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 exceptional morphosyntactic behaviour of Tura numerals and restrictors. In particular, 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 constructions at issue made it necessary to address some theoretical questions, such as endoclysis, word integrity, and constancy of the morphological status of linguistic entities. I have tried to show that there is no need for the notion *endoclysis* provided we simply assume that a given linguistic element does not necessarily 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 infixes 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

ADV	adverbializer	NEG	negation
DIM	diminutive	PL	plural
F1	selective, counter-presuppositional or argumentative focalisation (see Bearth 1987–1988)	PM	predicative marker
F2	counter-inferential focalisation (see Bearth 1987–1988)	POSS	possessive marker
GB	Gilbert Bakayoko (informant)	SG	singular
GM	Goh Soupou Mardoché (informant)	SUBJ	subject
L	grammatical low tone	TAM	tense-aspect-modality
		TM	terminal marker (marks certain type of clauses)
		TR	“transposer” (see Note 8)

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