# Daluw the Language 

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## Preface

Daluw is a language constructed for Speedlang Challenge 8, organised by miacomet. The time limit is two weeks, ending on 2021 March 14.

As is normal for this sort of thing, there are bits where I got caught up in details, and other bits where I didn't, so coverage is pretty uneven. And I'm lousy at coming up with example sentences, so those are pretty dull and repetitive.

Still, I've managed to touch all the bases required for the challenge. In particular:

- Make use of some sort of quantity distinction. There's contrastive length on the low vowel, a vs aa.
- Glides/semivowels may not contrast. Assuming that a semivowel is a segment that's neither a vowel nor a consonant, $\mathbf{h}$ is the only candidate; see $\S 1.5$ for detailed discussion.
- Have some sort of surpasegmental feature that isn't tone or stress. Breathy voice behaves as a suprasegmental feature, see §1.3.
- Include an open pronoun class. Pronouns can be formed from many nouns, including body part terms and nouns referring to human personality types, the latter of which at least is an open class. See $\S 3.3$ for discussion.
- Feature insubordination. The Daluw infinitive can be used unembedded, see §6.4.
- Have asymmetrical negation. Clausal negation is normally expressed using a dedicated verb, with the lexical verb taking a nonfinite form. See $\S 5.4$ for details.
- Mark indefinite noun phrases but not definite ones. There's an indefinite article (§2.3) but no definite article (passim.).

And here's how I've fulfilled the various speedlang tasks:

- Document and showcase your language. You're looking at it.
- Translate and gloss five sample sentences. I chose the 5moyd option; see examples (4.2), (4.7), (4.4), (4.1), and (3.22). I've felt free to adjust the sentences in minor ways, to suit both the cultural context and my own expository needs.
- Include an example showing at least fifteen possible pronouns. It's just a list, I'm afraid; see (3.7).
- (Optional) Submit your phono to the Segments Phono Challenge. The sister language Vasi that's mentioned here and there has the right inventory, you'll find a pretty minimal sketch of its phonology in Appendix A.

I've had useful comments and advice on various points from a number of people, especially miacomet and priscianic. And I think miacomet did an especially good job with this challenge's constraints.

## Abbreviations

| 1 | first person |
| :--- | :--- |
| 2 | second person |
| 3 | third person |
| COMP | complementiser |
| COP | copula |
| DIST | distal demonstrative |
| DU | dual |
| GEN | genitive |
| INDEF | indefinite |
| INF | infinitive |
| ITER | iterative |
| NEG | negation |
| p | plural |
| PAST | past tense |
| PL | plural |
| POSS | possessor |
| PRS | present tense |
| RECIP | reciprocal |
| REDUP | reduplication |
| REFL | reflexive |
| s | singular |
| SUB | subject |

## Chapter 1

## Phonology

There are 20 consonants, if you count $\mathbf{h}$, and six vowels, counting long a; there's also breathy voice, which behaves as a suprasegmental.

### 1.1 Consonants

Table 1.1 gives the consonants.

|  | Bilabial | Dental | Alveolar | Velar | Glottal |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Nasals | m | n | n |  |  |  |
| Plosives | p b | t d | t d | $\mathfrak{f}$ | k g |  |
| Fricatives | f | $\searrow$ | s z |  |  | h |
| Approximants |  | l | r |  | w |  |

Table 1.1: Daluw consonants, with $\mathbf{h}$
$\mathbf{f}$ represents a bilabial fricative, and $\mathbf{w}$ is specifically a rounded velar approximant. I represent all other consonants following IPA conventions.

For some discussion of the question whether $\mathbf{w}$ and $\mathbf{h}$ are truly consonants, see §1.5.
With three exceptions, all consonants can occur word-initiall, intervocalically, and word-finally. The exceptions are that $\mathbf{f}$ occurs only in coda, and $\mathbf{f}$ and $\mathbf{h}$ cannot occur in coda. Voicing contrasts are not lost in any position, though obstruents that do not contrast in voicing are a bit flexible in this respect; for example, word-final $\boldsymbol{\delta}$ is sometimes pronounced as $\boldsymbol{\theta}$.

Consonant clusters occur only between vowels, and comprise at most two consonants. Morphemeinternally the first consonant is most often a nasal; in this position there is only a contrast between $\mathbf{m}$ and a place-assimilating nasal which I'll usually write as $\mathbf{n}$; even this contrast is lost before a labial consonant.

Other clusters do occur, especially in words that are obviously multimorphemic.

### 1.2 Vowels

The vowels are iea a o u. The vowels other than a do occur long, but only as a result of the process of phrase-final lengthening (§1.4); and it's because only a can be underlyingly long that I count aa as a phoneme in its own right, rather than treating vowel length just as a suprasegmental feature.

All the vowels vary somewhat in realisation. With $\mathbf{i}$ a aa $\mathbf{u}$, this variation is conditioned by phonation. When breathy, the high vowels have close to their canonical realisation, but with modal phonation are somewhat lower, approximately [iv I ; this is a genuine height difference, and does not involve the tongue root. Non-breathy $\mathbf{a}$ is $\mathbf{a}$, and this does involve a somewhat retracted tongue root, as well a some epilaryngeal constriction; breathy a is pretty much e.

The mid vowels also vary somewhat in height, and e can also be somewhat centralised, but this is independent of phonation, and so far I'm thinking of it as free variation.

Two vowels can occur in sequence only when they are the first two vowels of a stem. ${ }^{1}$ There's good reason to suppose that any such vowel pair belongs to the nucleus of a single syllable. It's the stem-initial syllable that attracts stress, and the volume and pitch accents characteristic of a stressed syllable are realised equally on both vowels in such a sequence. It's also only in the steminitial syllable that we find underlyingly long a, suggestig the generalisation that it's only these stress-attracting syllables can be underlyingly heavy. Further, if the two adjacent vowels are also the word's final two vowels, the process of phrase-final lengthening ( $\S 1.4$ ) treats them as together constituting the nucleus of a single heavy syllable.

The first in a pair of adjacent vowels is always strictly higher than the second, suggestig perhaps that they are opening diphthongs. But there are no further constraints on what vowels can occur in sequence, and the two vowels generally have about the same duration, neither pattern really being characteristic of diphthongs. I thus suppose these sequences genuinely consist of two independent vowels. (See $\S 1.5$ for some further relevant discussion.)

### 1.3 Breathy voice

All Daluw vowels can occur with what I'll call (and transcribe as) breathy voice.
Why the qualification? Breathy voice is generally (cross-linguistically) associated with a somewhat lower pitch, but in Daluw breathy-voiced vowels are if anything pronounced at a higher pitch than their modal counterparts. This suggests that they are pronounced with stiffer vocal folds than is characteristic of breathy voice, and that strictly speaking they might better be classified as faucalised.

Now, a contrast between faucalised and pharyngealised voice has been implicated in at least some of the vowel harmony systems that are usually described in terms of tongue root contrasts, and in some moods I think of Daluw as transitioning in the direction of ATR harmony. Interestingly, though, phonation conditions vowel quality contrasts only in the high and low vowels, whereas ATR contrasts tend to be present, if anywhere, in the mid vowels.

The distribution of breathy vowels does nonetheless feel like a system of vowel harmony. It is as far as I know an exceptionless rule that if any vowel in a Daluw word is breathy, than all vowels following it in the word are also breathy. In a large majority of cases, if any vowel is breathy, then the stem-initial (stressed) vowel is too, and most of the exceptions are obviously multimorphemic.

[^0]The single largest class of exceptions involve stems with no breathy vowels that take breathy suffixes. Further work might also discover one or more inherently breathy derivational suffixes. Other exceptions might well derive from compounds whose second element alone has breathy vowels, though there are a significant number of cases that cannot be analysed synchronically as compounds. In any case, for the most part it's just as if only a stem's stressed vowel can be underlyingly breathy, with breathiness then spreading onto other vowels in the word.

### 1.4 Phrase-final lengthening

There's a general requirement that the last syllable in a prosodic phrase be heavy, where only vowels count towards syllable weight. This is perhaps related to the fact that phrase-final syllables often end up hosting phrasal boundary tones; but since most of those tones are simple highs or lows, that's only a partial explanation.

I'm afraid I have nothing very useful to tell you about how to figure out where prosodic phrases begin and end. No doubt this will be related to syntactic structure, but I don't know yet how cleanly, nor have I so far discovered what might condition any disharmonies. One easy point though has been established: a word pronounced in isolation is automatically phrase-final. This means that a word's citation form is liable to have undergone phrase-final lengthening.

It's important to my arguments at a couple of points that for the purposes of this rule, the final syllable in a word like tiad home counts as heavy: phrase-finally you get tiad, not tiaad. This implies that the ia both belong to a single syllable and that they are both vowels.

Note that this process regularly targets object clitics, which thus become more prominent, prosodically speaking, than you might expect from clitics. Perhaps this presages an eventual transformation into true suffixes.

### 1.5 Semivowels?

One of the constraints for this challenge is that the language may not have semivowels that contrast only in place of articulation or rounding. I've got phonemic w as well as four vowels that can occur as the first element of what you might consider opening diphthongs, and you might think of those vowels as onglides and therefore as semivowels. So maybe I've got some explaining to do.

I'm afraid I'm going to try to settle this issue mostly by stipulation; in my defence, the stipulations in question are not especially controversial.

