# METATHESIS AND THE QUEST FOR DEFINITENESS IN THE LETI OF TUTUKEI (EAST-INDONESIA) 

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## 1. NNTRODUCTION $^{1}$

In van Engelenhoven (1991) I presented a preliminary report on the morphophonological linking devices Apocope and Metathesis (A\&M) in the Tutukei communalect of the Leti language. ${ }^{2}$ As was demonstrated, A\&M appears to be of major importance in the morphological and syntactic processes of this language.

Besides its morphophonological aspect, the syntactic consequences of A\&M especially were discussed. The concatenation of grammatical words across phrase boundaries and its effects on the status of the phonological word considerably hampered constituent analysis in 1991. Several syntactic types of A\&M were described and it was suggested that they exhibited different kinds of incorporation. The A\&M rules are summarised in Appendix 2.

In this paper I intend to answer two questions:

1. Why do grammatical words concatenate?
2. What is the function of the indexer in concatenation?

## 2. THE INDEXER

In van Engelenhoven (1994) an 'indexing suffix’ (indexer, glossed DEX) /e/ was introduced. The indexer marks definiteness of clause constituents and is restricted to stems with final $/ \mathrm{a}$. It is mutually exclusive with the final suffix $\{0\}$ on the sentence-final constituent which marks the indicative mood (IND). ${ }^{3}$
(1)

| a. I:na? | (A) fish? |
| :--- | :--- |
| b. ian-o | (a) fish |
| c. I:n-e? | The fish? |
| d. i:n-e | the fish |

[^0]It is incompatible with stems that have a final high vowel. Here it is the absence of the final suffix which indicates that the sentence-final word is definite:
(2)
a. ßatu?
(A/the) stone?
b. ßatu-o
(a) stone
c. Batu
the stone

On both transitive and intransitive verbal phrases (VPs) the indexer indicates 'verbal definiteness'. ${ }^{4}$ This is exemplified by the intransitive verb ntißla 'it flaps' (3a) versus its indefinite counterpart (3b):
a. Ntißl-e. It flaps.
b. Ntißal-o. It kind of flaps.

Indexer inflection of transitive VPs signals ellipted or dislocated objects:
(4) Ro:n-e. They eat (it).

Indexer inflection is attested with all kinds of stems, ${ }^{5}$ except with $\beta a \beta a$ 'to be named', mana 'because', masialo 'it ought' and lexicalised verb + clitic constructions such as: ${ }^{6}$
a. N-kak=la-e.

3SG-grasp=go-DEX
He grasps it.
b. *N-kak-e la-e

3SG-grasp-DEX go-DEX
Human nouns can be marked for plurality by/ra/ which requires an indexer: ${ }^{7}$

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N-kak=la pụat-era.
3SG-grasp=go woman:DEX-PL
He grasps the women.
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N-kak=la mụani-ra.
3SG-grasp=go man:DEX-PL
He grasps the men.
Plurality is inflected on the predicator rather than on the subject, exemplified below by puat-e 'the woman/women' (8a). In order to be inflected with the plural suffix, the subject must be dislocated (8b):
a. Puat-e r-o:n-e i:n-e.
woman-DEX 3PL-eat-DEX fish-DEX
The women eat the fish.

[^1]$\begin{array}{lll}\text { b. Puat-er=de } & r-0: n-e & \text { i:n-e. } \\ \text { woman:DEX-PL=END } & \begin{array}{l}\text { 3PL-eat-DEX } \\ \text { fish-DEX }\end{array}\end{array}$
The women, they eat the fish.

## 3. ADHESION, COHESION AND INCORPORATION

### 3.1 ADHESION: LINKING AT THE PHRASE LEVEL

Adhesion refers to the obligatory linking of unequal elements in a phrase, for example, Noun=Modifier=Adverb:
$R$-э:n-e ian=memetam=daßr-e $\beta$ ali-o.
3PL-eat-DEX fish=black=vicious-DEX also-IND They eat the very black fish also.
a. N- $\beta$ ali
$\beta a t \approx m \approx u=\varepsilon \pi m \varepsilon r=1 a \beta a r t e s i$ salmek-o.
3SG-turn:DEX stone $\approx$ red=extreme:DEX already-IND He turns the reddest stone already.

