4 Word Classes and Overview of Morphology

This chapter has three parts. The first summarises the characteristics of each word class (form class) identified for Kuot, in terms of semantics, morphology and syntax, with mention of sub-classes where appropriate, and the approximate size of the class for closed classes.¹ The second part of the chapter is an overview of the morphology, discussing stems, affixes, clitics, and particles, their prototypical definitions for Kuot, and cases that do not fit the definitions. Properties of cohesion, form variance and distribution are discussed. The last part concerns the unit “word” in Kuot.

The terms “agreement”, “indexing” and “cross-referencing” refer to the same categories in terms of person, gender and number marking in the grammar, but with the following differences: agreement is used for relations within the noun phrase, so that for instance a demonstrative in attribute use agrees with a head noun; indexing is used for cases where the item showing the category is not syntactically within the scope of the noun, as for prepositions and possessives, which thus index the category of the noun (as well as referents not expressed as nouns); cross-referencing is used for the pronominal markers on a predicate (verb or adjective) which cross-reference a noun (or referent not expressed as a noun) in an argument role.

4.1 Word classes

There are only two open classes in Kuot: nouns and verb class I. All other classes are closed. Four classes can be identified as lexical: nouns, verbs, adjectives and adverbs. These are presented first, followed by: numerals, pronouns, possessives, prepositions, locationals and directionals, and demonstratives. The

¹ Numbers for the closed word classes represent the numbers of stems in my data. I am certain that there are more members than I have been able to collect, in particular in the larger of the classes (verb classes II and III, adjectives, and perhaps also adverbs), as it proved impossible to elicit lexemes according to morphological patterning. A further complication in giving the number of verbs is the fact that some stems are “semi-ambitransitive”, so that relations between transitive and intransitive variants are not straightforward in terms of semantics and/or form, making it somewhat arbitrary whether one or two stems should be counted.
last subsection is shared by several small classes: particles, adverbial and aspec-
tual enclitics, conjunctions, and interjections.

This section summarises the criteria on which the classes and sub-classes are
based. More information about the behaviour of particular groups of mor-
phemes is given in 4.2 below; a detailed description of nouns is found in Chap-
ter 5; other classes are briefly described and exemplified in 1.1.

4.1.1 Nouns

_Semantics:_ Prototypically denote entities in the world; also abstract concepts.

_Morphology:_ Inherent gender (masculine and feminine) in the singular (re-
flected in agreement, indexing and cross-referencing morphology on other con-
stituents within and outside the noun phrase). The semantics of gender is
opaque for inanimate referents.

Inflect for non-singular and dual number (reflected in the same way as gender).
Much irregularity in the non-singular (plural) formation; dual mostly regular
(based on non-singular). Deviant dual and plural formation for many kin terms
in reference to pairings/groupings denoted by the term, in contrast to regular
forms.

One “plain” and ten “special” declensions based on singular form; in the special
declemions the last part of the stem is in most cases subtracted before the non-
singular suffix is added.

Many nouns (but not all) can also function as stems in verb class I, without
morphological derivation.

There is no productive reduplication among nouns.

_Syntax:_ Typically head of the noun phrase (also limited appositional use). The
gender/number category of the noun governs agreement within the noun phrase,
person indexing in possessives and on prepositions, and the form of cross-refer-
encing morphemes on verbs and adjectives.

_Sub-classes:_ Declensions (see morphology just above).

Inherently locative nouns (do not take locative preposition *na* ‘in, at’).

Relational nouns (‘behind’, ‘in the middle (of)’ etc.; can only be used in relation
to an entity, never for parts (*‘back’), construed with inalienable possessive
forms.

Three quantifiers: *pɔppot* and *pɔppauliap*, both meaning ‘much, many’, and
*namarip* ‘few’.

One filler noun used when searching for a lexeme has separate feminine and
masculine forms (m. *marə*, f. *maro*), as well as a special form for place names
(*marən*), and a few terms for pigs of particular colouring also have gendered
forms.

4.1.2 Verbs

_Semantics:_ Prototypically denote actions and states.
**Morphology:** Take affixes and enclitics cross-referencing one to two arguments. Stems are monotransitive, ambitransitive (S=A or S=O: a few stems can be either) or transitive. A few stems in class II are suppletive between intransitive and transitive; sometimes part of one paradigm is suppletive.

The order of cross-referencing affixes and clitics in relation to the stem give three classes (I, II and III) in the intransitive, which are paired with four classes (I, IIa, IIb and III) in the transitive. There is also a handful of irregular verbs that do not fit into the classes.

Some stems in classes II and III have stem changes for future.

A dummy object marker u- or the pluractional da- in the object prefix slot renders the stem syntactically intransitive, as do the prefixes te- ‘REFlexive’ and ne- ‘RECiprocal’.

Action nominalisation is a morphological process in verb classes II and III; stems in verb class I are used as nouns without morphological derivation.

There is some productive reduplication in verb class I.

**Syntax:** Typically head of the verb phrase; can also occur in the attribute construction.

**Sub-classes:** Classes I, II (a, b) and III, based on argument cross-referencers (see Morphology above).

There are three auxiliary verbs (habitual -me, -ga ‘want; be about to’, and -ma ‘try’; see also particles).