First, I assume that if something is a semivowel, then it's neither a vowel nor a consonant. So if $\mathbf{w}$ is a consonant, then it's not a semivowel; and if ieou are truly vowels when they occur as the first element in a two-vowel sequence, then they're also not semivowels.

Second, I assume that vowels aren't distinguished by a feature, maybe [syllabic], that somehow guarantees that you can have at most one vowel per syllable. This means that the fact that you can get two apparent vowels in a single Daluw syllable doesn't entail that at least one of them isn't really a vowel.

Let me start the argument with the distinction between $\mathbf{w}$ and $\mathbf{u}$. My claim is that these are genuinely different phonemes, and that neither is (ever) a semivowel, because $\mathbf{w}$ is just a consonant, and $\mathbf{u}$ is always just a vowel.

Consider the words we才 fur and ue cloud, and the question of whether they begin with the same segment. First, there are usually clear differences in how the segments are pronounced. w is higher and somewhat more forward than $\mathbf{u}$. It is also noticeably shorter. Second, the process
of phrase-final lengthening treats initial $\mathbf{u}$ but not initial $\mathbf{w}$ as moraic: phrase-finally (including when pronounced in isolation), weð must become weeð, but ue is always just ue. These patterns are just what you might expect if $\mathbf{u}$ were a vowel and $\mathbf{w}$ a consonant.
(Incidentally, w also doesn't prevent phrase-final lengthening when it's a word-final coda: ạpew rain, for example, must become ạpeew phrase-finally.)

Now, maybe you think that a word can have its syllable structure underlyingly specified. Then you might suppose the difference here isn't in the underlying segment, but the position that segment is assigned in the word-initial syllable: it's assigned to the onset in weð but the nucleus in ue. So let's take this argument forward a step.

Consider the prefixes used to index a third person plural possessor:

$$
\begin{align*}
& \text { a. bạay } \rightarrow \text { sibạay }  \tag{1.1}\\
& \text { fụạ } \rightarrow \text { sifụa } \\
& \text { weð } \rightarrow \text { siweð } \\
& \text { b. ama } \rightarrow \text { siðama } \\
& \text { ebek } \rightarrow \text { siðebek } \\
& \text { ue } \rightarrow \text { siðue } \\
& \text { their camp } \\
& \text { their flower } \\
& \text { their fur } \\
& \text { their mother } \\
& \text { their initiation } \\
& \text { their cloud }
\end{align*}
$$

You can probably see the pattern: you get si before consonants, and sið before vowels; and you get si before $\mathbf{w}$, but sið before $\mathbf{u}$.

Alternatively, you might suppose, you get si when the following syllable has an onset, and sið when it does not. However, I have invented some data that proves this wrong. $\mathbf{h}$ occupies a somewhat odd position in Daluw phonology. It occurs (only) in the syllable onset, but morphophonologically it does not always behave as a consonant. Here, it selects sio- as the prefix to mark a third person plural possessor:
hụọ $\rightarrow$ siðụo
their snake
So the alternation here is sensitive not to the structure of the following syllable but to the nature of the following segment: you get sio- before a vowel or $\mathbf{h}$, and otherwise you get si-.

I have a little more to say about $\mathbf{h}$, but first I want to make a few more comments about $\mathbf{w}$ and the possible semivowels.

My arguments so far have focused on $\mathbf{w}$ and $\mathbf{u}$. But it would be easy to run the same argumets with the other nonlow vowels in place of $\mathbf{u}$, or (for that matter) with $\mathfrak{j}$ in place of $\mathbf{w}$, if $\mathfrak{j}$ makes you suspicious.

I also want to mention the behaviour of the infinitive prefixes, all of which end in $\mathbf{u}$. I'll illustrate their behaviour with the first person singular infinitive prefix fu-:

| a. | $\begin{align*} & \text { menndez } \rightarrow \text { fumendez }  \tag{1.3}\\ & \text { ti } \rightarrow \underset{\sim}{\text { futi }} \end{align*}$ | for me to summon for me to open |
| :---: | :---: | :---: |
| b. | imkes $\rightarrow$ fuemkes ola $\rightarrow$ fuola | for me to begin for me to come |
| c. | ial $\rightarrow$ fual ọade $\rightarrow$ fụạde | for me to be pleasant for me to dig |
| . | uma $\rightarrow$ fuome <br> uere $\rightarrow$ fuere | for me to drink for me to seek |

$$
\begin{array}{lll}
\text { e. } & \text { wesina } \rightarrow \text { fuwesina } & \text { for me to feast } \\
\text { wuad } \rightarrow \text { fuwuad } & \text { for me to paint }
\end{array}
$$

In (1.3a), fu- is followed by a consonant and there's no problem. In (1.3b), it's followed by a single vowel, and becomes the first in a two-vowel sequence; if the following vowel is $\mathbf{i}$, it lowers to $\mathbf{e}$. In (1.3c), the stem begins with two vowels, and the $\mathbf{u}$ of the prefix simply replaces the first of them. (1.3d) and (1.3e) then show that in these respects, fu- treats a stem-initial $\mathbf{u}$ just like any other vowel, and stem-inital w just like a consonant.

What's new here is the contrast between uere seek in (1.3d) and wesina feast in (1.3e). With uere, the $\mathbf{u}$ of the prefix and the $\mathbf{u}$ of the stem merge, leaving a single $\mathbf{u}$; but with wesina, the $\mathbf{u}$ and the $\mathbf{w}$ remain distinct. One way to press the issue here is to ask why fu+uere doesn't become fuwere. If $\mathbf{u}$ and $\mathbf{w}$ are really the same phoneme, this avoids deleting a segment and requires only a resyllabification; and we independently know that Daluw countenances resyllabification, at least of stem-final consonants before a vowel-initial suffix (see, e.g., §2.1.1, on plural formation).

All that goes to show that $\mathbf{w}$ is just a consonant and vowel-pair-initial vowels are just vowels, and therefore that none of those segments are semivowels.
$\mathbf{h}$, though is a bit more complicated. It's not a vowel: it cannot occur in the syllable nucleus, and has neither a vocalic aperture setting nor a vocalic place of articulation. But arguably it's not a consonant either: at least some parts of Daluw morphophonology treat it as a non-consonant, and arguably it also lacks a consonantal place of articulation. So it might be reasonable to class $\mathbf{h}$ as a semivowel (and certainly there are phonologists who class it that way). But if $\mathbf{h}$ is a semivowel, it is Daluw's only one.

## Chapter 2

## The noun phrase

Most of what I have to say about nouns and noun phrases is collected in this chapter. (The exception is relative clauses, see §6.3.)

### 2.1 Plurals

### 2.1.1 Morphology

The most common way to form a plural noun is to suffix -we. There are complications:

- After $\mathbf{l r} \mathbf{w} \boldsymbol{f}$ the suffix is just -e.
- As you'd expect, the vowel in the suffix becomes breathy if the stem vowels are breathy.
- Sometimes the vowel in the suffix is breathy even if the stem's vowels are not. This can happen after a vowel (in which case you get -he rather than -we), a nasal, a fricative (only $\mathbf{s}$ and $\mathbf{z}$ occur stem-finally), or any of $\mathbf{1 r w f t}$ t. All stems ending in $\boldsymbol{\delta}$ take -we.
- A handful of monosyllabic nouns have their vowel become breathy only in the plural.
- Some regular consonant alternations take place before the plural suffix: $\mathfrak{j}$ becomes $\mathbf{\delta}, \mathbf{d}$ becomes $\mathbf{z}$, and $\mathbf{t}$ becomes $\mathbf{s}$.

Table 2.1 summarises these patterns.
There are probably one or more recurrent plural suffixes other than -we, but if so I haven't discovered them yet. I do know of some plurals that, synchronically speaking, are just irregular (though none so far that are genuinely suppletive).

Here are some examples:

```
Plurals in -we
    buog }->\mathrm{ buogwe strangers
    ebek }->\mathrm{ ebekwe teeth
    pigom }->\mathrm{ pigomwe goomfruits
    teaz }->\mathrm{ t_eazwe animal hides
```

| Final segment | Plural form(s) |
| :---: | :---: |
| $\mathrm{mmnt} \mathrm{t}^{a} \mathrm{~s}$ z | -we -wẹ |
| $\mathrm{pb} \mathrm{d} \mathrm{d}^{\text {b }} \mathrm{td} \mathrm{kg}$ | -we |
| б | -we |
| $1 \mathrm{rwf}{ }^{\text {c }}$ | -e -ẹ |
| i eaou | -we -hẹ |

Table 2.1: The -we plural
${ }^{a}$ t becomes $\mathbf{s}$.
${ }^{b} \mathbf{d}$ becomes $\mathbf{z}$.
$\boldsymbol{c}_{\boldsymbol{f}}$ becomes $\boldsymbol{\delta}$.
(2.2) Plurals in -e
buol $\rightarrow$ buole noses
(2.3) Breathy stems with plurals in -we and -e
fụa $\rightarrow$ fụawe $\quad$ flowers
(2.4) Unpredictable -we., -e, and -hẹ plurals

| ham $\rightarrow$ hămwẹ | days |
| :--- | :--- |
| pade $\rightarrow$ padehe. | paths |

(2.5) Nouns with final consonant alternations
bạá $\rightarrow$ bạạ̃e camps
(2.6) Irregular plurals

| ka $\rightarrow$ koa | ka flea |
| :--- | :--- |
| way $\rightarrow$ wea | people |

### 2.1.2 Mass nouns

Let's say, broadly speaking, that a mass noun is a noun that regularly occurs referentially without plural morphology, but the lack of plural morphology doesn't tell you anything significant about how much of that kind of thing (or stuff) you're talking about. To take a pair of English examples, if you use "person" referentially, without plural morphology, you can only be talking about one person; but if you use "water" referentially, without plural morphology, there are no semantic limits on how much water you could be referring to.

