

# MORPHEMIC METATHESIS IN DAWANESE (TIMOR)

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## 1. INTRODUCTION

### 1.1 AIM AND SCOPE

In current introductions to general linguistics and inventories of possible morphological processes metathesis tends to be overlooked. In one of his contributions, to Greenberg's series on *Universals of human language*, entitled "A typological view of metathesis", Russell Ultan (1978) points to the fact that metathesis as a historical process is less sporadic and more widespread than is generally assumed. As a synchronic, morphological process, however, the phenomenon seems to be quite restricted. The only examples Ultan (pp.377, 380) indicates are Sierra Miwok, where it is related to the patterning of short and long syllables within the word, and Rotuman, where "completive" versus "incompletive" forms of the verb are marked by inversion of final CV<sub>2</sub>/V<sub>1</sub>\_ if V<sub>2</sub> is more sonorous than V<sub>1</sub>. To his Rotuman example (*leka* (completive) versus *leak* or *lyak* (incompletive) 'go') Ultan (p.377) adds the remark that "this type of metathesis appears to be fairly common in AUSTRONESIAN" and that "among others it is also found in KWARA'AE, ROWA and KUPANGESE".

In his contribution to the Third International Conference on Austronesian Linguistics Don Laycock (1982) presents some data from Austronesian languages concerning metathesis. His main aim is to describe and explain the historical process of metathesis as it appears in Ririo (Western Solomon Islands), but other languages are mentioned in passing. Most of his examples represent diachronic phenomena, but he also adduces two cases of synchronic metathesis. Besides Rotuman, "the classic citation for AN metathesis" (Laycock 1982:272), he briefly discusses Timorese<sup>1</sup> in this connection. He gives (p.269) 17 word pairs excerpted from Middelkoop (1950), not always with a correct translation of the contextless Dutch glosses in this source. To this list Laycock (p.270) adds the comment that "Middelkoop provides no further information, or data", but he infers that "the difference between the forms is syntactic". In an addendum to his paper, however, he quotes 10<sup>1</sup>/<sub>2</sub> word pairs from

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<sup>1</sup> The language has been known as Timorese since Jonker (1906). In later sources the name 'Dawanese' (*Bahasa Dawan*) is used. According to speakers along the border with the Tetun-speaking area it is a derogatory exonym, used by Tetun speakers. They therefore prefer 'Timorese'. Other speakers, including my main informant, object to this term, however, since it would include Tetun and other languages. The term 'Atoni' as name of the language is likewise rejected by Dawanese, since it means 'man, human being' in their language. According to footnote 18 on the reverse of map 40 in Wurm and Hattori (1983) the language is known as 'Vaikenu' or 'Ambenu' in the former Portuguese enclave in West Timor, while otherwise "the people themselves refer to their language as *uab atoni pah meto* 'the language of the people of the dry land'". However, following my main informant (who also acknowledges the endonym *quab meto* 'dry language') and current Indonesian usage I adopt the term 'Dawanese'. (For typographical reasons I use *q*, /*q*/ and [q] throughout this paper to indicate glottal stop.)

fieldnotes by R.A. Blust on "Atoni (Timorese)", 6<sup>1</sup>/<sub>2</sub> of which show metathesis. He further adds (p.279) Blust's comment that "the metathesised forms are to be regarded as 'normal' speech, the underlying forms as 'careful speech', with no syntactic difference between them". Laycock does not indicate which dialect Blust took his fieldnotes from (some of his forms differ from mine), but in the dialect which I had access to metathesis is systematic, and fulfilling (as Laycock assumed) a clear syntactic function.

I was put on the track of metathesis by Aone van Engelenhoven, who, in a paper written in 1987 but only recently published (Engelenhoven 1995) presents evidence for a close relationship between the Austronesian languages of the south-western islands of the Moluccas and of Timor, while in an unpublished paper written at the same time (Engelenhoven 1987) he demonstrates the all-permeating character of metathesis in Letinese phrase structure. His contribution to this volume shows that Letinese qualifies to replace Rotuman as the classic citation for Austronesian metathesis; Dawanese does not lag far behind.

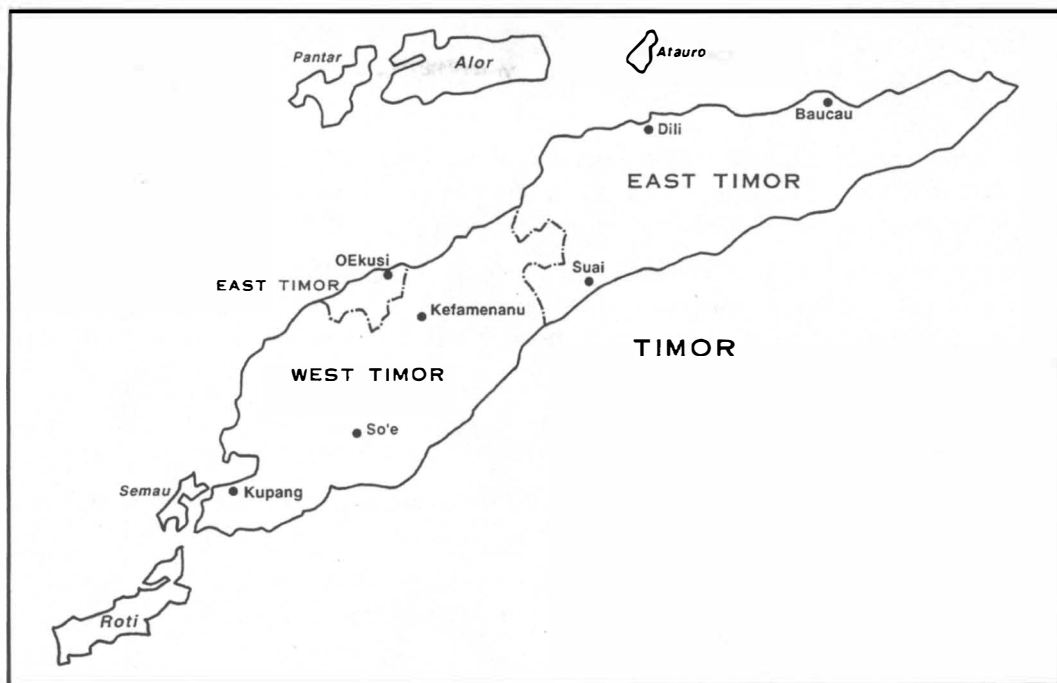
As metathesis in Dawanese is closely related to other morphological processes, a complete picture of its function would require a total description of Dawanese morphology. However, that would obviously exceed the scope of this paper, which is a first report on ongoing research. There are still quite a lot of aspects in Dawanese morphology, especially verbal morphology, which I do not even partially understand.<sup>2</sup> Therefore, I shall confine myself to a few general observations on metathesis in Dawanese, while presenting a more detailed picture on nominal morphology. Given the uncertain nature of the spelling and phonemic analyses in all previous studies, the discussion on morphology has to be preceded by some introductory remarks on the phonology of the Nilulat dialect (see §2).