There are three verbs that serialise with other verbs (-la ‘go’, mu-o ‘come’ and -op ‘come’).

**Size:** Verb class I is open. Verb class II is closed and has 110 members; verb class III is also closed and has 71 members.

### 4.1.3 Adjectives

**Semantics:** Typically denote states, qualities or properties.

**Morphology:** Take subject cross-referencing affixes; some irregularity.

Action nominalisation by derivational suffix.

Opaque and unpredictable reduplication patterns.

Causative through derivation, then used as verb (class I).

**Syntax:** As for verbs, but future marking with an extra ba (as for other non-verbal predicates).

**Sub-classes:** (interrogative lak- ‘be where’ is blocked from the attribute construction).

**Size:** 76 (closed).
4.1.4 Adverbs

_**Semantics:**_ Specify place, time, degree, value, or manner of the action or situation described in the predicate; also sentence adverbs such as ‘perhaps’ and ‘again’.

_**Morphology:**_ Very limited reduplication. (Possibly obsolete -t was used to derive adverbs from other classes).

_**Syntax:**_ Preferred position after first constituent of clause or phrase, but relatively free. Time adverbs in particular are often topicalised.

_**Sub-classes:**_ Only as indicated by semantics; a few forms can take class I verbal morphology.

_**Size:**_ 44.

4.1.5 Numerals

_**Semantics:**_ Numbers 1–10.

_**Morphology:**_ ‘10’ takes dual and non-singular suffixes in the formation of higher numbers.

_**Syntax:**_ Prenominal.

Numbers from 3 and up are construed with the inalienable possessive markers (‘four “of” pigs’).

Numbers over 10 are formed from the lower numbers (e.g. ‘six “of” tens and four’ is 64, ‘ten “of” tens’ is 100).

Blocked from the attribute construction.

Preposed particle _lǝma_ forms ordinals.

_**Sub-classes:**_ (Special forms for 1 and 2 in counting.)

_**Size:**_ 12.

4.1.6 Personal pronouns

_**Semantics:**_ Emphatic or contrastive reference to speech-act participants (no pronouns for third person).

_**Morphology:**_ None.

_**Syntax:**_ Normally constitute NP, sometimes in appositive constructions. Cannot form complements of most prepositions (the prepositions take indexing affixes instead). Rarely if ever in subject or object function; typically topicalised.

_**Sub-classes:**_ None.

_**Size:**_ 8.

4.1.7 Possessives

_**Semantics:**_ Alienable (PossII): alienable ownership, kinship, some benefactive uses. Inalienable (PossI): part-whole relations, material and a general associa-
tive (between noun phrases); oblique arguments (of verbs), including instrumental.

**Morphology:** PossI forms index possessor in 12 categories. PossII forms index possessor as well as possessee, some making a gender distinction in the third person singular, giving 42 forms. There are also four interrogative forms. The forms as such are invariant.

**Syntax:** In the possessive phrase, the possessee noun phrase comes first, followed by the possessive marker, followed by the possessor noun phrase. The noun phrases are not otherwise marked. The marker functions pronominally if there is no possessor noun phrase (this is the main strategy for first and second person possessors).

**Sub-classes:** PossI, PossII, interrogative.

**Size:** 58 forms.

### 4.1.8 Prepositions

**Semantics:** Typically indicate location, goal, or function (oblique argument role) of referents (which are usually coded in noun phrases).

**Morphology:** For all but two prepositions, person/number/gender affixes index the referent, always for some; for others obligatorily in some syntactic contexts and for first and second person, and optionally elsewhere.

**Syntax:** Precede the noun phrase, forming a prepositional phrase. Me ‘to, for’ can combine with other prepositions.

**Sub-classes:** Indexing vs. non-indexing.

**Size:** 10.

### 4.1.9 Locationals and directionals

**Semantics:** Encode location, proximity, or direction of an event or situation with respect to the deictic centre.

**Morphology:** Prefixes of several kinds indicate categories such as proximity; some forms are obligatorily prefixed. Some stem alternation depending on prefixes.

A stem augment t- (p-) with low semantic impact can be used with all stems, and selects for the prefix ta- in locational/directional use.

Simple or complex locational and directional forms constitute the base of demonstratives derived by demonstrative prefixes (these are a different class, see below).

**Syntax:** As for adverbs.

**Sub-classes:** None.

**Size:** 7 basic senses, 10 forms.
4.1.10 Demonstratives

**Semantics**: Exophoric deixis (pointing in physical space); encode location, proximity, or direction, of an entity with respect to the deictic centre. Also many anaphoric uses; some stems are restricted to this function, and some stems have temporal meaning. Third person only; also function as third person pronouns.

**Morphology**: 1. Simple demonstratives: deictic invariant forms indexing third person masculine, feminine, dual and plural.
2. Composite demonstratives consisting of: the simple demonstratives prefixed to A) simple or complex forms from the paradigm of locationals and directionals; or B) to stems only used in the demonstrative paradigm.