Daluw has mass nouns, but in a fair number of common cases it has count nouns where English has mass nouns. (So Daluw is definitely not one of those languages that uses count nouns only for animates.) For example, Daluw mas sand is a count noun, so when it's used to refer to any significant amount of sand, you'll get its plural form (maswe). Insofar is there's a general rule here, it's that if something comes in the form of bits, and its within the range of normal human

|  |  | Singular |
| :--- | :--- | :--- |
| ht | Plural |  |
|  | f-, fa- | fow-, fu- |
| $1+2$ | -- | gal-, gaw- |
| 2 | l-, lo- | low-, lu- |
| 3 | t-, te- | sið-, si- |

Table 2.2: Possessor agreement prefixes
powers to distinguish and individually manipulate those bits, then Daluw will use a count noun. Sand qualifies; but mud, for example, does not, and it gets the mass noun taam.

Mass nouns can nonetheless take plural morphology, if there's some contextually salient principle for individuating the noun's referent. If, for example, you were distinguishing the mud by the Hạð Emu from the mud by the Hạð Suon, you might refer to them as tạạmwẹ dame two muds.

### 2.1.3 The dual

A small number of nouns, mostly body part terms, can take a dual suffix, either -hụ or (after a consonant) -u. This must be followed by the plural suffix.

### 2.2 Possessor agreement

Nouns inflect to agree with a possesser, which need not get any further expression. Table 2.2 shows the paradigm. Two prefixes are provided for each person/number combination. In the plural forms, the first prefix occurs before vowels or $\mathbf{h}$ (which drops), the second occurs before consonants. It's a bit more complicated with the second- and third-person singular forms: the second form is used before consonants (not counting $\mathbf{h}$ ), but also whenever the stem begins with a single mid or low vowel (which in either case surfaces as a).

These prefixes appear to be an innovation. Daluw's sister language Vasi has a clearly cognate set of clitic pronouns, and they can used for (among other things) possessors.

The prefixes are also clearly cognate with the clitics Daluw uses to register pronominal objects (§3.2).

### 2.3 The indefinite article fi

The particle fi, also used as the number one, can be used as an indefinite article, in which case it precedes the noun:

| (2.7) | fi buog | a stranger |
| :--- | :--- | :--- |
|  | fi fưa | a flower |
|  | fi teaz | an animal hide |

Since numbers follow the noun, the two uses of fi are easy to distinguish.
As an indefinite article, fi occurs not just with singular count nouns but also with plurals and mass nouns:

| fi detwe | some sticks |
| :--- | :--- |
| fi ụ | some water |

This means that it is not redundante to use fi as both an indefinite article and a number in the same noun phrase:

## (2.9) fi way fi one person

Most Daluw adjectives usually follow the head noun, though some always precede it and some always come between it and the noun, and post-nominal adjectives can be moved to the front of the noun phrase for contrastive focus; I take up these issues in §2.4.

Though fi expresses indefiniteness, it is not obligatory in all indefinite noun phrases. I don't so far have a really good rule for when you use it and when you don't. I suppose the tendency is to use it when the referent is (as one might say) highly individuated; but that can mean different things in different situations. Like, if you're saying that you want to talk to an elder, and you want to make it clear that there's some particular elder that you want to talk to, you're sure to use fi. But you're also pretty sure to use it when the noun phrase in question is the subject of its clause, or when it includes one of the handful of adjectives that always occur before the noun (§2.4.2), or if you anticipate that you or an interlocutor will want to refer back to the noun phrase's reference; and I don't have anything really useful to say about what these conditions have in common.

### 2.4 Adjectives

Many Daluw words satisfy the following three conditions:

- They can be used as modifiers within a noun phrase without any overt indication that they are in a relative clause
- They either cannot be used as predicates or can be used as predicates only along with the copula a.
- They either cannot be used in a noun phrase without a separate overt noun head or they can be used in such a noun phrase only with a very limited range of interpretations, and cannot occur with the indefinite article (cf. §2.4.3).

I'm going to call those words adjectives, though it'll turn out they're a fairly heterogenous group.

### 2.4.1 Agreement

Many adjectives can or must agree in number with the associated noun. They do so using the same suffixes that occur with nouns, except without having to worry about some of the irregularity:

- The suffix is -e after $\mathbf{1 r w f}$ and otherwise is -we.
- The vowel in the suffix becomes breathy if the nearest stem vowel is breathy or if the stemfinal consonant is $\boldsymbol{\delta}$. You never get an unexpectedly breathy suffix, and the -hee allomorph never occurs with adjectives.
- You do get consonant alternations: $\mathfrak{j}$ becomes $\boldsymbol{\delta}$, $\mathbf{d}$ becomes $\mathbf{z}$, and $\mathbf{t}$ becomes $\mathbf{s}$.

I'll explain in some detail below when adjectivs do and when they do not agree with the associated nouns, but here are some generalisations:

- Predicate adjectives must always agree.
- Prenominal adjectives and adjective that cannot be used as predicates never agree.
- Certain classes of derived adjectives (§2.4.4) must always agree.
- Many other adjectives optionally agree when used predicatively, often with an associated semantic difference.


### 2.4.2 Attributive-only adjectives

Some adjectives can only be used attributively, never predicatively, even with the copula. These adjectives never agree with the associated noun.

Attributive-only adjectives actually divide into three subclasses: high prenominal adjective, low prenominal adjectives, and attributive-only postnominal adjectives.

High prenominal adjectives always come first in the noun phrase, and at most one can occur in any one noun phrase. Well, almost: naas only can also occur postnominally, but with a different meaning, mere. In fact, the adjective can occur twice in a single noun phrase, once in each position:

| naas | kiore | naas |
| :--- | :--- | :--- |
| only | child | mere |

"the only mere child"
I suppose that Daluw isn't substantially more (or less!) awkward than that English.
The other four high prenominal adjectives that I've discovered so far really do occur only in the NP-initial position. They are eaz same, doa other, suot true, genuine, and taam whatever.

There are also five attributive-only adjectives, the low ones, that occur immediately before the noun, and after the indefinite article when it is present. These are ko big, major, great, sif small, minor, biaw old, longtime, gaa new, and suw good.

The meaning of these terms deserves further comment. ko and siy, unlike English "big" and "small," never have their significance relativised to the noun they occur with. A ko ka great ka flea is great (in size, or whatever other way is contextually appropriate) not relative to other fleas but in general (so in fact it is very unlikely to be koo in size). Conversely, the significance of suw good does vary with the noun it occurs with. A suw wakado good hunter is not just a hunter who is good, it is someone who is good at hunting. biaw old is also nonintersective, though in a slightly more subtle way: a biaw wakado old hunter is someone who's been a hunter for a long time, not an aged hunter, much as a gaa wakado new hunter is someone who's just become a hunter, regardless of age.

Postnominal attributive-only adjectives are a bit of a miked bag, and I have not yet had the chance to investigate them in any depth. But it shouldn't surprise you to learn that there's one that means former, for example, and another that means current.

None of the attributive-only adjectives ever shows agreement with an associated plural noun. Also, they cannot occur in a noun phrase without an overt noun head.

### 2.4.3 Regular adjectives

I can't think of a better name, sorry.
Regular adjectives can occur as post-nominal modifiers, as predicates, and as the heads of noun phrases.

Their use as predicates is straightforward. Like all adjective and noun predicates, they require the copula a (). They agree in number with the subject.

I know of only three sorts of case in which they can head noun phrases. The first is when referring to a quality of some particular thing:
(2.11) te-dawed aape

3s-big tree
"the size of the tree"
You'll note that the adjective takes possessor agreement; this is obligatory in this construction. (And note that the big tree would be aape dawed.)

Adjectives can also head noun phrases in partitive constructions, another context in which possessor agreement is obligatory. Here, for example, is a possible answer to the question which snake you want:

| teza | sidawed |
| :--- | :---: |
| t- eza | si - dawed |
| $1 \mathrm{~s}-$ want | $3 \mathrm{p}-$ big |
| "I want the big one" |  |

(I agree, it's kind of gross that si- can express both a first person subject and a third person singular possessor, but that's how it turned out.)

Third and (so far) finally, noun phrases headed by regular adjectives can be used in generic constructions:

## (2.13) tưr a wisomte <br> tur a wisomte <br> old COP wise

"Age is wisdom"
Note that in none of these cases can the adjective occur with the indefinite article, and I consider it an open question whether that's actually the rule governing the nominal use of these adjectives.

When used as modifiers, adjectives can be a bit tricky, since with many of them there's a choice whether or not to have them agree with a plural head noun, and the choice can correspond to subtle semantic and syntactic differences.

The syntactic issue has to do with adjective ordering. As can easily be confirmed when the head noun is plural, adjectives that don't agree always precede ones that do. Further, the order amongst non-agreeing adjectives is strict, while agreeign adjectives are more free. The strict order among non-agreeing adjectives corresponds to the default order in English, but reversed, with for example size adjectives following colour adjectives. This is what you mostly expect in languages in which adjectives follow the noun.