Equal phrase constituents, for example two adjectives, are apposed and have in principle indexer inflection:
b. $N$ - $\beta$ ali $\quad \beta a t \approx m \approx u \approx \varepsilon \pi m \varepsilon r-e \quad$ lalaßn-e salmek-o. 3SG-turn:DEX stone $\approx$ red-DEX big-DEX already-IND
He turns the red, big stone already.
To specify the (in)definiteness of the apposed adjectival NP, it is placed in an embedded clause by adding an endophoric subject:

He turns the red stone which is big already. (lit. He turns the red stone, it is a big one, already.)
d. N-ßali $\quad \beta a t \approx m \approx u \approx \varepsilon r m e r-e \quad$ lalaßan=de salmek-o. 3SG-turn:DEX stone $\approx$ red-DEX [big=END] already-IND
He turns the red stone which is biggish already. (lit. He turns the red stone, it is a biggish one, already.)

### 3.2 COHESION: LINKING AT THE CLAUSE LEVEL

With cohesion is meant the linking of clause constituents. Cohesion is triggered when the host constituent is indefinite and blocked when it is definite. Example (11) concerns stems with final $/ a /$ which may exhibit indexer inflection to signal definiteness; example (12) concerns stems with final high vowels where definiteness is indicated by absence of A\&M.

In (a) all constituents are indefinite which results in cohesion between the VP, the object and the adverbial phrase:
(11) a. R-כ:n=ian= $\beta$ ali-o.

3PL-eat=fish=also-IND
They kind of eat a fish also.
(12) a. $N-\beta a l \approx \beta \approx i \approx a s \approx s \approx u \approx a l m \varepsilon k-o .8$

3SG-turn $\approx$ stone $\approx$ already-IND
He kind of turns a stone already.
In (b) the VP is 'definite' and thus case blocks cohesion. The object is still indefinite and coheres to the adverb, respectively $\beta$ ali 'also' and salmeka 'already':
(11) b. $R$-э:n-e ian= $\beta$ ali-o.

3PL-eat-DEX fish=also-IND
They eat a fish also.
(12) b. $N$ - $\beta$ ali $\quad \beta a s \approx s \approx u \approx a l m \varepsilon k-o$.

3SG-turn:DEX stone $\approx$ already-IND
He turns a stone already.
In (c) the VP is 'indefinite' and therefore coheres to the object. The object itself is definite and does not cohere to the adverb:
(11)
c. $R-כ: n=i: n-e$ $\beta$ ali-o.
3PL-eat=fish-DEX also-IND
They kind of eat the fish also.
c. $N-\beta a l \approx \beta \approx i \approx a t u \quad$ salmok-o.
3SG-turn $\approx$ stone:DEX already-IND
He kind of turns the stone already.

In (d) the VP and the object are both definite and none of the phrases are linked:
(11) d. R-o:n-e i:n-e $\quad \beta$ ali-o.

3PL-eat-DEX fish-DEX also-IND
They eat the fish also.
(12) d. N- $\beta$ ali $\beta$ atu salmek-o.

3SG-turn:DEX stone:DEX already-IND
He turns the stone already.
Cohesion does not occur between a predicate and a preceding subject:
(13) Lara n-tißal-o.
sail 3SG-flap-IND
A sail kind of flaps.
In equational clauses nouns are preferred as subjects over pronouns: ${ }^{9}$
(14) $\beta$ atu sai-o.
stone:DEX this-IND
This is the stone. (lit. The stone is this.)
(15) a. Mak-den=Nuß $\beta \beta$-e-ra ir-o.
[REL-stay=Nuwewang]-DEX-PL they-IND
They are the Nuwewangese. (lit. The ones who stay in Nuwewang are they.)

[^2]b. Mak-den=Nuß $\beta$ n $=i r-$.
[REL-stay=Nuwewang]=they-IND
They are Nuwewangese. (lit. Who stay in Nuwewang are they.)
Precliticisation of pronouns to intransitive verbal predicates indicates dynamic situations and allows indexer inflection (16a) versus its unindexed counterpart (16b):
(16)
a. Ha^na-pperat-e.
this 3 3SG-heavy-DEX
This becomes strong.
b. Ha~na-pperat-o.
this 3 3SG-heavy-IND
This is kind of strong.
To refer to stative situations, the VP is nominalised by means of possessive suffixation or demonstrative determination. Both are mutually exclusive with indexer inflection. Possessive suffixation signals absolute states. ${ }^{10}$ Note the predicative pronoun in the following example due to the nominal subject rule in equational clauses described above:
(16)
c. Pperat-ne sai-o.
heavy-POSS this-IND
This is heavy. (lit. Its heaviness is this.)
Demonstrative determination indicates contingent states:
d. Na-pperas=sai-o.
[3SG-heavy=this]-IND
This is heavy (for the moment) (lit. he being heavy here).