**Syntax**: Head of noun phrase; or determiner, normally preceding the head.

**Sub-classes**: 1. Simple stems, indexing third person categories; 2. Stems used only in composite forms (making up the second part of the form).

4.1.11 Particles, adverbial and aspectual clitics, conjunctions, and interjections

This heading subsumes a varied group of forms, which are brought together here by virtue of being short and invariant and having mainly grammatical functions, although on other criteria they form multiple classes. The headings in the following indicate the categorisations.

**Particles in the predicate**: 
- tense (*e, eba, ba* FUTURE; procedural habitual; ‘if’, ‘then’)
- aspect (*mǝn* CONTINUOUS, *buat* HABITUAL)
- mood (*lǝma* ‘if’)
- for NEGation, negative existential, PROHIBitive, and APPRehensive.

**Particles in the noun phrase**: Specificity (*non, ba*).

**Other particles**: ORDinal numeral.

There are six *adverbial clitics* and one *aspectual clitic* (*=arǝ*), all of which attach to the first constituent of their phrase.

**Conjunctions**: *ga* ‘and’, *pa* ‘but’, *o* ‘or’, *lǝ* RELator, *me* ‘for, to (prep.’).

**Interjections**: *karuk* ‘no’, *aa* ‘yes’; also words such as *mikat* (adv.) ‘true!’,* kuot* ‘what, really?!’, *me* (prep. ‘for, to’) ‘why?!’.

The language further has pronominal enclitics and pronominal and other affixes. The interrelations of the various types of forms in Kuot will be discussed in terms of cohesion and dependency in the following section.

4.2 Morphology

Kuot morphology is mainly agglutinative, with some morphologically conditioned phonological processes across morpheme boundaries. Affixes and enclit-
tics mark subject on verbs and adjectives; and affixes mark object, reciprocal and reflexive on verbs, as well as agreement on demonstratives and prepositions. Suffixes indicate non-singular and dual on nouns. Enclitics further express aspect and several adverbial meanings; these cliticize to the first constituent in a phrase. There are also particles with various grammatical functions. Reduplication is partly productive in verb class I. Synchronically, there is no compounding of stems. Three morphological categories are expressed (at least in part) through stem-internal changes: future stem forms in verb classes II and III; plural formation of nouns, and nominalisation of verbs of classes II and III and of adjectives.

The bulk of productive affixal morphological marking is thus concerned with the categories of number, gender and the person. Derivation is not prominent in Kuot, and the only productive derivational morphology in the language derives action nominals from verbs of classes II and III (e.g., *mulibap* ‘crying’ from class II *-liba* ‘cry’) and adjectives (e.g., *sasarapunim* ‘wetness, moisture’ from *sasara-* ‘wet’); and class I verbs from adjectives.

This section discusses the types of morphemes that can be distinguished in Kuot: stems, affixes, clitics and particles, and possessives (which fall outside these categories). They are investigated in terms of phonological and morphological dependency and form variability. It will be seen that although the traditional morphological categories provide a framework for categorising the types of morphemes, they do not give a sufficiently detailed grid to capture the full variation found in Kuot morphology.2

It was found that applying criteria of morphological dependency to all morphemes in the language would give results that are not very useful for characterising the morphemes in question. Ranging the morphemes from most independent to most dependent would give something like the following (selected morphemes):

**INDEPENDENT**

- adverbs, particles
- nouns (singular)
- verb class I
- clitics
- verb classes II and III, adjectives, affixes.

**DEPENDENT**

It is particularly unsatisfactory to have lexical stems with the affixes. This situation arises because stems of verb classes II and III and adjectives are bound forms, requiring affixes (and incomprehensible to native speakers in un-affixed form). Morphologically, they are as bound as the affixes themselves. It was therefore decided to investigate stems separately from other morphemes. The

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2 One type of morphology that will not be discussed here is reduplication, and the stem augment in the locational/directional paradigm will also not be considered here.
following sections will deal first with stems, and then show how affixes, clitics and particles form a continuum, rather than discrete categories. The possessives are discussed last.

Sometimes in the following, the same information will be given several times. This is because of items such as verb class II stems and their obligatory subject prefixes, which to some extent define each other in being mutually dependent as morphological forms. These relations will be investigated first from the point of view of stems, then from the point of view of affixes etc., at the risk of being somewhat repetitive.

4.2.1 Stems

The term “stem” is used loosely here for a morpheme in Kuot that

- is part of a paradigm (or form-class), and
- can be used on its own or be host to affixes or clitics.

Kuot has four word classes which can be called lexical on account of the meanings they encode: nouns, verbs, adjectives and adverbs. As said above, only two are open, namely nouns and verb class I. Further stems are the sets of locationals, demonstratives, prepositions, numerals, and pronouns.

The stems differ, as types of morphemes, in two ways that concern us here: in the amount of variation in form that they display in different contexts, and in their degree of morphological autonomy. By variance is meant the degree to which the stem type occurs in the same phonological form in all contexts where it appears. Autonomy is whether the stems are bound (−) or are able to appear without the presence of associated morphology (+). Table 1 lists the stem types and their properties as regards variance and autonomy (the properties given for each category hold for the majority of members in a class, but not necessarily all).
Table 1: Variance and autonomy of Kuot lexical stems.