Naturally, when the head noun is singular, it's impossible to tell by inspection which adjectives are agreeing and which or not; but when the two cases can be distinguished on semantic grounds, you get the same patterns.

I'm not going to go into detail about the semantic differences, because I'm running out of time, and anyway I'd mostly be cribbing from Cinque's The Syntax of Adjectives. Roughly, I take adjectives that agree with the head noun to be functioning as reduced relative clauses, and to have the same meaning they have as predicates; adjectives that don't agree modify the head noun more directly, and can have somewhat different semantics. For example, it's only adjectives that don't agree that can have non-intersective interpretations. For example, when tur old is used as a direct modifier rather than as a reduced relative clause, you can imagine it meaning longtime rather than aged, like in English "old friend." (But Daluw already has the preverbal, non-agreeing adjective biaw for that meaning, so I'm not sure you'll actually find that with turr.)
(If you're curious about the sorts of semantic differences I'm talking about, chapter two of Cinque's book is theory-light and gives lots of examples; he also gives a summary table on p 33.)

### 2.4.4 Essenially predicative adjectives

There's a further class of adjectives that can all be used predicatively and that always agree with a plural head noun. Most of these are clearly derived, and in fact most of them are derived using one of two prefixes, wi- and hol- (which mostly becomes how- before a consonant).
wi- seems related to the verb i have (which takes the agreement prefix $\mathbf{w}$ - in third person); it combines with nouns to form adjectives indicating possession, usually in signficant amounts, of the referent of the noun. For example:

$$
\begin{array}{lll}
\text { wịo } & \text { watery, full of water } & <\mathbf{u} \text { water }  \tag{2.14}\\
\text { wisomte } & \text { wise } & <\text { somte wisdom } \\
\text { wihụen } & \text { excited } & <\text { hụen blood }
\end{array}
$$

hol- is the opposite, and forms privative adjectives:

$$
\text { (2.15) } \begin{array}{lll}
\text { hobuol } & \text { lacking in judgment } & <\text { buol nose } \\
& \text { holụ } & \text { withered } \\
& <\text { ụ water } \\
\text { howmak } & \text { invisible } & <\text { mak body }
\end{array}
$$

Like wi-, hol obviously corresponds to a regular Daluw verb, in this case hol lack.
(You might wonder why I don't treat these as verb phrases in reduced relative clauses. Neither pattern is fully productive, however, and the sorts of phonological accommodation you get between the prefixes and the stems are not typical of verb-object phrases. Also, these have the stress patterns of individual words, not of phrases.)

### 2.4.5 Complement-taking adjectives

Many adjectives can take complements, if only to express comparison:

| fi | waf | witrosi | i | $=\mathrm{fa}$ |
| :--- | :--- | :--- | :--- | ---: |
| INDEF | person | virtuous | GEN $=1 \mathrm{~s}$ |  |

"a person more virtuous than me"

Phrasal adjectives like this always follow other adjectives other than numbers and demonstratives; they always agree with a plural head noun.

### 2.4.6 Numbers and demonstratives

I know of no reason not to count Daluw numbers and demontratives as adjectives. They follow all other adjectives, with demonstratives following numbers when both are present. Demonstratives but not numbers agree in number with the head noun.

There are two demonstrative adjectives, proximal ki and distal ko. I don't have anything interesting to say about when they're used, except that the lack of a definite article means that ko often takes on extra duties. (See also $\S 3.4$ on demonstrative pronouns.)

### 2.5 Other noun phrase modifiers

Relative clauses normally come before numbers or demonstratives but after all adjectives. Especially heavy ones can follow numbers and demonstratives, however.

Preposition phrases can also be used as noun phrase modifiers, with the same distribution as relative clauses.

Awkwardly, I haven't figured out in any detail the syntax of possessors.

## Chapter 3

## Pronouns

### 3.1 Personal pronouns

Table 3.1 gives the basic set. If you compare it to Table 2.2, you will see that these all have

|  | Singular | Plural |
| :--- | :--- | :--- |
| 1 | fa | fowa |
| $1+2$ | -- | gala |
| 2 | loa | lowa |
| 3 | tea | sið̃ |

Table 3.1: The independent personal pronouns
the form of a possessed nominal element a, which, however, has no obvious synchronic meaning (presumably it is not the copula).

The independent personal pronouns are used whenever a pronoun is necessary but a pronominal clitic would not be appropriate, for example in slow speech or when focusing the pronoun. More often, though, you'd use a pronominal clitic or (for the subject of a verb) simply drop the pronoun.

### 3.2 Pronominal clitics

Table 3.2 shows this series. The resemblance to the possessor agreement prefixes (Table 2.2) is

|  | Singular | Plural |
| :--- | :--- | :--- |
| 1 | =fa | =fu |
| $1+2$ | -- | $=$ gaw |
| 2 | =lo | =le |
| 3 | =te | $=$ =e |

Table 3.2: Pronominal clitics
obvious.
These clitics can be used in any position in which a weak pronoun is possible; they always follow their host, but I have so far not discovered a point in the grammar where that is a real constraint. Unsurprisingly, they are used most often to express the object of a verb or preposition.

### 3.3 Derived personal pronouns

Daluw's pronoun system has a very unusual feature: the possessor agreement prefixes can be used to derive essentially arbitrary pronouns. The basic mechanism is simple. You simply take a noun, and add the agreement prefix with the appropriate person and number features. Thus, fabuol could be used to mean not just my nose but also simply me.

The status of these as true pronouns is easy to verify. For example, they control agreement on verbs and adjectives:

| fowụen | na | sitiwe | baan |
| :---: | :--- | :---: | :--- |
| fow- hụẹ | na | si-ti | - we |
| baan |  |  |  |
| 1pPOSS- blood | PAST | 1sUB- open - PL | dance |

"We danced"

| fubuol | sue | mạare |  |
| :---: | :--- | :--- | :--- |
| fu- buol | sue | mạar | -e |
| 1pPOSS- nose | $1 \mathrm{p}:$ COP | comfortable -PL |  |
| "We are comfortable" |  |  |  |

They also cannot occur in contexts where a similarly-referring pronoun would be ungrammatical:

| *țeza | fa | futi | baan |
| :---: | :---: | :---: | :--- |
| t- eza | fa | f- $\mathrm{u}-\mathrm{ti}$ | baan |
| 1sUB- want | 1 s | 1 ssub- INF- open | dance |

Intended: "I want to dance"

| *teza | fawụen | futi | baan |
| :---: | :---: | :---: | :---: | :---: |
| t- eza | fa- wụen | f- $\mathrm{u}-\mathrm{ti}$ | baan |
| 1suB - want | 1sPOSS - blood | 1sSUB- INF- open | dance |
| Intended: "I want to dance" |  |  |  |

The problem is that the subject of an infinitive complement cannot co-refer with the matrix subject: you need the reflexive pronoun de (§3.5). And in this case, if you wanted to use a derived pronoun, you'd undoubtedly put it in the matrix clause, maybe resulting in this:

(See $\S 3.5$ for the need for a reflexive pronoun here and for the third person agreement on the infinitive.)

The most common pattern is for these pronouns to be based on body part terms, as in the examples I've given. Another common pattern is to use an adjective, as in, for example, fumaar our comfort, us.

These pronouns are heavy, both prosodically and information-wise: you'd only use them in fairly emphatic contexts, in exhortatory or celebratory speech, for example. There's also a fun language game that makes heavy use of these pronouns (though unfortunately I haven't had time to describe it for this grammar).

Unsurprisingly, semantics plays an important role in choosing what pronouns to derive. Blood is associated with excitement and energy, and (metaphorically speaking) it's let loose in a dance. Body parts have various sorts of sigificance, both in general and in relation to particular people; for example, the culture hero Fiaz often get nose pronouns, largely on account of the size of their nose. Or you might use fumaar our comfort at an especially relaxed time.

The choice of pronoun can influence the interpretation of the sentence as a whole:

| fumaar | kiemgi |  | sitiwe |  | ðaạm |
| :---: | :---: | :---: | :---: | :---: | :---: |
| fu- maar | kiem | -gi | si- ti | -we | ðaam |
| 1pposs- comfort | just.now | - PRS | 1sub - open |  | swim |
| "We just fucked" |  |  |  |  |  |

The idiomatic interpretation of Øaam swim here is helped along somewhat by the choice of pronoun.

The speedlang challenge requires a single example with fifteen pronouns to illustrate the language's open pronoun class. I had a fairly ambitious plan to construct a story that would satisfy this requirement, but there's not going to be time. Instead, I'm going to give a simple annotated list of words that are fairly regularly used to derive pronouns. Here they are:
(3.7) Common bases for derived pronouns
a. buol nose. Noses are often associated with wisdom, presumably because the obvious resemblance between wisdom and a good sense of smell. It helps that culture hero Fiaz is supposed to have been well-endowed, nasally speaking (and Fiaz themself is often referred to as tebuol their nose).
b. duaal belly. Belly pronouns are all about eating and wanting to eat.
c. enoð mouth. Mouth pronouns are more about language and camaraderie.
d. faawe hair. You use this about someone who's sort of flipping out, I don't know why. First and second person fafaawe and lofaawe are probably most used in past tense and in (self-)recrimination.
e. huen blood. This is more associated with excitement than with violence; though violence can be exciting, of course. Blood pronouns are probably most often plural.
f. ial pleasant. Refer to someone as lial when you're enjoying their company.
g. maar comfortable. Probably used most often in the first person plural or inclusive, fumaar or gawmạar.
h. mak body. Use this one to emphasise personal involvement or knowledge. Especially used most often with subjects of agentive verbs; first-person famak my body is probably most common
i. mi eye. Eyes are about seeing what's coming well in advance, though not necessarily with knowing what to do about it (it's the nose that's associated with wisdom). Use eye pronouns like gawmi or fumi especially in the context of warnings or fear.
j. nonu butt. You really only get first-person fanonu or maybe gawnonu, it's selfdeprecating but also endearing.
k. ope joy. Joy pronouns are celebratory, of course.