## 1.2 DAWANESE

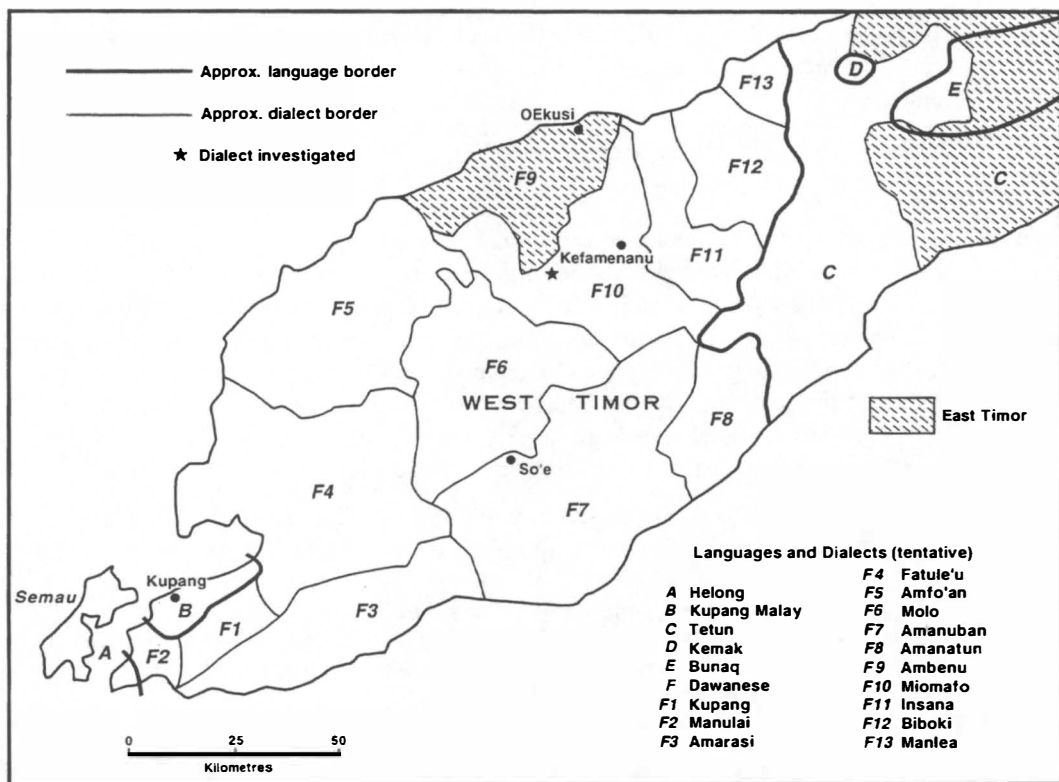
Dawanese is spoken by the inhabitants of the East Timorese enclave OEKusi [qpe kusi] in West Timor and by the majority of the West Timorese. The estimated number of speakers varies in recent sources between "approximately" 514,096 speakers (Bait et al. 1988:9), around 600,000 (Tarno et al. 1989:1; Sanga 1990:96), 650,000 (Wurm & Hattori 1983, map 40), and over 750,000 (Sanga 1989:ii). The figure of Wurm and Hattori seems to be a reasonable average. Census figures of 1980 show that the percentage of the population of the province of Nusa Tenggara Timur (which includes West Timor) which does not know Indonesian is above the national average. It seems to be a fair guess therefore that 30 - 40 per cent of the adult Dawanese are (still) monolingual.

Dawanese borders in the East on Tetun, and in the West on Kupang Malay and Helong (see Wurm and Hattori (1983, map 40) and the two maps in this paper). Along the old main road between Kupang and the Dutch colonial strongholds in the interior, speakers of Rotinese (and of Kupang Malay) form a majority or at least a considerable minority in the larger settlements. With the opening up of the interior following the Indonesianisation of East Timor the influence of Kupang Malay and Standard Indonesian is growing.

<sup>2</sup> This paper was originally written in April 1991 and slightly revised a few months later. Since then I have been able to collect more data on the verbal system, resulting in Steinhauer (1993).



MAP 1: THE TIMOR AREA



MAP 2: LANGUAGES AND DIALECTS OF WEST TIMOR

The language is divided into several dialects, which according to all sources are mutually understandable. The number and specification of the dialects in the various sources differ, however.<sup>3</sup>

Middelkoop (1950) does not give a list of dialects, but words and constructions in his grammar which are deviant or special according to unspecified criteria are indicated as Amarasi, Amanatun, Amanuban, Fatule'u, Ro'ic,<sup>4</sup> Molo and Amfo'an.