<table>
<thead>
<tr>
<th>Word class (/sub-class)</th>
<th>Stem variance</th>
<th>Aut</th>
</tr>
</thead>
<tbody>
<tr>
<td>nouns, plain declension</td>
<td>invariant, non-singular just added</td>
<td>+</td>
</tr>
<tr>
<td>nouns, special decl.</td>
<td>last part of stem subtracted before addition of non-singular</td>
<td>+?</td>
</tr>
<tr>
<td>verbs, class I</td>
<td>some reduplication</td>
<td>+</td>
</tr>
<tr>
<td>verbs, class II &amp; III</td>
<td>phonol. processes with subject affixes; some stems change for future; some suppletion in class II</td>
<td>-</td>
</tr>
<tr>
<td>adjectives</td>
<td>phonol. processes with subject suffixes; some reduplication (irreg.)</td>
<td>-</td>
</tr>
<tr>
<td>adverbs</td>
<td>very limited reduplication</td>
<td>+</td>
</tr>
<tr>
<td>locationals/directionals</td>
<td>some limited compounding</td>
<td>+/-</td>
</tr>
<tr>
<td>demonstratives, 3 m, f, d, p</td>
<td>invariant</td>
<td>+</td>
</tr>
<tr>
<td>demonstratives, non-loc</td>
<td>invariant</td>
<td>-</td>
</tr>
<tr>
<td>prepositions</td>
<td>invariant (except bo ‘on’ → -buo when prefixed)</td>
<td>+/-</td>
</tr>
<tr>
<td>numerals</td>
<td>invariant (except ‘ten’ which takes dual and non-singular forms)</td>
<td>+</td>
</tr>
<tr>
<td>pronouns</td>
<td>invariant</td>
<td>+</td>
</tr>
</tbody>
</table>

**Nouns** of the plain declension have the non-singular and dual endings added to the unmodified stem, while nouns of the ten special declensions have the last part of the stem subtracted:

1. **plain declension:**
   - *gǝs*       *gǝs-ip*       *gǝs-ip-ien*
   - possum      possum-nsg     possum-nsg-dl
   - ‘possum’    ‘possums’     ‘2 possums’

2. **special declension (nǝm):**
   - *kubunǝm*     *kubup*       *kubup-ien*
   - young.coconut young.coconut.nsg young.coconut.nsg-dl
   - ‘young coconut’ ‘young coconuts’ ‘2 young coconuts’

3. **special declension (ma):**
   - *kuma*       *kup*         *kup-ien*
   - tear         tear.nsg       tear.nsg-dl
   - ‘tear’       ‘tears’       ‘2 tears’

Noun stems in the plain declension are thus invariant in the sense that the non-singular is simply added to the stem without modification; and also autonomous in that they can be used “as is”. In the special declensions, however, there is a problem with identifying the stem. The constant stem parts in the last two examples above are *kubu* and *ku* but since the endings -nǝm and -ma are not predictable from any general principles, and since the starred forms are not attested as phonological forms, we would not want to postulate them as stems. These nouns may perhaps be said to have two related stem variants, one singular and one non-singular. The question of stem autonomy in the special declensions depends on the analysis of stem-hood for the singular forms – if an underlying stem like the starred forms were postulated, that underlying stem...
would of course require morphological processing even to form the singular, i.e., it would be variable and non-autonomous. If, on the other hand, we accept singular and plural stem variants, each is autonomous in the sense that it can be used without such processing, and at least the singular stem would be autonomous. Dual forms are simply suffixed to the end of the non-singular form in most cases.

Among the verbs, class I stems are largely invariant (apart from a final /a/ or /ǝ/ often being deleted before the third person singular masculine subject enclitic). There is some reduplication, with effects such as iterative, distributive, duration and intensity. Class I stems are autonomous in that they are used bare in citation, as action nominals, and in active form following the habitual auxiliary -me; elsewhere in active use a subject enclitic is obligatory. Stems which are transitive only require the object slot to be filled by the dummy object prefix u-in citation and nominalisation.

Verb classes II and III differ quite markedly from class I. The stems show a fair amount of morpho-phonological interaction with subject affixes, and some stems also have alternate forms for future. In class II there are a few suppletive stems (e.g. -num ‘walk’; -muŋ ‘walk.fut’). There is no reduplication in class II or in the second part of the stem in class III, but the first part of the stem in class III is occasionally reduplicated. These stems are not autonomous, but require the subject affix slot to be filled at all times (in nominalisation, the second person singular affix is used).

Adjectives show morpho-phonological interaction with subject suffixes. There is reduplication but it is non-productive and irregular, and has no discernible semantic impact. The suffixes that cross-reference third person are obligatory, and remain as number markers in first and second person forms, which are marked by prefixes, e.g.:

(2)  
\[
\begin{array}{ll}
\text{RED-big-3m} & \text{RED-big-3d} \\
\text{nu-kak-kan-i} & \text{ma-kak-kan-in} \\
\text{2s-RED-big-sg} & \text{2d-RED-big-dl} \\
\text{‘you(sg) are big’} & \text{‘you(2) are big’} \\
\end{array}
\]

A few manner adverbs have reduplication (the semantic impact is not clear). The forms are autonomous.