### 3.3 INCORPORATION

In van Engelenhoven (1991) cohesion was wrongly interpreted as a kind of incorporation. Incorporation refers to the phenomenon of combining two lexical morphemes, a verb and a noun, into a single nominal compound. It has been attested only with transitive verbs which accept the nominalising infix (NOM). ${ }^{11}$ When nominalised these verbs can be placed in an oblique phrase where concatenation of former objects is obligatory. This construction has a progressive aspectual meaning: ' X is/are at [...]'.
a. R-ela i-o:n-ian= $\beta$ ali-o.

3PL-be.at [NOM-eat-fish]=also-IND
They are kind of eating fish (lit. fish-eating) also.

| b. $R$-ela $\quad$ i-o:n-i:n-e | $\beta a l i-o$. |
| :--- | :--- |
| 3PL-be.at |  |
| [NOM-eat-fish]-DEX |  |
| They are eating fish also. |  |

[^3](18)

> a. $N$-ela $\quad \beta$-ni-al $\sim \beta \sim i \sim a s \approx s \approx u \approx a l m \varepsilon k-o$.
> 3SG-be.at $[\mathrm{NOM}$-turn $\sim$ stone $\approx \approx$ already-IND
> He is kind of tuming stones (lit. stone-turning) already.
b. N-ela $\beta$-nị-al~ $\beta \sim i \sim a t u \quad$ salmek-o.

3SG-be.at [NOM-turn~stone]:DEX already-IND
He is turning stones already.
Constructions exhibiting incorporation do not allow adverbial emphasis: the insertion of a clause-final adverb into the VP. In this case the adverb no longer modifies the entire clause but only the VP which is then focused. In the following example the adverb salmeka 'already' is inserted at the end of the VP. Note, that the verb $\beta$ ali 'to tum' and the adverb exhibit A\&M (adhesion, see §3.1), and, that 'verbal definiteness' is indicated through indexer inflection on the adverb (18c) versus its unindexed counterpart where the object $\beta$ atu 'stone' coheres to the predicate (18d):
(18) c. $N$ - $\beta a l \approx s \approx i=a l m \varepsilon k-e \quad \beta a t u-o$.

3SG-turn $\approx$ already-DEX stone-IND
He already turns a stone.
d. $N-\beta a l \approx s \approx i \approx a l m \varepsilon k=\beta a t u-o$.

3SG-turn $\approx$ already=stone-IND
He already turns a stone kind of.

## 4. CONCLUSION

It has been shown, that A\&M, the main linking device on the word level (19a), is also used on the phrase level (= adhesion) (19b), and the clause level (= cohesion) (19c):
(19) a. rai 'continent' + laßna '(to be) big' => Ra~1~i $\sim a \beta n a ~ ' T i m o r ' ~$
b. $\quad$ г $a+$ lalaßna 'big' $=>~ r a \approx l \approx i \approx a l a \beta n a$ 'big continent'
c. Ralia $\beta$ na 'Timor' $+\beta$ ali 'also' + sai 'this' =>

Ralịa $\beta$ an $=\beta a l \approx s \approx i \approx a i$ (Timor=also $\approx$ this)? Is this also Timor?
Adhesion differs from cohesion in that the first indicates shared phrase membership of linked constituents ( $\S 3.1$ ), whereas the latter signals indefiniteness of clause constituents (§3.2). Incorporation is restricted to certain verbs which use the nominalising infix to mark the progressive aspect (§3.3).

The discourse conditions which trigger cohesion need further investigation. Thus far, the collected text material suggests that cohesion is obligatory in sentence-initial clauses which summarise the content of the preceding paragraph. Cohesion must not be interpreted as a kind of truncation, which is an accidental feature of inaccurate or fast speech where the final vowel of a root or phonological word is deleted. Unlike cohesion, which explicitly indicates indefiniteness, truncation does not have sandhi and is ambiguous for definiteness (i.e. truncation rather blocks A\&M). ${ }^{12}$