Sanga (1990:96) distinguishes eleven ethnic groups apparently based on administrative criteria: Amarasi, Fatuleu, Amfoang, Amanuban, Amanatun, Molo, Miomafo, Insana, Biboki, Manlea and Ambanu (instead of Ambenu); it is not clear whether there are (also) linguistic criteria for his division.

Most authors mention ten dialects: Bait et al. (1988:249) distinguish: Amarasi, Amanuban, Amanatun, Manulai, Kupang, Miomafo, Manlea, Insana, Biboki and Molo.

Tarno et al. (1989:1) present the following specification: Biboki, Malea (for Manlea apparently), Molo, Amanatun, Amanuban, Miomafo, Amarasi, Kupang and Manulai.

Kusi (1990:15) mentions "sejumlah dialek...seperti:" (a number of dialects...such as:) Amarasi, Amfoan, Amanuban, Amanatun, Molo, Miomafo, Insana, Biboki, Manlea and Ambenu.

Talul (1988:2) only discusses the dialects of the regency of North Central Timor, where he distinguishes "three broad dialects...Biboki, Insana and Miomaffo".

Wurm and Hattori (1983, map 40) distinguish only seven dialects: Amarasi, Amfoan-Fatuleu-Amabi, Amanuban-Amanatun, Mollo-Miomafo, Biboki-Insana, Ambenu (Vaikenu) and Kusa-Manlea.<sup>5</sup>

### 1.3 SOURCES

Given the number of sources available today, Dawanese can claim to be one of the better languages of the area studied. However, none of these sources should be consulted without reservation. Capell (1944-45) presents data from various languages, among them Dawanese (called West Timorese), which are mainly of a comparative nature. Speaking of Rotinese and Helongese (called the language of Kupang) he observes (1945:28) that "phonetically, the most outstanding is the habit of inverting the last vowel and consonant of a word"; the examples he gives "are isolated words relatively few in number, whereas in...W[est] T[imorese]...it is possible to invert on a much larger scale and to a certain extent at will".

The first description of Dawanese (Middelkoop 1950) suffers from a serious lack of structure and of structuralism. The author's approach is one of free association. In many

<sup>3</sup> In the following survey I use the spelling applied by the various authors.

<sup>4</sup> The original Dutch is 'Ro'isch'. I have not been able to identify this dialect. Given the *r* in the name of the dialect, it must be either in the neighbourhood of Kupang (Amarasi, Kupang, Manulai), or in the extreme north-east (Manlea). All other dialects have *l* instead of *r*.

<sup>5</sup> The name and location of this latter dialect does not find support in the literature, and was unknown to my informant. Schulte-Nordholt (1971:232), however, seems to distinguish two Manleas when he mentions "princesses from Manlea, a small principality situated on the border between north-eastern Beboki [instead of Biboki; H.S.] and North Belu, and from Manlea in South Belu...". Probably the second Manlea is a misprint for Mandeo which appears in the indicated area on nineteenth century maps. On one of these maps, reproduced in Schulte-Nordholt (1971, opposite p.161) Koesa and Mandeo are indicated as two adjacent tiny princedoms in the central border area between Dutch and Portuguese Timor.

respects his grammar is incomplete, while the rich information it does contain is highly heterogeneous: daily and ceremonial language are rarely kept apart, and often it is not clear which dialect is being discussed. But the most aggravating shortcoming is that no effort has been made to be consistent in the spelling, especially with regard to the notation of the glottal stop (‘ or zero), and of the mid vowels, *ê* representing [ɛ], and *ò* [ɔ], but *e* [e, ɛ] and also [ə], while *o* represents [o] and also [ɔ]. On metathesis Middelkoop (p.400) has only one half page. It is said to be “algemeen voorkomend” (commonly occurring), but apart from the examples quoted by Laycock no information as to form and function is presented.

The Indonesian studies after Middelkoop (Bait et al. 1988; Kusi 1990; Sanga 1989; Talul 1988; Tarno et al. 1989) are linguistically more sophisticated, but they lack the broad factual scope Middelkoop had acquired after a lifelong study of language and culture as a missionary. None of these studies comes close to a comprehensive description of a Dawanese dialect, but in some respects they complement each other, if only because they deal with different dialects.

On metathesis all sources are brief and superficial:

Bait et al. (1988: 81) give five examples with the comment that “dalam bahasa Dawan terdapat kebiasaan pengubahan bentuk dengan cara metatesis...ini hanya merupakan kebiasaan saja sehingga bersifat mana suka dan tidak membawa perubahan fungsi, peran, atau pun artinya” (in Dawanese the habit exists of changing forms through metathesis... this is just a habit so that it is optional and does not cause any change of function, role, or meaning).

Sanga (1990) agrees with Bait et al. He discusses metathesis in a short paragraph (pp. 240-241), observes that it is very productive in Dawanese, but claims that it is “bersifat manasuka dan tidak mengakibatkan suatu perubahan makna, fungsi maupun peran. Manfaat yang terasa hanyalah menjadi penunak [probably: pelunak] bunyi saja” (optional and not resulting in a change of meaning, function or role. Its only noticeable use is that it serves euphony).

Kusi (1990:54) mentions metathesis once in passing, but examples are found in several places in his study, always in combination with suffixation.

Tarno et al. (1989:151, 154-154) are more explicit. The examples concern stems with and without suffixes. About the existing patterns information is confined to the observation (p.151) that (in bisyllabic words) “pergeseran bunyi bisa terjadi jika bunyi silabik suku pertama dengan suku kedua berbeda” (metathesis can occur if the vowels of the first and second syllables differ). As to the function of metathesis information is likewise brief. One syntactic opposition is given: *in ka ansuli* ‘he doesn’t answer’ versus *in ansuil au nak* ‘he answers my words’. Combined with the prefix *ma-* presence or absence of metathesis is shown to make a clear semantic difference, such as in *maneku* ‘eaten up’ versus *maneuk* ‘to eat together’.