Locationals and directionals are invariant, but have certain compounding tendencies, whereby several items can be strung together. A few members in this class are autonomous, while the majority require prefixation with a small set of prefixes that have some proximity distinctions, but whose main function appears to be to form viable words. There is also the augment mentioned in 4.1.9 which causes stems to take slightly different affixes.

Demonstratives (4.1.10 above and 1.1.1) are of two types, simple and composite. The simple forms, which may function independently or as prefixes to loca-
tional/directional forms or demonstrative stems, are invariant. In independent use they are autonomous. The stems to which they are prefixed to form complex demonstratives are invariant but all the demonstrative stems (i.e. those which are not in the paradigm of locational/directionals) are bound and can only occur prefixed.

**Prepositions** are invariant, except for *bo* ‘on’ which has the form *buo* when it takes person-indexing prefixes. One further preposition, *ira*– ‘at (etc.)’ has some phonological interaction with person suffixes. Some prepositions are autonomous while others require person affixes.

**Numerals** are invariant with the exception of the word for ‘ten’, *mənaburuan*, which takes non-singular and dual forms in the formation of higher numbers (nsg: *mənaburalap*, dl: *mənaburalapien*). The forms are autonomous.

Finally, **pronouns** are also invariable forms, although historically they appear to be reduplicated forms of the morphemes which cross-reference and index the same pronominal categories (there are no third person pronouns). They are autonomous.

### 4.2.2 Affix – clitic – particle, a dependency cline

We will now turn to non-stems, i.e. affixes, clitics and particles. Kuot grammatical morphemes show varying degrees of cohesion with or dependency on other material, ranging from tightly integrated affixes via clitics to particles that make up independent words. This section will discuss the properties of each type, as well as some problems that arise in categorising the morphemes.

First, I will propose definitions of prototypical affixes, clitics and particles for Kuot.

For Kuot, a prototypical **affix** is defined as a morpheme
- with grammatical meaning
- adhering to particular classes of morphemes (e.g. verb or sub-class of verb)
- forming a close unit with the morpheme to which it adheres (in terms of being obligatorily selected, not allowing for pausing, often having morphophonological alterations at the boundary, etc.)

For Kuot, a prototypical **clitic** is defined as a morpheme
- with grammatical or lexical meaning
- adhering to the first constituent in a phrase

For Kuot, a prototypical **particle** is defined as a morpheme
- with grammatical meaning
- not attaching to another constituent

As will be seen in the following, even these rather minimal definitions cause conflicts in some cases, and several morphemes straddle the categories. Instead of discrete categories, it is therefore useful to think of these categorisations as prototypes along a continuum, or cline, as schematised in Figure 1.
Each category can be seen as a prototype in the sense of a bundle of features that makes up the canonical instance, allowing for typical and less typical members. If several prototypes are lined up next to each other, morphemes can be expected to cluster around the canonical points, but items that have only a few features of a type, or features belonging to more than one type, can be ranged in between.

Table 2 gives all Kuot grammatical morphemes, (except for those treated among stems), and interjections, conjunctions and the demonstrative stem augment), ranged from the most cohesive and dependent to the most independent. The criteria used are

- phonological integration with other material, and
- distribution (selectivity), in terms of what considerations govern the placement of the morpheme.

Row numbers have been inserted to facilitate reference to and from the text following the table.

