Chapter 3: Nominals

3.1 Word classes

As is common in Australian languages (e.g. Dixon 1980), two major word classes can be identified in Enindhilyakwa along the traditional lines of the affixational potential of the individual lexemes: nominals and verbs. These two classes are differentiated by taking distinct sets of inflectional and derivational affixes. The lexemes in both classes can be used as semantic predicates. A third class of words can be identified as being non-inflecting and non-predicational, which I will refer to as particles. Examples include: *akwa* 'and', *vmba* 'but', *ngawa* 'continuing action, still', *arakba* 'completed action, already', *kajungwa* 'so that', *dhukwa* 'maybe', and the negation particle *nara*. They will not be discussed any further in this thesis (the reader is referred to Leeding 1989: Chapter 8 for details). The current chapter is concerned with nominals only. Discussion of the verbal word class runs over Chapters 4 to 6.

A fourth word class in many Northern Australian languages is coverbs (Schultze-Berndt 2000; McGregor 2002; Dixon 2002; Harvey 2003a: 206-7; Amberber, Baker & Harvey 2007). Coverbs convey nearly all the lexical verbal meanings, but they are distinguished from verbs in that they do not inflect for tense or mood. They differ from nominals in that they cannot, by themselves, be predicational: they need to be combined with an inflecting verb to construct a predicate. Coverbs have thus far not been described for Enindhilyakwa, but in Chapter 5 I will argue that the majority of verb stems in this language are historically complex and appear to have their origin in coverb+verb compounds. However, these complex compound stems are lexicalised and synchronically unanalyseable (as they are in a number of languages from the Gunwinyguan family [Schultze-Berndt 2000: 538]), so I do not treat coverbs as an individual word class, synchronically.

3.2 The nominal word class

The class of nominal words includes at least six subclasses: nouns, adjectives, pronouns, demonstratives, kinship terms, and adverbs. They are grouped together under the label 'nominals' based on their morphological properties: they all take noun class prefixes, albeit with varying flexibility, and they take case and number suffixes. This chapter focuses on nouns and adjectives, and their derivational possibilities. Many of the morphological possibilities that apply to nouns and adjectives also extend to the other subclasses, but statements in this chapter should be taken to refer just to nouns and adjectives, unless otherwise indicated. The other nominal subclasses will only be briefly discussed below, and I refer the reader to the work of Stokes (1982); Leeding (1989); and Waddy (n.d.) for more details.

Table 3.1 presents the structure of the nominal word, with optional elements in parentheses.[1] Plus and minus signs before the slot number give the direction with respect to the stem. Slots marked * may be reduplicated, to express plurality or intensification.

-6	(-5)	(-4)*	(-3)	(-2)	(-1)*	0*	(+1)	(+2)	(+3)
Pronominal / gender / noun class prefix	Trial number	Quantifier	Inner gender	Inalienable / alienable possession	Body part / generic nominal	Stem	Number	Adnominal case	Semantic case

Table 3.1: Structure of the nominal word

The only obligatory elements in the nominal word are the noun class/gender/pronominal prefix in slot [-6], and the stem in [0]. The sole exception is loanwords, which do not take an overt noun class marker. Not every element in this template occurs in every nominal subclass: body parts and generics, for instance, can only be incorporated into adjectives (including numerals) and adverbs, but not into nouns, demonstratives, pronouns or kinship terms. The latter three subclasses do not take derivational prefixes either. And the inner gender prefixes in slot [(-3)] only co-occur with the inalienable and alienable possession derivational prefixes in slot [(-2)], and with the nominaliser prefix *k-* that derives nominals from verbs. Even though deverbalised nominals may take the full range of nominal prefixes in slots [-6] to [(-2)], the nominaliser prefix is not included in this template because its base is a verb. As nominalised verbs formally behave like nominals, the nominaliser prefix will nevertheless be discussed in this chapter (section 3.4.6).

This chapter focuses on the prefixes in the nominal template, apart from the incorporation of body part and generic nominals in slot [(-1)]. Noun incorporation, which occurs with both adjectives and verbs, is the topic of Chapter 7. The current chapter only briefly touches on the stem in slot [0] and the number suffixes in [(+1)]. The two types of case suffix in [(+2)] and [(+3)] are discussed in Chapter 8.

Examples showing the expansion of each of these slots are presented in (1).[2]

(1) a. *m-akina   m-ingbvdha   merra?*
       VEG-that   VEG-strong   VEG.rope
       'Is that rope strong?'   (JW1 p.31)

---

[1] This structure is different from the one proposed by Leeding (1989). The differences will be discussed throughout this chapter.