Talul (1988:54) mentions metathesis only once, in connection with one of the plural allomorphs with nouns, but in discussing other types of suffixation he presents many examples of it, while in one set of forms without suffixation (pp.45, 61-62) presence versus

absence of metathesis mark attributive versus predicative functions: *au telo* 'my conceit' versus *au teol* 'I am proud'.<sup>6</sup>

The Indonesian sources have an uncertain phonology in common, while they are all more or less hampered by inconsistencies in spelling and a high percentage of typing errors. As mentioned they deal with different dialects: Kusi (1990) with Miomafo; Talul (1988) with a Miomafo subdialect; Bait et al. (1988) and Tarno et al. (1989) with Molo (which is claimed to be the most prestigious dialect); while Sanga (1990:474) as appears from his map seems to have made use of data from various dialect areas, to wit from East Miomafo and Insani (nine villages around the town of Kefamenanu [kefa mnanuq]), from South Molo and West Amanuban (six villages around the town of So'e [soqe]), and from South Amfoang and Amarasi (one village each).

In this paper metathesis is discussed in the dialect of Miss Floribertha Lake. She was born (in 1964) and raised in the Miomafo village of Nilulat, *kabupaten* Timor Tengah Utara, today about one hour by public transport from the district's capital Kefamenanu (see Map 2). From 1979 she studied in Kupang, the capital of the province, where she now teaches English at the Catholic University. I started working with her there in early January 1991 for about one week. Fortunately, she was selected to follow a two-year library course in Jakarta, which enabled me to have regular sessions with her from March of that year. Needless to say, this paper would not have been written without her constant and always cheerful help.

## 2. PHONOLOGY

The Nilulat dialect distinguishes the following consonants as set out in Table 1.

TABLE 1: CONSONANTS

	stop		fricative		nasal	lateral
	voiceless	voiced, lax	voiceless			
labial	<i>p</i>	<i>b</i>	<i>f</i>		<i>m</i>	
alveolar	<i>t</i>		<i>s</i>		<i>n</i>	<i>l</i>
palatal		<i>j</i>				
velar	<i>k</i>					
glottal	<i>q</i>		<i>h</i>			

The nasals, lateral and voiceless fricatives occur with the approximately common phonetic value in all positions.

The voiced and lax /b/ and /j/, however, have unexpected allophones:

/b/ is a voiced and lax bilabial stop in non-final position if not followed by a high vowel; in other positions its realisation tends to become slightly fricative;

/j/ is a voiced and lax palatal affricate in prevocalic position; syllable-finally the realisation becomes fricative ([ʃ]).

<sup>6</sup> The glosses are Talul's. In the dialect of my informant the opposition is [qau telɔk] 'my conceit' versus [qau qteɔl] 'I am conceited' (see below).

In the following discussion of the vowels of Nilulat Dawanese I refer to syllables. The number of syllables corresponds with the number of vowels in a (phonological) word. The phonological word, however, does not correspond with the grammatical word. In general, phonetic syllable boundaries do not correspond with grammatical boundaries. Compare the following grammatical and phonetic notations of the same sentence. In the grammatical notation words are separated by spaces, spelling is phonemic and word-medial morpheme boundaries are marked by a hyphen. In the phonetic notation syllable boundaries are indicated by +, while stress is marked by the symbol ' before the stressed vowel.

- (1) *Qina n-qote qnak-f-ini.*  
 [qi+nan+q'ɔ'+tɛq+n'ak+fi+ni]  
 3SG 3SG-cut head-GENERIC-PL.DEF  
 He/she cuts heads.

The system of vowels is set out in Table 2.

TABLE 2: VOWELS

		unrounded		rounded
		front	central	back
high		<i>i</i>		<i>u</i>
higher mid	mid	<i>é</i>	<i>e</i>	<i>ó</i>
lower mid		<i>è</i>		<i>o</i>
low		<i>a</i>		

The opposition lower versus higher mid is only valid in stressed final-stem syllables. In other positions this opposition is neutralised. Consequently, /e/ and /o/ are archiphonemes. The phonemisation of [e, ɛ, o, ɔ] is a recent phenomenon, resulting from apocope of vowels which originally conditioned different allophones of the mid vowel in the original penult. Minimal pairs are:

- (2) *Qau qót.* I am burning.<sup>7</sup> (underlying stem -*otu*)  
*Qau qòt.* I am cutting. (underlying stem -*qote*)  
*Qau qhél.* I am slicing. (underlying stem -*heli*)  
*Qau qhèl.* I am pulling. (underlying stem -*hela*)

The high, mid and low vowels have allophony:

/a/ is realised as low central unrounded, but is slightly backed in closed syllables especially before /q/;

/i/ and /u/ are generally high, but they are lowered to a low [ɪ, ʊ] or a high [e, o] in a final syllable if the preceding syllable contains a mid vowel (/e, o/);

/e/ and /o/ are realised relatively high ([e]) in open non-final syllables if the following syllable contains a high vowel; syllable-final /e/ is likewise relatively high if it is immediately

<sup>7</sup> Forms such as these seem to be typical of transitive verbs used intransitively, i.e. with a general but implicit object ('things'). Among other things the relation with intransitive verbs deserves further research.

followed or preceded by /o/, such as in *qau neok* ([neɔk]) 'my neck' and *noe* ([nœ] 1. 'soft', 2. 'river' (truncated form)); in all other positions /e/ and /o/ are relatively low, such as in *noel* ([nœl]) 'river' (free form), *tepo* ([tɛpɔ] 'to hit' (underlying stem and object focus form), *nɔpe* ([nɔpɛ]) 'cloud', *qume* ([qumɛ]) 'house', *metan* ([metan]) 'black'.