Table 2: The affix-to-particle cline. a=affix, c=clitic, p=particle

<table>
<thead>
<tr>
<th>category</th>
<th>form</th>
<th>processes</th>
<th>remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. &lt;a future stem alternation in verb classes II &amp; III</td>
<td>-(i)ŋ</td>
<td>stem-final t, n → r, l</td>
<td>fossilised; only on some verbs</td>
</tr>
<tr>
<td>2. a non-singular marking on nouns</td>
<td>-(i)p</td>
<td>stem-final t → r (n → l); labialisation harmony</td>
<td>productive; t→r process not prod. anywhere else in Kuot; also, many stems have ending subtracted before adding of non-sg</td>
</tr>
<tr>
<td>3. a subject marker in verb classes II &amp; III</td>
<td>misc. V- or CV-</td>
<td>u+o → u u+i → i a+i → e a+o → o e+a/o → o(a)/a(ə)</td>
<td></td>
</tr>
<tr>
<td>4. a 3rd person subject marker on adjective</td>
<td>-l, -u, -in, -im</td>
<td>å+u → o å+i → e</td>
<td></td>
</tr>
<tr>
<td>5. a 3rd person object marker in verb class IIa, non-fut</td>
<td>-a, -o, -an, -am</td>
<td>u+o → u</td>
<td></td>
</tr>
<tr>
<td>6. a derivation of adj. to transitive verb, cl I</td>
<td>ra</td>
<td>–</td>
<td>varying applicability</td>
</tr>
<tr>
<td>7. a person markers on some prepositions</td>
<td>misc.</td>
<td></td>
<td>varying obligatoriness</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>8.</td>
<td>a</td>
<td>action nominalisation in verb class II &amp; III</td>
<td>-(i)ap</td>
</tr>
<tr>
<td>9.</td>
<td>a</td>
<td>nominalisation of adjectives</td>
<td>-nim</td>
</tr>
<tr>
<td>10.</td>
<td>a</td>
<td>object marker on verbs (excl. 3rd pers in cl II) &amp; non-3rd person subject marker on adjectives</td>
<td>misc. V- or CV-</td>
</tr>
<tr>
<td></td>
<td>a</td>
<td>3rd person object marker in verb class IIa, fut</td>
<td>-ŋ, -ŋan, -m</td>
</tr>
<tr>
<td>11.</td>
<td>a</td>
<td>dual marker on nouns</td>
<td>-len</td>
</tr>
<tr>
<td>12.</td>
<td>c?</td>
<td>subject marker in verb class I</td>
<td>misc. closed sylls</td>
</tr>
<tr>
<td>13.</td>
<td>c</td>
<td>ASP</td>
<td>=ra</td>
</tr>
<tr>
<td>14.</td>
<td>c</td>
<td>adverbial clitics ‘just’; ‘a little’</td>
<td>=it; =arom, =arot, =arokan, =aroka</td>
</tr>
<tr>
<td>15.</td>
<td>c</td>
<td>adverbial clitics ‘yet, still’, ‘EMPH’, ‘too’, ‘now’</td>
<td>ka, kan, gat, bǝt</td>
</tr>
<tr>
<td>16.</td>
<td>p</td>
<td>origin</td>
<td>onim (/anim)</td>
</tr>
<tr>
<td></td>
<td>p</td>
<td>‘some’</td>
<td>non</td>
</tr>
<tr>
<td></td>
<td>p</td>
<td>‘one’</td>
<td>ba</td>
</tr>
<tr>
<td></td>
<td>p</td>
<td>‘say’, ‘want’ (aux); complementiser</td>
<td>nomo</td>
</tr>
<tr>
<td></td>
<td>p</td>
<td>habitual (aux)</td>
<td>buat</td>
</tr>
<tr>
<td></td>
<td>p</td>
<td>future</td>
<td>e, eba, ba</td>
</tr>
<tr>
<td></td>
<td>p</td>
<td>negation</td>
<td>tǝle/tǝla</td>
</tr>
<tr>
<td>17.</td>
<td>p</td>
<td>prohibitive</td>
<td>buat</td>
</tr>
<tr>
<td>18.</td>
<td>p</td>
<td>continuous aspect</td>
<td>mǝn</td>
</tr>
</tbody>
</table>

To examine the forms, and the criteria for their positions in the table, each morpheme or group of morphemes will be discussed briefly. In particular, we are
concerned with the forms which are transitional between the categories affix, clitic and particle.

1. At the very top we have something which is no longer a productive morpheme, giving future forms of some stems in verb classes II and III. Since this former suffix is fossilised and not productive, it does not really have a rightful position among the affixes of the language. Nevertheless, it is interesting to note that it shares processes with one of the productive morphemes in a different part of the grammar, namely 2. below: the non-singular suffix on nouns. The shared process is the conditioning of the allophone [r] from the stem-final /t/ of the stem to which the suffix adheres. The future forms also have final [n] going to [l] in the future forms; this is found with the non-singular forms of nouns too, but less consistently (see 3.2.2.4 and Chapter 5).

2. Apart from the processes shared with 1. above, noun non-singular forms have a labialisation harmony process whereby the vowel of the non-singular suffix becomes /u/ (rather than /i/) following a labial consonant (/p/, /v/, /m/) or a closed syllable containing a rounded vowel (/u/ or /o/). This process is unique to the non-singular morpheme (see 3.3.4; 5.2.1). Nouns in the special declensions almost always have the last part of the stem subtracted before the non-singular ending is added. Although non-singular forms consistently end in /p/, there is quite a lot of irregularity and unpredictability in the non-singular formation of nouns.

3. Subject markers are prefixes in verb class II and “infixes” in verb class III which has bipartite stems with the subject affixes in the middle. They are tightly integrated with the stem, and have several processes of morpho-phonological interaction with vowel-initial stems (in verb class III this concerns the second part of the stem; see 3.3.3 for details of the processes). The affixes are obligatory: stems of II and III cannot appear without the subject slot filled (even in nominalised forms).

4. The third person singular suffixes on adjectives interact phonologically with stems ending in /a/ (or in one case /u/; see 3.3.3). The suffixes are obligatory (but replace non-predictable single vowels when the nominalisation suffix is added).

5. The third person object markers in verb class IIa are suffixes, with different forms for future and non-future (cf. 10.). The feminine singular non-future suffix -o is deleted after a stem-final /u/ (e.g. i-alu-o ‘3fS-cover-3fO – she covers it’ [jalu]).