[^4]R-כ:n' i:n' $\beta$ ali-o.
3PL-eat fish also-IND

1. They eat $\mathrm{a} /$ the fish also.
2. They kind of eat a/the fish also.

N- $\beta a l$ ' $\beta a t$ ' salmek-o.
3SG-turn stone already-IND

1. He turns a/the stone already.
2. He kind of turns a/the stone already.

## APPENDIX 1: ABBREVIATIONS AND SYMBOLS

| - | apocope, internal metathesis on the morpheme level |
| :---: | :---: |
| $\sim$ | extemal metathesis on the morpheme level |
| = | apocope, internal metathesis on the phrase/clause level |
| $\approx$ | external metathesis on the phrase/clause level |
| $\sim$ | cliticisation without A\&M |
| : | not overtly marked semantic element X |
| i | glide |
| [] | phrase boundary |
|  | truncation |
| => | triggers, becomes |
| A\&M | Apocope and Metathesis |
| DEX | indexer |
| END | endophora |
| IND | indicative |
| NOM | nominalising infix |
| PL | plural |
| POSS | possessive |
| REL | relative |
| SG | singular |

## APPENDIX 2: A\&M RULES

The following chart illustrates the changes in the host component $(\mathrm{X})$ if followed by a guest component (Y) ${ }^{13}$ which does not begin with a consonant cluster (CC) or a consonant followed by a glide (CÇ). Each structural type is followed by an example. V in guest components can also be read as V .. In the final column host and guest component intertwine. The change of a high vowel into the corresponding glide has not been indicated in the structural type notation, as it is a predictable correlate of stress (van Engelenhoven 1995). The feature [ $\pm$ high] refers to the immediately preceding vowel.

[^5]| initial part of Y | V[-high] |  | V[+high] | ÇV | $\mathrm{C}_{3} \mathrm{~V}_{3}$ [+high] | $\mathrm{C}_{3} \mathrm{~V}_{3}$ [-high] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| final part of X | suffix /o/ | $\begin{aligned} & \mathrm{E} \text { E:LU 'Eul, Eulan } \\ & (\mathrm{X})^{\prime} \end{aligned}$ | UNA 'base, trunk (of X)' | UETRA 'Wetar, Wetarese (X)' | DI 'the (X) now' | DE 'the (X) once' |
| $\mathrm{V}_{1} \mathrm{a}$ | $V_{1}$ |  |  |  |  |  |
| LPIA 'k.o. tree' | Ipi-o | lpi-e:lu | Ipi-una | lpi-uetra | lpi-di | lpi-de |
| $\mathrm{V}_{1} \mathrm{C}_{1}{ }^{\text {a }}$ | $\mathrm{V}_{1} \mathrm{C}_{1}$ |  |  |  |  |  |
| ORA 'bamboo' | or-o | or-e:Iu | or-una | or-uetra | or-di | or-de |
| $\mathrm{V}_{1}: \mathrm{C}_{1} \mathrm{a}$ | $\mathrm{V}_{1} \mathrm{aC}_{1}$ | $\mathrm{V}_{1}: \mathrm{C}_{1}$ |  | $\mathrm{V}_{1} \mathrm{aC}_{1}{ }^{14}$ |  |  |
| VU:RA 'mountain' | vuar-o | vu:r-e:lu | vu:r-una | vuar-uetra | vuar-di | vuar-de |
| $\mathrm{C}_{1} \mathrm{C}_{2} \mathrm{a}$ | $\mathrm{C}_{1} \mathrm{aC}_{2}$ | $\mathrm{C}_{1} \mathrm{C}_{2}$ |  | $\mathrm{C}_{1} \mathrm{aC}_{2}$ |  |  |
| UPRA 'k.o. tree' | upar-o | upr-e:lu | upr-una | upar-uetra | upar-di | upar-de |
| $\mathrm{V}_{1} \mathrm{~V}_{2}[+$ high] | $\mathrm{V}_{1} \mathrm{~V}_{2}$ |  | $\mathrm{V}_{1}$ |  |  | $V_{1} \sim C_{3} \sim V_{2} \sim V_{3}$ |
| KIU 'k.o. tree' |  |  | ki-una | ki-uetra | ki-di | ki~d~u~e |
| $\mathrm{V}_{1} \mathrm{C}_{1} \mathrm{~V}_{2}$ [ + high] |  |  | $\mathrm{V}_{1} \mathrm{C}_{1}$ |  |  | $\mathrm{V}_{1} \mathrm{C}_{1} \sim C_{3} \sim V_{2} \sim V_{3}$ |
| PELI 'kapok' | peli-o | peli-e:lu | pel-una | pel-uetra | pel-di | pel $\sim$ d~i~e |
| $\mathrm{a}: \mathrm{C}_{1} \mathrm{~V}_{1}[+$ high] | $\mathrm{aV}_{1} \mathrm{C}_{1}$ | $\mathrm{a}: \mathrm{C}_{1} \mathrm{~V}_{1}$ | $\mathrm{a}: \mathrm{C}_{1}$ | $\mathrm{aV}_{1} \mathrm{C}_{1}$ |  |  |
| $\begin{aligned} & \text { KA:MI MI } \\ & \text { 'k.o. tree' } \end{aligned}$ | kaim-o | ka:mi-e:lu | ka:m-una | kaim-uetra | kaim-di | kaim-de |
| $\begin{aligned} & V_{1}: C_{1} V_{2} \\ & \left(V_{1,2}=[+h i g h]\right) \end{aligned}$ | $\mathrm{V}_{1} \mathrm{~V}_{2} \mathrm{C}_{1}{ }^{15}$ | $\mathrm{V}_{1}: \mathrm{C}_{1} \mathrm{~V}_{2}$ | $\mathrm{V}_{1}: \mathrm{C}_{1}$ |  |  |  |
| NU:NU 'banyan' | nu:n-o | nu:nu-e:lu | nu:n-una | nu:n-uetra | nu:n-di | nu:n-de |
| $\mathrm{C}_{1} \mathrm{C}_{2} \mathrm{~V}_{1}$ [+high] | $\mathrm{C}_{1} \mathrm{~V}_{1} \mathrm{C}_{2}$ | $\mathrm{C}_{1} \mathrm{C}_{2} \mathrm{~V}_{1}$ | $\mathrm{C}_{1} \mathrm{C}_{2}$ | $\mathrm{C}_{1} \mathrm{~V}_{1} \mathrm{C}_{2}$ |  |  |
| URNU 'breadfruit tree' | urun-o | urnu-e:lu | urn-una | urun-uetra | unun-di | urun-de |