Sequences of like consonants separated by a word boundary are usually pronounced as a single consonant (e.g. *qmakaq* 'rice' + *qi* 'this' is realised as [qmakaq'i] (cf. *qmakaq nae* [qmakaq n'ae] 'that rice'), *hit tót* 'we (inclusive) burn' as [hit'ot], etc). Within the word there are cases of double consonants (/kk, mm/ [k:, m:]), which are the result of morphological processes (see the paradigms of the inalienable nouns in §4.2).

Stress always falls on the lexical stem, and usually on its penult. Some seemingly polysyllabic stems are stressed on the final syllable, apparently because they originally consisted of a monosyllabic stem and a petrified prefix (e.g. *man'ap* 'quick', *bif'el* 'perempuan').<sup>8</sup> Stress may indicate a difference in the morphological build-up of otherwise identical words. For example:

- (3) *qume* [q'umɛ] 'house', *qumen* [q'umen] 'houses', versus  
*qu-mèn*<sup>9</sup> [qum'en] 'I am ill' (stem *-men*)

Final stressed syllables are usually lengthened, but this length is not phonemic. There are no words beginning with a vowel.

### 3. METATHESIS

As already stated, metathesis in Dawanese occurs with all major word classes. It is formally conditioned by morphological structure of the word and phonemic structure of the root. Where it has an independent semantic function it can be said to mark certain types of syntactic cohesion, or to put it more semantically, it signals, together with word order, that a subclass of the appropriate referents of the lexical unit in question is meant.

A few examples suffice to show the effect of metathesis with words other than nouns. Nouns will be discussed in more detail in the next section.

- (4) a. *Noni mnatu qina n-lomi.* Gold money he likes.  
money gold 3SG 3SG-like
- b. *Qina n-loim noni mnatu.* He likes gold money.
- (5) a. *Qau q-mepu ma q-tòk.* I work and sit.  
1SG 1SG-work and 1SG-sit
- b. *Qau q-meup tòk.* I work sitting.
- (6) a. *Qau q-mép.* I work.
- b. *Qau q-meup maqtaniq.* I work hard.
- (7) a. *Penaq qi qau q-ipu.* This corn I break off.  
corn this 1SG 1SG-break
- b. *Qau q-iup penaq qi.* I break off this corn.

<sup>8</sup> The proclitic *bi* is used before proper names of women who are of a lower social status than the speaker. The male equivalent is *ni*.

<sup>9</sup> In some of the examples morpheme boundaries are indicated. They are marked by a hyphen.



- (8) a. *liqan mone* boy  
 child male
- b. *liqan moen qahinet* smart boy

#### 4. NOUNS

##### 4.1 INTRODUCTION

Based on the possibilities of expressing possession Dawanese nouns can be divided into inalienables (in general denoting parts of a whole), and other nouns. In expressing possession the following pronominal forms play a part:

SG	1	<i>qau</i>	<i>kau</i>	<i>-k</i>
	2	<i>ho</i>	<i>ko</i>	<i>-m</i>
	3	<i>qin</i>	<i>-e, ∅</i>	<i>-n</i>
PL	1+2	<i>hit</i>	<i>kit</i>	<i>-k</i>
	1+3	<i>hai</i>	<i>kai</i>	<i>-m</i>
	2	<i>hi</i>	<i>ki</i>	<i>-m</i>
	3	<i>sin</i>	<i>sin</i>	<i>-k</i>

The forms of the first column are also used as subjects:

- (9) *Qau qtup.* I sleep.
- (10) *Qau qteop qasu.* I hit the dog.

The forms of the second column are used as objects; for a pronominal third person singular object the suffix *-e* is used to replace the final /a/ of verbs whose stem ends in that vowel; other transitive verbs use the unmodified verbal stem (without a suffix, but with the appropriate prefixes for the subject) to indicate a third person singular object:

- (11) a. *Ho mteop kau.* You (SG) hit me.  
 b. *Qau qtepo.* I hit him.

The suffixes of the third column (*-k*, etc.) mark inalienable possession.

##### 4.2 INALIENABLE NOUNS

Inalienable nouns are characterised by the following paradigm:

- 1) stem + suffix of the third column; this suffix indicates number and person of the whole to which the referent of the stem belongs;
- 2) stem + suffix *-f*, indicating generic reference;
- 3) stem with modification (where phonologically applicable), to be discussed below.

The most salient examples of inalienable nouns in Dawanese are those that indicate a part of the body, but words like 'edge' (*nini -*) and 'branch' (*toe -*) are also inalienable. It should be stressed that kinship 'terms' are not inalienables in Dawanese: they are not part of the

possessor. Nominalised adjectives on the other hand are, and are treated as such. Below follow the paradigms for 'lip' (*lulu-*), 'head' (*qnaka-*), 'ear' (*luke-*) and 'leg' (*hae-*).

possessor	lip	head	ear	leg
SG 1	<i>qau luluk</i>	<i>qau qnakak</i>	<i>qau lukek</i>	<i>qau haek</i>
2	<i>ho lulum</i>	<i>ho qnakam</i>	<i>ho lukem</i>	<i>ho haem</i>
3	<i>qin lulun</i>	<i>qina qnakan</i>	<i>qin luken</i>	<i>qin haen</i>
PL 1+2	<i>hit luluk</i>	<i>hita qnakak</i>	<i>hit lukek</i>	<i>hit haek</i>
1+3	<i>hai lulum/ lulmini</i>	<i>hai qnakam/ qnakmini</i>	<i>hai lukem/ luikmini</i>	<i>hai haem/ haemini</i>
2	<i>hi lulum/ lulmini</i>	<i>hi qnakam/ qnakmini</i>	<i>hi lukem/ luikmini</i>	<i>hi haem/ haemini</i>
3	<i>sin luluk/ lulkini</i>	<i>sina qnakak/ qnakkini</i>	<i>sin lukek/ luikkini</i>	<i>sin haek/ haekini</i>
generic	<i>luluf/ lulfini</i>	<i>qnakaf/ qnakfina</i>	<i>lukef/ luikfina</i>	<i>haef/ haefini</i>
(modified) stem	<i>lulu/lul</i>	<i>qnaka/qnak</i>	<i>luke/luik</i>	<i>hae</i>

The forms with the ending *-ini* denote plurality and definiteness. It is not yet clear to me whether there is a semantic difference between the alternatives for specific plural possessors (1+3, 2, 3) and why the choice does not exist for a first person inclusive possessor.