1. pigom goomfruit. Goomfruits are sweet and sloppy and sensuous, and make for endearing pronouns. Be careful though: what you want is lopigom your goomfruit, not fapigom my goomfruit; only the former is a second-person pronounn. Which is not to say the other one is ungrammatical.
m . rodi hand. Hands are naturally associated with certain kinds of work, but also with ritual power, and it is common to refer to someone whose hands have been ritually painted as terodihuwe their hands. (The dual suffix is not strictly necessary, but it's definitely common.)
n. sio poop. If you refer to someone as tesio, you probably don't like them very much.
o. tonde grief, loss. Most often used in plural forms that include the first person.

### 3.4 Demonstrative pronouns

There are two demonstrative pronouns, proximal aki and distal ako. These obviously relate to Daluw's demonstrative adjectives (§2.4.6); it's a tempting conjecture that the a that's been prefixed to them is the same a that shows up in the personal pronouns (§3.1).

### 3.5 The reflexive pronoun

Daluw has a single reflexive pronoun de:

"Fiaz ${ }_{i}$ asked Fiam ${ }_{j}$ to ask Weat ${ }_{k}$ to paint them $\mathrm{m}_{\mathrm{i}, \mathrm{j}, \text {, }}$ "
As (3.8) illustrates, the most basic use of de is in a subordinate clause to refer to the subject of an embedding clause. This can be an intermediate clause as well as the root clause; here, de in the twice-embedded clause can refer back to either Fiaz or Fiam. However, it cannot refer back to the subject of its own clause, and it also cannot refer back to the objects of the embedding verbs. It is a subject-oriented, non-local (obviative) reflexive pronoun.

The example uses nonfinite complement clauses, but de can also be used in finite complements, with the same restrictions on coreference:

## (3.9)

| fiạm | na | kịr | weat | di | fiaz | na | wụạd | de |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| fiam | na | kịr | weat | dị | fiaz | na | wụạd | de |
| Fiam | PAST | tell | Weat | say | Fiaz | PAST | paint | REFL |


In this sentence, de cannot refer back to Fiaz, because Fiaz is a clausemate, and it cannot refer back to Weat, because Weat is not a subject, so it can only refer back to Fiam.

The constraint that de cannot refer to the subject of the same clause applies only when de itself is a semantic argument of the verb. If instead it's a possessor or is embedded in an adjunct, there's no problem:

| a. fiaz na | ọa | tonel | de | uere | ebem |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| fiaz na | ọa | t - onel | de | uere | ebem |
| Fiaz PAST | enter | $3 s P O S S$ - tent | REFL | seek | paint |

b. fiam na idow fi mạðụ aðas i de fịạm na idow fi mạrðụ aðas i de
Fiam PAST see INDEF smoke nearby GEN REFL
"Fiam ${ }_{\mathrm{i}}$ saw smoke near themselves ${ }_{\mathrm{i}}$ "
It's also possible to demote a direct object to an oblique to allow the use of the reflexive pronoun:

| fiaz | na | wụạd | i | de |
| :--- | :--- | :--- | :--- | :--- |
| fiaz | na | wụạd | i | de |
| Fiaz | PAST | paint | GEN | REFL |

"Fiaz painted himself"
However, with many verbs, including wụad paint, it's preferable to use a somewhat different construction:

| fiaz | na | wưạd | de | mak |
| :--- | :--- | :--- | :--- | :--- |
| fiaz | na | wưạd | de | mak |
| Fiaz | PAST | paint | REFL | body |

"Fiaz painted themselves"
de functions here as a sort of autobenefactive pronoun (it could also be automalefactive), indicating that the subject's action significantly affects the subject. This construction is possible only when the object (here, mak body) is possessed by the subject, so you can think of it as a sort of subject-raising. Though the reflexive pronoun corefers with the clause's subject, for some reason that's not a problem here. (Perhaps the pronoun is secretly embedded in something, or somehow functioning as a suffix rather than a pronoun.)

In that construction, mak body is sufficiently neutral that it allows what you'd think of as a regular reflexive interpretation. But other objects are also possible, so long as they are possessed:

| (3.13) | fiaz | na | wụąd | de | rodihụwẹ |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | fiaz | na | wưad | de | rodi -hụ - we |
|  | Fiaz | PAST | paint | REFL | hand -DU -PL |

"Fiaz ${ }_{i}$ painted their ${ }_{\mathrm{i}}$ hands"

A regular object pronoun also cannot refer back to the clause's subject:

| (3.14) | fiaz na wưad $=$ te |
| :--- | :--- |
| fiaz na wụad $=$ te |  |
|  | Fiaz PAST paint $=3 \mathrm{~s}$ |
|  | "Fiaz ${ }_{i}$ painted them ${ }_{*_{i}, \mathrm{j}} "$ |

But in this case, you cannot achieve coreference by demoting the object:
(3.15) ? fiaz na wụạd i =te
fiaz na wụạd i =te
Fiaz PAST paint GEN $=3 \mathrm{~s}$
"Fiaz $_{i}$ painted them ${ }_{* i, j}$ "
That may be an instance of a more general rule of Daluw grammar, that in contexts where a reflexive pronoun is grammatical (with the intended meaning), you cannot use any other sort of pronoun. This rule can sneak up on you, because it governs not only overt pronouns but also silent ones, whether pro-dropped or controlled, and because the distribution of de is quite different from that of English reflexives.

For example, the following sentence cannot be interpreted as referring to Fiaz's tent:

| fiaz | na | ọa | tonel | uere | ebem |
| :--- | :--- | :--- | :---: | :--- | :--- |
| fiaz | na | ọa | t-onel | uere | ebem |
| Fiaz | PAST | enter | 3 3sPOSS- tent | seek | paint |

"Fiaz looked for $_{\mathrm{i}}$ the paint in their ${ }_{* i, j}$ tent"
There's no overt pronoun here, just possessor agreement, but you still cannot interpret it as if it had a silent pronoun referring back to the subject. For that, you need de, as in (3.10a), and de must be overt.

This also affects infinitives. With verbs like eza want, where you might expect subject control to be possible, the subject of the embedded verb can be understood as coreferential with the matrix subject only if de is present:

| (3.17) | fiaz | weza | de | puwụad | fiaam |
| :--- | :--- | :---: | :--- | :---: | :---: |
|  | fiaz | w- eza | de | p- $\quad$ - wưad | fiạm |
|  | Fiaz | 3sub- want | REFL | 3sSUB- INF-paint | Fiam |

"Fiaz wants to paint Fiam"
Without de, this could only mean that Fiaz wants some salient third party to paint Fiam: the subject of the infinitive can be pro-dropped only if it does not co-refer with the matrix subject.

There is an additional complication that runs throughout many of these examples. Whenever some other element of the sentence must agree with de, it always displays third person singular agreement, regardless of the person or number features of the antecedent of de. Here's an example of that:

| teza | de | puwụạd | fiạm |
| :--- | :--- | :---: | :---: |
| - eza | de | p- u- wụạd | fiạm |
| 1SUB- want | REFL | 3sSUB- INF- paint | Fiam |
| "I want to paint Fiam" |  |  |  |

Here the infinitive agrees as if with a third person singular subject, even though, semantically speaking, its subject is first person.
(Aside. I'm not sure how plausible this is, to be honest. It seems strange that you can pro-drop in I want them to paint Fiam but not in I want to paint Fiam, and it's easy to imagine that controlled pro would not be subject to the restrictions on overt pronouns. But for now, that's how this works.)

It's maybe worth pointing out that in this construction, de might raise into the matrix clause, but semantically speaking it's not an argument of the matrix verb, so there's no problem letting it corefer with the matrix subject. However, you could not also use de for the object of the embedded verb, because then it would corefer with the embedded subject. Instead, you'd probably use an autobenefactive construction:

| teza | de | puwuad | de | mak |
| :---: | :--- | :---: | :--- | :--- |
| t. eza | de | p- |  |  |
| u- wuagd | de | mak |  |  |
| 1SUB- want | REFL | 3sSUB- INF- paint | REFL | body |

"I want to paint myself"
There's one more complication. Sometimes, de can refer back not to a grammatical subject but to the speaker. I'm not sure whether this possibility is ever completely ruled out, but it's rare at best outside of some fairly particular circumstances.