[2] Recall from Chapter 2 that prefixes often end in, and stems begin with, a consonant. The vowels *i, u*, and *v* between prefixes and stems are epenthetic (rule P-1), and their quality depends on the surrounding consonants. The only attested underlying prefix-final and stem-initial vowels are *a* and *e* - apart from a handful of stems that begin with *i*, such as *-imimba* 'blind'. Stem-initial *i* merges with the *a* of the NEUT class prefix and becomes *e*: /a-imimpa/ 'NEUT-blind' [ɛmimpa] (rule P-6) (cf. /n-imimpa/ '3m-blind' [nimimpa]).

b. *ngayuwa   nvng-ena   nvngv-dharrvngka*
   1.PRO   1-this   1-woman
   'I am a woman.'   (anin3_dl_tr_002)

c. *Dhv-miyambena   dh-adhv-kadhuwa? Dhi-yarrmiyarrma dh-akina.*
   3f-what.kind.of? 3f-f-new   3f-thin   3f-that
   'What kind of new woman is that? That is a thin woman.'   (LL Book 5 p.22)

d. *ngarrv-bvkv-dhv-dhiyara*
   12a-tri-RDP-girl
   'we three girls'   (VL1 p.225)

e. *wurru-wurrak-eningaba*
   3a-many-good
   'many good people'   (VL1 p.227)

f. *yi-nv-m-eminda   yilyarra*
   MASC-m-INALP-NEUT.nose   MASC.pipe
   'bowl of Macassan pipe'   (VL2 p.212)

g. *wurri-yukwayuwi=yadha   warnv-kv-lhvki=yadha   ekalhara-manja*
   3a-little.PL=PURP   3a.m-NSR-go=PURP   NEUT.burnt.off.bush-LOC
   '(we burn off the bush) for children to walk on the burnt ground'   ('Ekalhara' g24)

h. *yi-lhakbak-ambilyvma   yikarba*
   MASC-short.and.upright-two MASC.woomera
   'two woomeras standing up'   (Ansec1)

i. *m-alh-angamba   miyeja-kiya?*
   VEG-du-where   VEG.paddle-du
   'Where are the two paddles?'   (LL Book 6 p.15)

j. *wurrendhindha-lhangwa-manja   warnv-m-edhvrra*
   COLL.mouse-POSS-LOC   COLL.m-INALP-NEUT.mouth
   'in a mouse hole'   (GED p.63)

The examples in (1a-c) illustrate the obligatory pronominal/gender/noun class prefix in slot [-6]. The VEGetable noun class marker *m-* in (1a) is one of five noun classes classifying non-humans. The other classes are: NEUTer *a-* or *e-*, MASCuline *y-*, FEMinine *dh-* and COLLective *wurr-*. Pronominal prefixes, such as *nvng-* '1' in (1b), refer to 1st and 2nd person humans. Gender prefixes, such as *dh-* '3f' in (1c), are used for 3rd person humans. The distinctions between the three types of prefix will be justified in section 3.4.1. As can be seen in these three examples, adjectives and demonstratives obligatorily agree in prefixation with their heads in adnominal use, and with their subjects in predicative use. In other words, adjectives and demonstratives show agreement for all persons.

Trial number (slot [(-5)]) is exemplified in (1d). The example in (1e) illustrates one of the quantifier prefixes in slot [(-4)]. An example of inner gender in slot [(-3)] is given in (1f), where it co-occurs with the inalienable possession (INALP) derivational prefix in slot [(-2)]. An example of the nominaliser (NSR) prefix *k-* is presented in (1g), where it derives a non-finite verb from a verb root. (1h) illustrates the incorporation of a generic nominal into a numeral (which are adjectives in Enindhilyakwa). An example of the dual suffix *-kiya* in slot [(+1)] is given in (1i). Finally, (1j) illustrates both types of nominal case suffix: adnominal and semantic. The latter indicates the

semantic role of a nominal in a simple clause, such as location in this example. Adnominal cases, on the other hand, such as POSSessive *-lhangwa,* indicate relations between nouns. Adnominal case suffixes can be followed by semantic case suffixes, as illustrated here, and only the latter have an additional function as complementising cases on verbs. Case is the topic of Chapter 8.

As will become clear from this chapter and Chapter 7, body part nouns play a major role in the language. They are virtually the only noun roots that can be marked for INALP, and they constitute the majority of noun roots that can be incorporated into verbs and adjectives. In both cases, they have extended their meaning: when marked for INALP, a body part noun no longer refers to a body part, but to a part of an inanimate item that resembles the body part in some way (e.g. *eminda* 'NEUT.nose' in [1f] refers to the bowl of a pipe, and *edhvrra* 'NEUT.mouth' in [1j] is used for 'hole'). When incorporated into a verb or adjective, body part nouns frequently have developed into generic nouns that classify external specific nouns in terms of their shape (e.g. the incorporated body part *lhakbak-* in [1h] means 'leg', but here it is used as a generic that classifies objects as being 'short and upright'; see Chapter 7). And finally, many body part nouns are polysemous: these have an additional flora or fauna meaning, most likely based on a perceived likeness (e.g. *yuwalkurra* 'MASC.kneecap' is also the name for 'Cyrene shell', and *memvrrkura* 'VEG.ribs' has the additional meaning 'potato bean'. Body parts nouns have permeated most of Enindhilyakwa grammar and are one of the principal ways to express shape.