6. Many adjectives allow a derivation to verb class I, with a causative sense (e.g. ‘make heavy’). The derived stems usually have a suffix -ra.

7. The pronominal indexing affixes used with prepositions are listed together, in spite of there being quite a lot of variation between the different prepositions. In particular, some prepositions are obligatorily indexed in all contexts, while for others indexing is triggered by certain syntactic contexts.
8. The action nominalisation process for verbs of classes II and III consists in adding a suffix -(i)ap, but the subject slot must also be filled by the second person singular suffix (nu-). Most class II verbs can take this derivation.

9. The action nominalisation process for adjectives involves a suffix -(V)nim but without subject marking (an example was given in the introduction to this section, under 4.2). The process is not fully productive and there is some irregularity.

10. Two items are listed under this number, separated by a broken line to indicate that they are not ordered with respect to one another. The future object markers in verb class II are suffixes like the non-future ones (cf. 5. above), but involve no phonological interaction with the stem. The object prefixes used in verb class I and in the first and second person in classes II and III also do not interact with stems, but are constant in form.

11. Last among the affixes, we have the dual suffix -ien. It is added onto the non-singular form of nouns, e.g.:

(3) maua-p-ien  ‘two fruitbats’
    fruit.bat-nsg-dl

The suffix itself is very regular, but in some cases the form to which it is added is not the non-singular form normally used. The dual suffix is optional in the sense that inanimates are usually not marked for dual, but is well integrated with the word in that pausing never occurs before it.

The forms looked at so far are analysed as affixes on account of forming tight units with the stems to which they adhere, and occurring with words of particular word classes (or sub-classes). We will now turn to forms analysed as clitics, although the first one is somewhat intermediary between clitic and affix status.

12. The subject markers of verb class I are treated as clitics in this work, but deviate from the definition of clitics given above; while all other morphemes identified as clitics have a distribution that makes reference to position within the phrase, the subject markers of verb class I always attach to verb stems of class I, being in that respect affix-like. The class I subject markers form a unit with the verb stem, to which one of the other clitics can then attach, forming a sequence of two units, as in (4), while the other clitics are mutually exclusive:

(4) U-tie, pare=men=aaro makauluap
    3f-there get.up=3pS=ASP woman.nsg
    ga o-kima=men=aaro [u-sik satɔr]…
    and 3fO-see=3pS=ASP 3f-DEM egg(f)
    ‘Alright, the women got up and saw this egg…’

These subject markers are treated as clitics because of their low level of cohesion with the stem, as compared to the affixes. They show minimal phonological interaction with the verb stem; there are contexts where the slot is not obligatorily filled; and speakers frequently pause before the subject marker in dictating, and often separate it by a space when writing. It is clear that they are in-
termediate between clitics and affixes in terms of Kuot morphological categories.

13. The next item is the first representative of the proper clitics, the aspect marker \(= \varnothing\). It cliticises to the first constituent of the phrase (normally the verb phrase).\(^3\) Only one clitic can go in this position, so \(= \varnothing\) is in complementary distribution with items 14. and 15. on the list, which are thus all mutually exclusive. As for all clitics with this distribution, the continuous aspect particle \(m\varnothingn\) is not counted when determining which is the first constituent. \(= \varnothing\) shows some phonological interaction with its host, in that it takes the form \(=ar\varnothing\) following a consonant. After a vowel, both \(= \varnothing\) and \(=r\varnothing\) are possible. It is presented separate from the following clitics because it is different semantically: while the adverbial clitics in 14. and 15. have fairly distinct meanings, \(= \varnothing\) is quite bleached and its meaning depends largely on context.

14. The adverbial enclitics \(=it\) ‘just’ and several ones meaning ‘a little’ (slightly different in form) also cliticise to the first constituent in the phrase to which they belong. They interact with the phonological shape of their hosts in that the initial vowel of the clitic is dropped if the host ends in a vowel, giving \(=t\), \(=rom\) etc. The meanings of these clitics and of those in 15. could be said to be lexical rather than grammatical in character; i.e., their semantics is largely isolable and corresponds to senses expressed by adverbs and similar words in most languages, and their use is determined by their semantics rather than grammatical considerations such as tense or person.

15. This set of adverbial clitics share their distribution (and mutual exclusivity) with the items given in 13. and 14. They differ from the latter in that they are invariant forms, having no phonological interaction with their hosts (other than general phonological process such as \(k\rightarrow\varnothing / V_V\) which apply everywhere in the language when the conditions arise). Although the distribution is certainly that of clitics, the fact that the forms are invariant makes this set similar to particles.

16. A diverse group of forms is given here, separated by dotted lines to indicate that they are not ordered with respect to each other. They are all analysed as particles here, because they are invariant forms, and their distribution is determined by syntactic rules applying on a phrase level but to each specifically, with reference to particular other constituents (rather than simply the number of constituents as for the majority of clitics). \(On\varnothingm\) (sometimes \(anim\)) indicates origin in terms of place or time. \(Non\) ‘some’ and \(ba\) “one” belong to the noun phrase and are to do with specificity. \(N\varnothingmo\) has a variety of functions and can be an auxiliary or function as a complementiser. \(Bu\varnothingt\) marks habitual and is an auxiliary in the verb phrase, synonymous with the auxiliary verb \(-me\); it is further homonymous with the prohibitive particle; see 18. below). \(E/eba/ba\) marks

\(^3\) This is reminiscent of the so called Wackernagel position, but in Kuot applies to the phrase rather than the clause.
future, and also a procedural past habitual, and has some irrealis-like functions. Finally, *tale* (future form *təla*) is the general negation.