The first sort of case is when the only available subjects are indefinite. For example:

| a. | fi | way | kiemgi | ono | gu | de |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| fi | way | kiem | -gi | ono | gu | de |
| INDEF | person | just.now | -PRS | attack | hit | REFL |
| "Someone just attacked me" |  |  |  |  |  |  |


| b. | fi | way | negi | ona | tonel | de |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| fi | waf | ne | -gi | oa | t- onel | de |
|  | INDEF | person | already - PRS | enter | 3sposs - tent | REFL |

"Someone has been in my tent"
?Or: "Someone ${ }_{i}$ has been in their ${ }_{i}$ tent"

(You might get the last sentence after asking someone if they'd painted themselves, for example.)
Notice that when de refers to the speaker rather than the subject, there's no problem using it as the object of a matrix verb. That's why (3.20a) is grammatical under the intended interpretation, even though it could not be interpreted as a grammatical reflexive. And you could force the intended interpretation of (3.20c) by rephrasing it as doa fi way na wụad de.

The second context in which this use of de is relatively common is in matrix-clause infinitives (cf. §6.4):

| a. | puwuad | de! |
| :--- | :--- | :--- |
| p- $u-$ wưad | de |  |
|  | 3sSUB - INF - paint | REFL |

"If only someone would paint me!"
?Or: "If only someone would paint themselves!"
b. de pua ðað̃ one
de p-u-a ðаðа one
REFL 3sSUB-INF-COP again young
"If only I were young again!"
Here's an example where de is naturally taken as referring to the speaker despite in an embedded clause where the matrix subject is definite:
(3.22) onwa tiaz na gos agim tiạm wụan de pigom

| onwa | tiaz | na | gos | $\underset{\text { agig }}{\text { agim }}$ | tiam | w- u- ean | de | pigom |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| apparently | Tiaz | PAST | address | suggest | Tiam | 3sSUB- INF- eat | REFL | goomfruit |

"It seems that Tiaz proposed to Tiam to eat my goomfruit" (5moyd 1432)
I don't so far have a good explanation why this works.
In contexts like these, de does not block the use of regular first-person pronouns.

## Chapter 4

## The verb complex

### 4.1 Subject agreement

Main verbs inflect separately for the person and number of the subject.
Number agreement uses the same suffixes found with nouns and adjectives, with the same sorts of complications found with nouns; see §2.1.1 for details.

Subject agreement is usually straightforward: first and second person are coded respectively by $\mathbf{s}$ - and $\mathbf{m - ;}$ these replace a stem-initial $\mathbf{h}$, and $\mathbf{i}$ is inserted before a stem-initial consonant. But before vowel-initial verbs, there are three other patterns; Table 4.1 shows all the possibilities.

|  | 1 | 2 | 3 |
| :--- | :--- | :--- | :--- |
| I | $\mathrm{s}-$ | $\mathrm{m}-$ | $\varnothing-$ |
| II | $\mathrm{t}-$ | $\mathrm{m}-$ | $\varnothing-$ |
| III | t | m- | $\mathrm{w}-$ |
| IV | t | ñ- | $\mathrm{d}-$ |

Table 4.1: Subject agreement prefixes for four classes of verb. All verbs in classes II, III, and IV begin with a vowel.

### 4.1.1 Irregular verbs

So far I know of just one truly irregular verb, the copula a. It inflects as in Table 4.2. Notably, its first and second forms seem to consist entirely of agreement affixes.

|  | Singular | Plural |
| :--- | :--- | :--- |
| 1 | si | sue |
| $1+2$ | -- | galawe |
| 2 | mi | mue |
| 3 | a | awe |

Table 4.2: The copula a

### 4.2 Verbal aspect

There's a progressive verb form using a suffix that can take (at least) the forms -baan -vaan -aan. You get the last of these after a plosive, and -vaan after the same verbs that have an unpredictable breathy vowel in the plural agreement suffix. (There may be other morphophonological peculiarities with this suffix, I haven't had time for thorough investigation.) These suffixes select the -e form of the plural agreement suffix.
-baan is the only Daluw affix with a heavy nucleus. This may hint that it was grammaticalised from a full verb only recently. However, as an independent lexical item, baan has only the (nominal) meaning dance, which does not seem semantically appropriate.

Progressive verb forms are a lot less common in Daluw than in English, and are mostly used only when there's a fairly direct contrast between a backgrounded ongoing situation and a foregrounded event; though see also §4.6.1 for another use.

The only other verbal inflection I so far know about is initial cv-reduplication, which can be used with some verbs to express iterative aspect.

Other than these two forms, aspect is usually expressed periphrastically. In particular, verb chaining can be used to invite various sorts of perfective interpretation.

### 4.3 Nonfinite verb forms

There are two nonfinite verb forms, which I'll describe as an infinitive and a nominalisation. Chapter 6 includes what I have to say about the usage of these verb forms, here I'll just introduce their morphology.

### 4.3.1 The infinitive

The Daluw verb has a form that I'll refer to as the infinitive. Unlike infinitives in many languages, this verb form inflects to agree with its subject. Table 4.3 shows the paradigm.

|  | Singular | Plural |
| :--- | :--- | :--- |
| 1 | fu- | ðü |
| $1+2$ | -- | galu- |
| 2 | bu- | mụ- |
| 3 | pu- | wụ- |

Table 4.3: Subject agreement in the infinitive
I'll normally decompose each of these prefixes into two bits, one specifically marking agreement and the other, either $\mathbf{u}$ or $\mathbf{u}$, marking the infinitive. (It would be possible to think of $\mathbf{u}$ as strictly a minimal form and $\mathbf{u}$ as augmented, but elsewhere first person inclusive is always treated as plural, so I do not pursue that course here.)

Syntactically, there are two main reasons for thinking of this verb form as an infinitive rather than, say, a subjunctive. First, when it occurs as the complement to a verb, its subject raises into the matrix clause, as can be shown by tests involving, for example, adverb placement. Second, a clause headed by a verb in this form cannot include the tense particles na or gi, suggesting that an infinitive clause is strictly smaller than a finite clause. The fact that these infinitives agree with
their subject is not really a worry, since in Daluw agreement is evidently lower in the clause than tense. Semantically, one might also note that these verb forms tend to be future-oriented in a way that's reminiscent of infinitives.

### 4.3.2 The dok nominalisation

This is pretty straightforward, you prefix a verb with dok-, or do- if it starts with a consonant, and the result can be used as a noun.

This is a fairly 'big' nominalisation. Any object is just included, without requiring any syntactic adjustment. However, a dok nominalisation need not have a subject, and if it does have a subject, its morphosyntactic behaviour is distictive. If it is plural, this is registered by the usual verbal plural agreement suffix. But otherwise, the subject of a dok nominalisation is indexed with the nominal possessor agreement suffixes (which are also sensitive to number). Also, the subject of a dok nominalisation follows the verb, just like a possessor would; it will also follow the object, if that is represented by a pronominal clitic.

A dok nominalisation can also include vP adverbs, such as manner adverbs.

### 4.4 The morphological imperative

There's a morphological imperative, evidently related to the infinitive form: it uses a u- prefix whose morphophonological behaviour is exactly like that of the infinitive agreement prefixes. (But actual imperatives are just as often expressed with bare verb stems, or with wordier constructions.)

### 4.5 Tense, aspect, and modality particles

There is a small family of particles that can come between the subject (if it is overt) and the verb, and which express various tam categories.

### 4.5.1 Tense

There are two tense particles, na for past tense and gi for present. na is the more common of the two, since Daluw clauses default to present tense and gi is often unnecessary. gi cannot be used to invite a progressive or other sort of imperfective interpretation.

### 4.5.2 Aspect and modality

This is a group of, at last count, five particles marking various modal or aspectual distinctions. Syntactically they are distinct from plain adverbs because when they occur in a finite clause, they must be suffixed with the appropriate tense particle. This may be the only context in which present-tense gi is truly obligatory.

Semantically, these particles always fall within the scope of the tense marker. For example, nena already-PAST indicates that the speaker is talking about something that had already occurred at the topic time, which is in the past.

Two of the particles express a basic modal distinction, awaz expressing possibility (like "may" or "can") and maar expressing necessity (like "must"). When they occur suffixed with a tense particle, these unambiguously express circumstantial (as opposed to epistemic).

The other particles in this class are po (habitual), ne already, and kiem just now, about to, almost. Here's an example to illustrate the last of these:

| onel | kiema | rampe | tio | i | fi | ue |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| onel | kiem -na | rampe | tio | i | fi | ue |
| tent | almost -PAST | fall.over | go.down | INDEF | GEN | wind |

"The tent almost fell over because of the wind"
(5moyd 1429)
(kiem almost becomes kiema when combined with the past tense suffix -na.)
When these particles occur in an infinitive clause, they do not take the tense suffixes. The following example illustrates that, as well as some fairly complex interactions with tense in finite clauses:

| (4.2) | awazna | siti | ðаam | oro | negi |  | simoa | awaz | futi |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ạwạz - na | $s-\mathrm{ti}$ | ðạạm | oro | ne | - gi | s-moa | ạwạz | f- |
|  | can -PAST | 1sub-open | swim | and.then | already | -PRS | 1sUB- NEG | can | 1 sSUB - |


| - | ðạam <br> $\mathrm{u}-\mathrm{ti}$ <br> INF- open <br> Øạam <br> swim |
| :---: | :---: |

"I used to be able to swim, but now I can't"
(5MOYD 1420)

### 4.6 Transitivity

Daluw is fairly relaxed about transitivity. Many basically transitive verbs can be used without an object, and quite a few basically intransitive verbs (nonagentive ones at least) can be given an object and take a causative sense. But that doesn't mean there's nothing to say about transitivity in Daluw.