The following paradigms are derived from adjectival stems: 'conceit' (*teol-*) from *-teol* 'conceited'; 'whiteness' (*muti-*) from *mutiq* 'white'; and 'length' (*mnanu-*) from *mnanuq* 'long'.

possessor	conceit	whiteness	length
SG 1	<i>qau telok</i>	<i>qau mutik</i>	<i>qau mnanuk</i>
2	<i>ho telom</i>	<i>homutim</i>	<i>ho mnanum</i>
3	<i>qin telon</i>	<i>qin mutin</i>	<i>qina mnanun</i>
PL 1+2	<i>hit telok</i>	<i>hitmutik</i>	<i>hita mnanuk</i>
1+3	<i>hai telom/ teolmini</i>	<i>hai mutim/ mutimini</i>	<i>hai mnanum/ mnaonmini</i>
2	<i>hi telom/ teolmini</i>	<i>hi mutim/ mutimini</i>	<i>hi mnanum/ mnaonmini</i>
3	<i>sin telok/ teolkini</i>	<i>sin mutik/ mutikini</i>	<i>sina mnanuk/ mnaonkini</i>
generic	<i>telef/teolfini</i>	<i>mutif/muitfina</i>	<i>mnanuf/mnaonfina</i>

As is apparent from the above paradigms the personal suffixes show syncretism. That is why the forms are usually preceded by the free forms of the personal pronouns; in the above paradigms they are always those used for subjects. As shown in example (12) the 'subject' forms of the pronouns should also be used in object position if their function is possessive:

- (12) *Qau haek natik ho qnakam.* My foot kicks your head.

Only where the context is thought to be sufficiently unambiguous by the speaker are these free pronominal forms left out.

The free forms of the personal pronouns whose stems end in /a/ (*qina*, *sina*, *hita*) drop this /a/ unless followed by a word beginning with a consonant cluster.<sup>10</sup>

The generic forms of the inalienable nouns are used when the possessor is not presented as a 'whole' but as a type. Compare:

- (13) *bibi qnakaf* head of a goat/goat's head  
 (14) *bibi qina qnakan* head of a (specific) goat

The generic forms of the inalienable nouns are also used to express 'real' possession, that is, possession of the non-part-whole type, preceded by an expression indicating the possessor. For example:

- (15) *qau qnakaf*  
 my head (the one I just cut off, the one Nancy is cooking for me, etc.)

The modified stems of the inalienable nouns are used as the first part of compounds (16), and if followed by an adjectival or nominal attribute (17 and 18). For example:

- (16) a. *qau qnak nafuk*  
 my hair (lit. head hair, an inalienable compound)  
 b. *qina qnak nafun* his hair
- (17) a. *Ho qnak mutiq ko.* You are white-headed.  
 2SG head white 2SG  
 b. *ho qnak mutiq* your white head  
 2SG head white  
 c. *Qina qnaka mtasaq.* He is red-headed./his red head  
 3SG head red
- (18) a. *qau luik qahinet* my right ear  
 1SG ear the.one.who.knows  
 b. *sin luik qamontini* their left ears  
 3PL ear the.stupid.ones

As example (17) illustrates, there is a difference between clause and phrase indicating part-whole possession with inalienable nouns followed by an attribute for non-third person possessor (i.e. for those persons for which the object pronouns begin with /k/). For a third person possessor, however, the forms *qin(a)* and *sin(a)* precede the nominal expression, while no 'object' form follows, so that the choice between clause and phrase becomes a matter of context.

Alienable nouns do not have the possibility of expressing possession by suffixation. The only possible pattern is preposition of the 'subject' forms of the personal pronoun for all persons. Compare the following examples:

<sup>10</sup> This phenomenon is part of a more general rule. All polysyllabic stems ending in /-a/ drop this /-a/, unless they are followed by a consonantal suffix or by a word which begins with a consonant cluster.

- (19) *qau qasu; qin qasu* my dog; his/her/its dog  
 (20) *qau qaos mutiq* my white dog  
 (21) *qau qaos qahinet* my clever dog

#### 4.3 MODIFICATION

Several cases of modification have been exemplified, both with inalienables and with other nouns. Modification of nouns (apocope and/or metathesis) occurs before the plural suffix *-in* and the 'definite suffix' *-e*, and before attributes (but not before demonstratives), dependent on certain morphological and phonemic conditions. Before discussing the rules of modification in detail, the most productive types of nominal derivation should be introduced. They all involve addition of a consonant to a verbal stem. Verbal stems are found by subtracting the prefix *n-* and the suffix *-n* from the form for the third person plural subject.<sup>11</sup> For example:

- (22) *Qau qòt.* I cut. *Sina nqoten* They cut. (< stem *-qote*)  
 (23) *Qau qót.* I burn. *Sin notun* They burn. (< stem *-otu*)  
 (24) *Qau qtòk.* I sit. *Sina ntokon* They sit. (< stem *-toko*)  
 (25) *Qau qtup.* I sleep. *Sina ntupan* They sleep. (< stem *-tupa*)  
 (26) *Qau qlóm.* I like. *Sina nlomin* They like. (< stem *-lomi*)