17. The prohibitive (i.e. negative imperative) marker is the particle *buat* (homonymous with the habitual auxiliary particle mentioned in 16.). It is presented on a line of its own because it can make up an utterance (‘Don’t!’), although it is usually part of a predicate.

18. Last in Table 2 we have the continuous aspect particle *mən*. It has relatively free distribution in the predicate, and can even occur several times in different positions in the same predicate, or occasionally make up a predicate on its own. As mentioned, it is not counted when the first constituent is determined for the placement of a clitic.

1, 12, and 18, being on the boundaries between affix, clitic and particle, are interesting. The first is no longer a productive suffix, but shares features with the non-singular suffix which is productive. The subject enclitics of verb class I are affix-like in terms of selectivity, but clitic-like in terms of cohesion. The continuous particle *mən* is an invariant grammatical morpheme like the other particles, but its position is less strictly determined by syntax, and it has the potential of being used as a predicate.

4.2.3 Paradigms without stems: possessives

One group of morphemes that has not been discussed in the above sections is the alienable (PossII) and inalienable (PossI) possessive paradigms. Each has forms indexing twelve pronominal categories of possessor, and the alienable set further index three to four categories of possessee (third person only; not all forms distinguish masculine and feminine). The reason why they have not been included is that they are only partly segmentable. For the inalienable set, each form can be said to be a portmanteau consisting of pronominal category+possessive. There is thus no stem to segment out. In the alienable forms, the first part of each form indexes the possessor, and the second part the possessee, but again, there is no stem that remains constant in all the forms and which could be glossed ‘possessive’. There is also a small set of interrogative possessives, which do have a base (or stem) *au-* to which the endings indicating 3m, 3f, 3d and 3p are added.4

4.3 Word

Criteria for a unit word can be phonological or grammatical.5 In Kuot, phonological criteria are not helpful for defining a unit word. Stress is lexical and not determined with reference to units such as syllables or moras in relation to word boundaries, and phonological rules make reference to syllables but not to words (and morpho-phonological rules apply only to certain morphology).

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4 Other question words fit quite well into other word classes (noun, adjective, adverb, verb), and have not been included in this presentation.

5 These sometimes yield different results, as in Boumaa Fijian (Dixon 1988).
There is one exception to this, namely the restriction on final [r] in the northern dialect of Kuot, giving e.g. *burburu* ‘stone wall’ where the southern dialect has *burbur*, but even here it can be argued that the restriction applies to stems rather than words, in that verb stems are subject to this restriction even when a subject enclitic is present. Prosodic contours apply to units such as phrases and clauses rather than to individual words. (See further Chapter 2, various sections.)

Morphological and syntactic criteria fare somewhat better. The order of morphemes within a word cannot be manipulated; suffixes must come after the stem and prefixes first, such as the non-singular suffixes on nouns and the object prefixes of verbs. A well-formed grammatical word can thus consist of a stem plus required grammatical morphology in the right order.\(^6\) A form not requiring morphological additions, such as a singular noun, an adverb or a particle can of course also make up a well-formed grammatical word.

An enclitic also forms a single word with its host, in that enclitics are never used independently. An important difference between affixes and clitics (except the subject enclitic of verb class I) is that the former remain with their host if the phrase is syntactically manipulated, while the clitics attach to any constituent which is first in the phrase at any particular time (excepting the continuous particle *møn*).

While there is no Kuot word that matches perfectly to the sense of English ‘word’, several expressions are possible in that sense. They are:

\[(5)\]

<table>
<thead>
<tr>
<th>Kuot</th>
<th>English Sense</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>dǝdema</em></td>
<td>‘expression’, ‘utterance’, ‘behaviour, act’</td>
</tr>
<tr>
<td><em>nuloiap</em></td>
<td>nominalisation from verb class IIb -lo ‘speak’</td>
</tr>
<tr>
<td><em>ties</em></td>
<td>also ‘language’, ‘utterance’; also used as verb class I ‘speak’</td>
</tr>
<tr>
<td><em>nəp</em></td>
<td>‘part, piece’, also ‘behaviour, act’ and other senses</td>
</tr>
</tbody>
</table>

Of these, the first three tend to be used of lexical items, while *nəp* can be used of smaller parts as well. Two further items may be mentioned, which are used for ‘meaning’: *muana*, normally ‘reason’, and *kudo* (the latter only mentioned once by one speaker).

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\(^6\) It may be noted that the requirement to add grammatical morphemes may come from the stem (as in verb classes II and III), or from syntax (as in verb class I), or from referential considerations (as the non-singular on nouns, which normally depends on the number of referents).