### 4.6.1 Detransitivisation

A lot of the time you can just drop the object, and you've got yourself an intransitive verb. This doesn't create ambiguity, because Daluw doesn't allow objects to be pro-dropped: they'll be represented at least by a pronominal clitic.

Still, a lot of the time a detransitivised verb sounds better if there's some overt indication that what matters is the process, and not its effect on an object. Consequently, detransitivised verbs often occur with progressive or iterative marking. It's not that these express a valency alternation, they just make it clear that the object of the reported activity is not what's important.

In fact with iteratives in particular you often get a verb chain like this:

| na | guwe | weat | guguwe |
| :--- | :--- | :--- | ---: |
| na | gu - we | weat | REDUP-gu - we |
| PAST | hit - PL | Weat | ITER - hit - PL |

"They hit Weat, they beat him"

Here the verb gu hit gets used twice, once with an object and once reduplicated, detransitivised, and expressing repeated action. (In the light of the discussion below it's significant that the plurality of the subject is marked on both verbs; this is verb chaining, but it's not true serialisation.)

Another context in which verbs are normally detransitivised are reciprocal statements:

| fi | momawe | dawed | i | way | kiko | ono | guwe | aðo |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| fi | moma - we | dawed | i | way | kiko | ọno | gu - we | aðo |
| INDEF | mob - PL | big | GEN | people | RECIP | attack | hit - PL | there |

"Big mobs of people fought each other there"
(5MOYD 1428)
Syntactically, kiko one another is an adverb, and can have no direct effect on the verb's transitivity; but it's no surprise that it regularly occurs with detransitivised verbs.
(Though, it can occur with transitive verbs as well:

| oro | fumạar | na | kiko | toanwe |  | pigomwe |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| oro | fu- maar | na | kiko | t- oan | - we | pigom | - we |
| and.then | 1pPOSS - comfortable | PAST | RECIP | 1SUB - eat | - PL | goomfruit | - PL |

"And then we ate one another's goomfruit"
I guess this involves possessor raising or something like that.)
A final possibility is to demote a verb's object by inserting the genitive preposition $\mathbf{i}$. (3.11) included a syntactically-motivated case of this, with the reflexive pronoun de. But this construction is generally available, and is, in fact, a common way to express certain partitive statements:

| oro | toanwe | i | pigomwe |
| :--- | :---: | :--- | :--- |
| oro | t. oan - we | i | pigom -we |
| and.then | 1SUB- eat - PL | GEN | goomfruit - PL |

"And then we ate some of the goomfruit"

### 4.6.2 Unergative verbs

An unergative verb is an agentive intransitive verb. In English, "sing" and "dance" are unergative, at least when used intransitively.

Cross-linguistically it's very common to allow unergative verbs to take so-called cognate objects: "sing a song" is an example, as is "dance a dance." It's also common to have constructions that pair such cognate objects with semantically light verbs, as in "do a dance" or "take a shower."

Daluw sort of takes that last tendency to an extreme. There are plenty of exceptions, but the use of light verb constructions rather than individual unergative verbs is very common. For example, Daluw seems to have no verb meaning dance; instead you might say ti baan open a dance.

There's reason to suppose that despite their apparent structure, Daluw grammar treats these constructions as intransitive verbs. The main piece of data is their ability to occur in serial verb constructions, in positions that normally disallow transitive verbs. For example:

| na | kiko | dọw | ti | baan | kuedwe |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| na | kiko | dọw | ti | baan | kụed - we |
| PAST | RECIP | exactly | open | dance | go.past - PL |

"They danced right past one another"
(5moYd 1427)

That this is a true serial verb construction, and not some other sort of verb chaining, is confirmed by the fact that kued but not $\mathbf{t i}$ is inflected to agree with the plural subject. But that it a bit mysterious that baan, apparently an object just of ti, can appear between the two verbs.

### 4.7 Verb chaining

It's fairly common to find two verbs in a single clause, with no explicit conjunction or indication of subordination. It's a sign of what I'm calling verb chaining when multiple verbs fall under the scope of a single tense particle.

There are at least two major sorts of verb chaining. In the first, the verbs can take separate objects, and each is marked to agree with the subject. In a construction of this sort, the verbs are most often given a sequential interpretation, though if the first verb (and perhaps also the second) is in the progressive, they'll be understood to be simultaneous.

In the second sort of construction, the two verbs are bound more tightly. With the exception of cognate object constructions mentioned above (§4.6.2), the verbs must share all arguments, and together they inflect only once with the clause's subject, with the first verb prefixed for person agreement and the second suffixed for number agreement, as necessary. I'll sometimes referred to this sort of case (but not the previous sort) as a serial verb construction.

## Chapter 5

## Simple clauses

### 5.1 Basic constituent order

Daluw is a very well-behaved svo language: when a verb has two arguments, it's always predictable which one will end up as grammatical subject; an overt subject is always before the verb; and an overt object is always after the verb.

With one unsurprising sort of exception: wh-movement can move an object to clause-initial position:

| me | gi | moan? |
| :--- | :--- | :---: |
| me | gi | m - oan |
| what | PRS | 2 SUB - eat |
| "What are you eating?" |  |  |

So far this is possible only in questions and (maybe) relative clauses, but if I decide to allow focus movement or topicalisation it'll presumably happen there too.

### 5.2 Grammatical subjecthood

Daluw allows pronominal subjects to be dropped. But it doesn't allow a finite clause to lack an overt subject for any other reason, so when there is no overt subject, it's always possible to fill one in. I'm going to assume that a pro-dropped subject still counts as a clause's grammatical subject, because that simplifies some formulations, but nothing important turns on this.

Further, Daluw has no expletive subjects, and with one important exception, the subject is always a semantic argument of the verb.

The exception is the negative verb moa, which I discuss below (§5.4). It takes a clausal complement, and the subject of that clause obligatorily raises to provide moa with a subject. But moa is the only Daluw verb that behaves this way.

This means that every other verb in Daluw has a semantic argument that can serve as its subject. Thus, other than moa, there's no verb like English "seems," that takes only a clausal argument that cannot serve as subject. Weather reports, to take another significant example, all involve verbs that take a semantic argument.

Which of a verb's arguments serves as grammatical subject is determined by a familiar sort of thematic hierarchy: if there's an agent, then it's the subject; otherwise if there's an experiencer, then it's the subject; and so on. It's possible there'll end up being verb pairs like "scare" and "fear," where these matters can get a bit subtle, but I assume that the thematic hierarchy settles even those cases. (I take "scare" to be an agent/patient verb, and "fear" to be an experiencer/theme verb, for example.)

You might think this is exactly like what English does, but there's an important difference. Daluw doesn't allow the sort of construction where the one argument of a nonagentive intransitive verb remains after the verb, and the normal subject position is filled with some other expression, maybe expletive "there" or a locative expression. Except when the subject has been pro-dropped, and with the important exception of moa, the pre-verbal subject position is always occupied by a semantic argument of the verb.

This is especially noticeable in existential constructions:

| fi | pigomwe | na | zawe |
| :--- | :--- | :--- | :--- | :--- |
| fi | pigom -we | na | za - we |
| INDEF | goomfruit -PL | PAST | exist - PL |

"There were some goomfruits"
As you can see, in this case English strongly prefers to put the semantic subject after the verb, and put expletive "there" in subject position. (But it's still the semantic subject that controls agreement on the verb, so "there" is not taking on all the properties you'd associate with grammatical subjecthood in English.)

### 5.3 Nonverbal predicates

Noun and adjective predicates use the copula a:

| tiạm | a | wakado |
| :--- | :--- | :--- |
| tiaam | a | wakado |
| Tiam | COP | hunter |

"Tiam is a hunter"
tiaz a maar
tiaz a mạar
Tiaz COP comfortable
"Tiaz is comfortable"

As you can see in (5.3), noun predicates do not normally take the indefinite article, though you might include it if you need to take steps to rule out an equative interpretation:

| tiam | a | fi | wakado, | moa | pua |  | wakado | ko |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| tiạm | a | fi | wakado, | moa | p- | u-a | wakado | ko |
| Tiam | COP | INDEF | hunter | NEG | 3sSUB - | INF - COP | hunter | DIST |

"Tiam is $a$ hunter, they're not the hunter"
For the copula's irregular conjugation, see §4.1.1.
Locative predicates use the existential copula za (whose conjugation is regular):

| (5.6) | na | siza | loas | i | hạd |
| :--- | :--- | :--- | :--- | :--- | :--- |
| na | $\mathrm{s}-\mathrm{za}$ | loas | i | hạd |  |

### 5.4 Negation

Clausal negation is expressed using the negative verb moa, normally with the lexical verb in an infinitive complement:

| (5.7) | na | simoa | fuan | lopigom |
| :--- | :--- | ---: | :--- | :---: |
|  | na | $\mathrm{s}-\mathrm{moa}$ | $\mathrm{f}-\mathrm{u}-$ oan | lo- pigom |
| PAST | 1SUB- NEG | 1 1sSUB - INF - eat | 2sPOSS-goomfruit |  |
|  | "I did not eat your goomfruit" |  |  |  |

As noted above ( $\$ 5.2$ ), moa is unique among Daluw verbs in lacking a semantic subject, that is, a semantic argument that can serve as its grammatical subject. The grammatical subject must therefore raise from the embedded clause.