[^6]
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[^0]:    1 Fieldwork was carried out on Leti Island in 1989 and 1990 under the auspices of the Indonesian Institute of Sciences (L.I.P.I. no. 4917/S.K./1989) in the framework of the author's research for his doctoral dissertation which was financed by the Netherlands foundation for the advancement of tropical research (W.O.T.R.O; grant no.W38-51). I thank Dr G. Reesink and Dr H. Steinhauer for their useful comments on earlier drafts of this paper which was read at the Second Intemational Maluku Research Conference, Honolulu, July 29 - August 1.
    2 Spoken on the island with the same name off the easternmost tip of Timor in the south-western Molucca Islands.
    3 Examples (1) and (2) are minimal clauses that constitute comments on an extra-linguistic topic: '(It is)...'.
    H. Steinhauer, ed. Papers in Austronesian linguistics No.3, 207-215.

    Pacific Linguistics, A-84, 1996.
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[^1]:    4 This is a tentative label parallel to indexer inflection on noun phrases (NPs). For a discussion, see van Engelenhoven (1993, 1994, 1995). For the time being verbal indefiniteness will be indicated here in the glosses by 'kind of.
    5 In Rumkeser and its dependency Riskei where the bulk of the research was done, meka 'only' was never inflected with an indexer. I did attest mek-e with informants from eastern Tutukei. It is still unclear whether the Rumkeser-Riskei case is to be considered as a kind of western sociolect anomaly or not.
    6 For abbreviations and symbols used in this paper see Appendix 1.
    7 Although /ra/ is suggested as a segment of a bisyllabic -Vra suffix in van Engelenhoven (1995), the analysis of an indexer + plural suffix combination (van Engelenhoven 1993) is preferred here.

[^2]:    8 Tutukeian Leti has an optional sandhi rule $\iota>s I_{\text {_ }} s$.
    9 Endophoric subjects are restricted to apposed clauses as discussed in $\S 3.1$ (see examples 10 c and d).

[^3]:    10 The terms absolute and contingent state have been adopted from Comrie (1981:103-104).
    11 The nominalising morpheme has five allomorphs which are partly phonologically and partly lexically conditioned. In the examples given it occurs as either the infix -ni- or the prefix $i-$. I refer to van Engelenhoven (1995) where it is discussed at length.

[^4]:    12 Leti does not allow a sequence of more than two consonants. In the case of VCCV\#CV, V:CV\#CCV and VCV\#CCV truncation is thus automatically blocked.

[^5]:    13 By guest component and host component are meant, respectively, the rightside morpheme and the leftside morpheme between which A\&M takes place.

[^6]:    14 If $\mathrm{V}_{1}=\mathrm{a}$, then $\mathrm{V}_{1} \mathrm{a}>\mathrm{a}$ : (e.g. la:ra 'sweet sop' + uetra $>$ la:r-uetr).
    15 If $V_{1}=V_{2}$, then $V_{1} V_{2}>V_{1}$ :.