The most productive nominalising derivations are:<sup>12</sup>

- (i) stem + *-t* or *-s*, roughly used to indicate the result of the activity expressed by the corresponding verb; the suffix *-s* is used instead of *-t* after stems which contain a phoneme /t/ already (e.g. *tokos* 'position' (from *-toko* 'to sit'), *lomit* 'wish, liking, love' (from *-lomi* 'to like'))).
- (ii) *qa-* + stem + *-t* or *-s*, used to indicate the actor of the activity expressed by the verb in question; the choice between *-t* and *-s* is subject to the same conditions as in (i) (e.g. *qatokos* 'someone who sits, inhabitant', *qalomit* 'fan, lover', *qameput* 'worker' (from *-mepu* 'to work'))).
- (iii) *qa-* + stem + suffix *-b*, used to indicate the causer (but not the actor) of the activity expressed by the verb (e.g. *qatupab* 'someone who puts to sleep' (from *-tupa* 'to sleep'))).
- (iv) *q-* + stem + *-q*, indicating the instrument of the activity of the corresponding verb (e.g. *qtokoq* 'chair' (from *-toko* 'to sit'), *qume qhanaq* 'kitchen' (lit. house for cooking, from *-hana* 'to cook'))).

Modification does not occur if the stem is monosyllabic and ends in a vowel, such as *ma-* 'tongue', *tu-* 'knee', or if it ends in a sequence of two vowels, such as *hae-* 'leg, foot'. It does occur systematically, however, with:

<sup>11</sup> For a third person plural subject verbs have two forms. One is the same as the forms for the other persons; the other has the suffix *-n*, if not followed by an object which begins with a consonant cluster. But in the latter case the stem form (without modification) is used for all persons (see below).

<sup>12</sup> What follows is a rough generalisation. There are exceptions and deviations. And there are more types of derivation, some of which may turn out to be productive as well.

(a) polysyllabic stems ending in one vowel; and

(b) polysyllabic stems ending in a consonant (stems ending in a consonant cluster do not exist; monosyllabic stems ending in a consonant undergo modification only to a limited extent, that is, they are only able to drop the final consonant).

Nominal stems ending in a vowel are not modified if they are followed by an attribute beginning with a consonant cluster. For example:

(27) *qumemasaq* red house

(28) *nonimnatu* gold (*mnatu*) money

If they are followed by an attribute beginning with a single consonant, the following changes take place:

...V<sub>2</sub>C<sub>1</sub>V<sub>1</sub># + #C<sub>n</sub>V<sub>n</sub>... > ...V<sub>2</sub>C<sub>1</sub>C<sub>n</sub>V<sub>n</sub>...

if V<sub>1</sub>=/a/ or if V<sub>1</sub> and V<sub>2</sub> are either both [back] or both [front]. For example:

(29) *qnaka* 'head' + *mutiq* 'white' > *qnak mutiq* 'white head' (e.g. in *qatoin qnak mutiq* 'white-headed person', (vs *qnaka mtasaq* 'red head')

(30) *mata* 'eye' + *bilu* 'blue' > *mat bilu* 'blue eye' (vs *mata qnaek* 'big eye')

(31) *bibi* 'goat' + *fuij* 'wild' > *bib fuij* 'wild goat' (vs *bibi qnaek* 'big goat')

(32) *teke* 'gecko' + *matel* 'green' > *tek matel* 'green gecko' (vs *teke mtasaq* 'red gecko')

(33) *kolo* 'bird' + *bilu* 'blue' > *kol bilu* 'blue bird' (vs *kolo mnanuq* 'high bird')

(34) *kulu* 'teacher' + *mone* 'male' > *kul mone* 'male teacher' (vs *kulu qnaek* 'big teacher')

(35) *sibe* 'worm' + *mutiq* 'white' > *sib mutiq* 'white worm' (vs *sibe mtasaq* 'red worm')

(36) *bebi* 'duck' + *kase* 'foreign' > *béb kase* 'bioindustrial duck' (vs *bebi qnaek* 'big duck')

(37) *qopu* 'hole' + *manuaf* 'wide' > *qóp manuaf* 'large hole' (vs *qopu mtasaq* 'red hole')

(With the vowel pattern ...C/w/C/o/# no example has been found to date.)

Otherwise ...V<sub>2</sub>C<sub>1</sub>V<sub>1</sub># + #C<sub>n</sub>V<sub>n</sub>... > ...V<sub>2</sub>V<sub>1</sub><sup>+</sup>C<sub>1</sub>C<sub>n</sub>V<sub>n</sub>...

in which V<sub>1</sub><sup>+</sup> relates to V<sub>1</sub> as follows:

a. if V<sub>2</sub> = [high] and V<sub>1</sub> = [mid], then V<sub>1</sub><sup>+</sup> is raised to [high]. For example:

(38) *qume* 'house' + *fatu* 'stone' > *quim fatu* 'house of stone', *luke* 'ear' + *qapetas* 'wet' > *luik qapetas* 'wet ear' (vs *qume qnaek* 'big house', *luke qnaek* 'big ear')

(39) *kilo* 'kilogram, kilometre' + *mastenaq* 'half' > *kiul mastenaq* 'one half kilogram/kilometre'

b. if V<sub>2</sub> = /a/ and V<sub>1</sub> = [high], then V<sub>1</sub><sup>+</sup> is lowered to [mid]. For example:

- (40) *fafi* 'pig' + *metan* 'black' > *faef metan* 'black pig' (vs *fafi mpòk* 'fat pig')
- (41) *gasu* 'dog' + *fequ* 'new' > *qaos fequ* 'new dog' (vs *gasu qnaek* 'big dog')
- c. otherwise  $V_1^+ = V_1$ . For example:
- (42) *nope* 'cloud' + *matel* 'green' > *noep matel* 'green cloud' (vs *nope mtasaq* 'red cloud')
- (43) *nenò* 'sky' + *bilu* 'blue' > *neon bilu* 'blue sky' (vs *nenò mtasaq* 'red sky')
- (44) *noni* 'money' + *kase* 'foreign' > *noin kase* 'foreign money' (vs *noni mnatu* 'gold money')
- (45) *nesu* 'door opening' + *manuaf* 'broad' > *neus manuaf* 'wide door opening' (vs *nesu mnanuq* 'high door opening')
- (46) *laso* 'poison' + *maputuq* 'hot' > *laos maputuq* 'hot poison' (vs *laso mtasaq* 'red poison')
- (47) *bale* 'place' + *qalekot* 'good' > *bael qalekot* 'good place' (vs *bale mnasiq* 'old place')
- (48) *nifu* 'pool' + *bilu* 'blue' > *niuf bilu* 'blue pool' (vs *nifu mtasaq* 'red pool')
- (49) *suqi-* 'chin' + *metan* 'black' > *suiq metan* 'black chin' (vs *suqi mnanuq* 'broad chin')

If the stem (whether derived or not) ends in a consonant the consonant is dropped before an attribute (but, again, not before a demonstrative). The resulting secondary stem remains unmodified if the attribute begins with a consonant cluster. If the attribute begins with a single consonant, the secondary stem undergoes modification according to the same conditions and with the same results as set out above for stems ending in a vowel. For example:

- (50) *sit* 'song' + *qalekot* 'good' > *si qalekot* 'nice song'
- (51) *tob* 'people' + *labit* 'Indonesian' > *to labit* 'the Indonesian people'
- (52) *botil* 'bottle' + *fequ* 'new' > *boit fequ* 'new bottle' (vs *boti qnaek* 'big bottle')
- (53) *gameput* 'worker' + *mutiq* 'white' > *gameup mutiq* 'white worker' (vs *gamepu mnasiq* 'old worker')
- (54) *noel* 'river' + *mutiq* 'white' > *noe mutiq* 'white river' (likewise *noe mtasaq* 'red river')
- (55) *lalan* 'road' + *manuaf* 'wide' > *lal manuaf* 'wide road' (vs *lala qnaek* 'big road')
- (56) *qtokoq* 'chair' + *bilu* 'blue' > *qtòk bilu* 'blue chair' (vs *qtoko mnanuq* 'high chair')

## 4.6 PLURALISATION AND DEFINITENESS

As became clear from the paradigms of the inalienable nouns given above, nouns can be pluralised by an affix.<sup>13</sup> This holds not only for inalienables, but also for other nouns. However, it is not the noun itself which is affixed but the noun + attributes (if any). If this complex ends in a vowel *-n* is added. If it ends in a consonant *-in* is added (with the additional suffix *-i* in positions other than before a demonstrative or a personal pronoun). The part of the word before that final consonant is treated as a secondary stem which undergoes the appropriate modification for stems ending in a vowel. For example:

- (57) *liqanaq* 'child', *liqanqin* 'children', *liqanqin qi* 'these children', *hai liqanqini*  
1. 'our (exclusive) children', 2. 'we are the children', *hai liqanqin* 'we are children'
- (58) *liqan mone* 'boy', *liqan monen* 'boys', *liqan moen qameput* 'working boy',  
*liqan moen qameuptini* 'the working boys'
- (59) *qume* 'house', *qumen* 'houses', *quim fequ* 'new house', *quim fequn* 'new houses',  
*quim mutiq* 'white house', *quim muitqin(i)* '(the) white houses'

When the attribute is nominal the resulting construction is ambiguous. Compare:

- (60) *qau qsòs qume* 'I buy a house', *qau qsòs qumen* 'I buy houses', *qasosat*  
'buyer', *qasòstín(i)* '(the) buyers'
- (61) *qasosat qume* 'buyer of a house', *qasòs qumen* 1. 'buyer of houses', 2.  
'buyers of a house', 3. 'buyers of houses'

Mutatis mutandis the same seems to hold before the suffix *-e* for nominal constructions (nouns, nouns + non-demonstrative attribute) which end in a consonant (including those with the plural suffix *-n*). This suffix also adds a notion of definiteness.<sup>14</sup> For example:

- (62) *Qasòste ntup.* The buyer sleeps.
- (63) *Boitle mutiq.* The bottle is white.
- (64) *Quimne mutiq.* The houses are white.

## 5. CONCLUSION

With its systematic use of metathesis as a means of marking 'syntactic' cohesion, Dawanese morphology shows some rare typological features. Within Austronesian languages, however, the type is not unique: it is found (perhaps even more elaborated) in other Austronesian languages in the area (such as Letinese) and it developed independently elsewhere in the Austronesian world, with a comparable function (notably in Rotuman).

Typologically Dawanese shows some striking similarities with French. Both languages show phonological concatenation of grammatical words, while subtraction and modification with all major word classes are the morphological rule rather than the exception.

Ultan (1978) asserts that metathesis has phonetic origins. The same is obviously true of subtraction. Historically both processes imply weakening of the phonemic integrity of the lexical word. For Dawanese and French this weakening is also apparent from the

<sup>13</sup> Plurality is implied if a numeral is present: *qume meseq* 'one house', *qume tén* 'three houses'.

<sup>14</sup> Further research into the function and distribution of this suffix is necessary.

development of phonological words which do not coincide with grammatical words. It seems likely that there is a typological relation between both developments.

However, it is also possible to look at the Dawanese facts from another angle. The apparent weakening of the phonological integrity of lexical words by the modification processes can be claimed to be counterbalanced by the creation of lexical border signals. The main effect of the modification processes is that consonant, and also vowel, clusters are formed. The former occur around, immediately before (in the case of the suffix *-in(i)*), or immediately after the border of a lexical morpheme; the latter mainly occur somewhere between such borders.

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