This seems to rule out the possibility of using moa with a finite complement, since I'm pretty sure Daluw doesn't allow raising out of finite clauses. I don't think this leads to any real problems. It does mean that the negation and the negated clause can't differ in tense, but you'd rarely want that, and for the cases you do there'll probably be some sort of cleft construction you can use. Other TAM particles can occur in infinitive clauses, just without the tense suffixes they must bear in matrix clauses (§4.5), so that's not an issue. But maybe I'm missing something.

## Chapter 6

## Subordinate clauses

I'm going to be very quick here, I'm almost out of steam.

### 6.1 Complement clauses

There are two or three common sorts of complement clause, depending on whether you count dok- nominalisations as truly clausal.

Finite clauses use the complementiser di, which is also a verb meaning say:

| (6.1) | fiaz | weza | dị | wea | tiwe | baan |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | fiaz | w- eza | dị | wea | ti | - we | baan |
|  | Fiaz | $3 S U B-$ want | COMP | person:PL | open | -PL | dance |

"Fiaz wants the people to dance"
If the complement clause refers to the matrix subject, it must use the reflexive pronoun de to do so, just like in infinitive clauses (cf. §3.5):

| (6.2) | fiaz | na | di | di | de | maargi | ti | baan |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | fiaz | no | dị | dị | de | maar -gi | ti | baan |
|  | Fiaz | PAST | say | COMP | REFL | must -PRS | open | dance |

"Fiaz said that he would dance"
That example also illustrates the possibility of using di both as the verb and as a complementiser in the same sentence.

The Daluw infinitive, more than English's, is future-oriented. It makes best sense as the complement to verbs like eza want or agịm suggest, that point towards a possible future action. It doesn't really make sense as the complement to a verb like new like, enjoy, which is mostly about your attitude towards things you have already done; so with new you're more likely to use the dok nominalisation.

For it part, the dok nominalisation is fairly free to operate as the complement to a verb simply because it is a noun, and, syntactically at least, it can end up wherever a noun can. So it's not entirely clear whether it should really be counted as a complement clause when it does serve as the object to a verb.

### 6.2 Adverbial clauses

A wide range of adverbial clauses can be constructed by using a clause as the complement of an appropriate preposition.

### 6.3 Relative clauses

I've only figured out the most basic thing about relative clauses, namely that they're introduced by the non-inflecting particle a and that at least in simple cases the relativised constituent is just gapped. Whether this is the same as the a that shows up in pronouns, or the one that serves as copula, I don't know.

It wouldn't stun me to learn that din say can also be used to head relative clauses.

### 6.4 Insubordination

Insubordination is a phenomenon whereby constructions that somehow inherently belong to subordinate clauses nonetheless get used in matrix clauses. There are some uses of Daluw's infinitive that qualify.

Especially, an unembedded infinitive can be used as a sort of hortative:

| apew | putio! |
| :--- | :---: |
| ạpéw | p- u- tio |
| rain | 3sSUB- INF- fall |
| "If only it would rain!" |  |

One thing that really stands out in that example is that the infinitive has a subject. We already knew that the infinitive will agree with a subject, suggesting maybe that in Daluw subjects are more at home in infinitives than they are in many other languages, including English. But when serving as complement clauses, their subjects nonetheless seem to have to escape into the matrix clause, just as they do in other languages.

## Appendix A

## Vasi

Daluw's sister language Vasi is still mostly unknown, so here I'll just provide a sketch of its phonology. Much of this will be comparative, referring back to parallel discussions of Daluw.

## A. 1 Inventory

Vasi's inventory of consonants is given in Table A.1.

|  | Bilabial | Coronal | Dorsal | Glottal |
| :--- | :--- | :--- | :--- | :--- |
| Nasals | m | n |  |  |
| Plosives | p b | t d | kg |  |
| Fricatives | f v | s z | $\chi$ | h |
| Approximants |  | l | w |  |

Table A.1: Vasi consonants
$\mathbf{f} \mathbf{v}$ are bilabial, but otherwise I follow the IPA closely. In particular, $\chi$ is uvular, while $\mathbf{k} \mathbf{g}$ are velar.

The biggest differences with Daluw involve the coronals, especially though not only because of Vasi's lack of a distinct dental series. (See $\S$ A. 5 for some related data.)

Vasi has eight vowels, i e ẽ a ão õ $\mathbf{u}$, with a representing [a] and the tilde representing nasalisation. Unlike Daluw, Vasi has no contrastive vowel length.

The nasal vowels are an innovation, but hardly a mysterious one; they correspond to Daluw nasal codas, accompanied by lowering of high nasal vowels.

All Vasi vowels other than a can be breathy-voiced, but as in Daluw this behaves like a suprasegmental feature.

## A. 2 Phonotactics

As already noted, Vasi has lost nasal codas. It seems likely that, diachronically at least, all remaining consonant clusters signal morpheme boundaries.

Vasi does not allow vowel sequences. Comparison with Daluw suggests that the latter underwent a change that merged the first two syllables in many stems by eliminating the medial consonant, and that this is what gave rise to Daluw's vowel pairs (and also long a:). In all cases, Vasi retained the medial consonant, which might be any of $\mathbf{f z w} \boldsymbol{\chi} \mathbf{h}$.

## A. 3 Stress

Vasi words are stressed on their last syllable. This is the opposite of Daluw, where stress is consistently stem-initail. Also unlike Daluw, Vasi allows inflection to shift stress, so, for example, the plural suffix (cognate with Daluw's) regularly bears stress in Vasi.

Like Daluw, Vasi has a process of phrase-final lengthening (cf. §1.4), but it applies somewhat differently. In Vasi, the process always targets a stressed syllable. This means that it skips over pronominal clitics at the end of prosodic phrases, a marked difference. Also, since Vasi has no underlyingly heavy syllables, this process always results in a lengthened vowel.

## A. 4 Breathy voice

Here are the major differences between Vasi and Daluw with respect to breathy voice:

- Breathy-voiced vowels in Vasi have a characteristically lower pitch, unlike in Daluw.
- Vasi a, unlike Daluw a, is never breathy.
- Like in Daluw, breathy voice spreads rightwards to the end of the word. However, in Vasi this spread is normally blocked by a or $\chi$.
- In Daluw, breathy voice seems to have also spread leftwards onto stressed vowels. This did not happen in Vasi, perhaps because it stresses the word-final syllable instead of the wordinitial one. Largely as a result, Vasi has many more breathwise disharmonic roots than does Daluw. As an example you can consider the pair maldu (Vasi) and maroðu (Daluw), both meaning smoke. It would be reasonable to suppose that the Vasi form reflects the original situation, with breathy voice only on the second vowel, but that it has spread leftward in Daluw.


## A. 5 Some cognates

The attempt to reconstruct the most recent common ancestor of Daluw and Vasi is still in its infancy, and here I will not even attempt a comprehensive list of sound correspondences. Instead, I provide the following table of likely cognates, as an aid to future research.

Table A.2: Likely cognates between Vasi and Daluw

| Vasi | Daluw | Gloss(es) |
| :--- | :--- | :--- |
| agẹ̃ | ạgịm | request (V); suggest (D) |
| apẹv | ạpẹw | rain |
| azas | aðas | around (V); nearby (D) |

continued...

Table A.2: Likely cognates (continued)

| Vasi | Daluw | Gloss(es) |
| :---: | :---: | :---: |
| bawẹz | bạay | camp |
| bizaw | biaw | old (V); longtime (D) |
| bufol | buol | monster (V); stranger (D) |
| det | dets | branch (V); stick (D) |
| dowa | dọa | other |
| dụ | ðụ | breath |
| ebek | ebek | scar (V); initiation (D) |
| ehaz | eaaz | similar (V); same (D) |
| ẽkes | imkes | stand up (V); begin (D) |
| fụva | fụa | flower |
| gafo | gaa | young (V); new (D) |
| izal | ial | friendly (V); pleasant (D) |
| kaf | ka | ka flea |
| kil | kịr | lie (V); inform (D) |
| kizode | kiore | egg (V); child (D) |
| kuhẹd | kụẹ | go forward (V); go past (D) |
| maldụ | mạrðụ | smoke |
| mas | mas | sand |
| maxel | maạl | asleep (V); comfortable (D) |
| mẹ̃zẹz | mẹndenz | control (V); summon (D) |
| ohadẹ | ọạdẹ | dig |
| padeh | pade | method (V); path (D) |
| sahã | tạam | mud |
| sõte | somte | wisdom |
| tefez | teaz | clothing (V); animal hide (D) |
| tụl | tụr | old |
| ụve | ue | wind |
| vaz | way | person |
| vezav | wiaw | listen (V); hesitation marker (D) |
| vọhas | wọạs | waterfall (V); roar (D) |
| weza | eza | thirsty (V); want (D) |
| wụvad | wụạd | blood (V); paint (D) |
| $\chi$ ã | ham | day |
| $\chi$ ¢̣hụ | hụo | snake |
| $\chi$ ¢̣̣\|̣̃ | hụen | juice (V); blood (D) |
| zahã | ðạam | play (V); swim (D) |
| zavã | oan | eat |


[^0]:    ${ }^{1}$ I'm hinting at a distinction between stems and roots, but I'm afraid I haven't worked out derivational morphology in nearly enough detail to draw this distinction with any rigour; sorry.