3.2.1 Organisation of chapter

This chapter is structured as follows. The remainder of this section first summarises the nominal subclasses that will not receive any further detailed attention in this thesis: pronouns (3.2.2), demonstratives (3.2.3), numerals (3.2.4), kinship terms (3.2.5), and adverbs (3.2.6). Most of this summary is based on the previous work of Stokes (1982); Leeding (1989); and Waddy (n.d.-a), supplemented by my own research. Section 3.3 then turns to nouns and adjectives and outlines the distinctions between the two nominal subclasses, which lies in the flexibility of their noun class prefix: for most nouns, their class prefix is frozen to the stem, whereas adjectives agree in noun class with the noun they modify. Section 3.4 investigates the nominal prefixes (slots [-6] to [(-2)] in Table 3.1). The obligatory noun class, gender and pronominal prefixes are examined in section 3.4.1, which also explores the semantics of the noun classes (section 3.4.1.2). Section 3.4.2 discusses the trial number prefix, section 3.4.3 the quantifier prefixes, and section 3.4.4 the inner gender prefixes. These morphemes co-occur with the three derivational prefixes: inalienable possession (section 3.4.5.1), alienable possession (section 3.4.5.3), and nominaliser (section 3.4.6). The inalienable possession construction is used to express the part-whole relation for non-humans. The part-whole relation for humans, i.e. human body parts, is expressed by different means

examined in section 3.4.5.2: possessive case on the whole or possessor. Section 3.5 then describes the various nominal stems, and section 3.5.1 outlines their somewhat unusual polysemy. This is followed by a brief mention of the number suffixes in section 3.6. Section 3.7 finishes this chapter with a summary.

3.2.2 Pronouns

The free pronoun system comprises 22 different forms distributed over 24 categories. They are listed in Table 3.2. The same categories are distinguished in the pronominal prefixes on other nominals and on verbs (Table 3.3).

	Minimal	Augmented	Dual	Trial
1	*ngayuwa*	*yirruwa*	*yinuwa* (m) *yirrvnguwa* (f)	*yirrvbvkvrruwa*
2	*nvngkuwa*	*nvngkurruwa*	*nvngkv(r)nuwa* (m) *nvngkvrrvnguwa* (f)	*nvngkvrrvbvkvrruwa*
12	*yakuwa*	*ngakurruwa*		*ngarrvbvkvrruwa*
3	*enuwa* (m) *ngalhuwa* (f)	*abvrruwa*	*abv(r)nuwa* (m) *abvrrvnguwa* (f)	*abvrrvbvkvrruwa*
MASC	*(yi)ngalhuwa*			
FEM	*ngalhuwa*			
COLL	*abvrruwa*			
VEG	*(mv)ngalhu-wa*			
NEUT	*(a)ngalhu-wa*			

Table 3.2: Enindhilyakwa free pronouns

Number is distinguished in the pronouns for humans only; non-human pronouns are number neutral (the same holds for the pronominal prefixes). There is an inclusive/exclusive distinction in the first person: '12' stands for 'first person inclusive', i.e. speaker and addressee, whereas '1' denotes 'first person exclusive', i.e. speaker only. Related to the inclusive/exclusive distinction is the minimal/augmented number architecture. 'Minimal' number is the logically minimum set, and 'augmented' number is one or more greater than the minimum set. The use of minimal/augmented analyses for Australian languages goes back to McKay (1978), who showed that the pronominal paradigms of Rembarrnga were more perspicaciously described in these terms, rather than in the 'classic' terms of singular, dual and plural. 'Minimal' corresponds to 'singular' for all persons except the 1st inclusive, where it corresponds to 'dual'. 'Augmented' corresponds to 'plural' for all persons. First person inclusive behaves like a singular number in Enindhilyakwa: it does not take the augmented number morpheme *rr-* present in the augmented forms.

There appear to be two number subsystems in Enindhilyakwa: next to the minimal/augmented system, we find a dual/trial system. This subsystem serves as a specification of the augmented category: when speakers want to be very specific (Leeding 1989), dual forms may be generated by adding gender morphemes to the augmented forms: the feminine prefix *ng-* creates feminine dual, and masculine *n-* makes masculine dual. Trial number is formed by adding the trial prefix *bvkvrr-* to the augmented forms, without a distinction in gender. Hence while 'augmented' means one or more beyond the minimum, this can optionally be made more specific by the addition of separate morphemes to denote dual or trial number.[3]

Pronouns with non-human referents, as are attested in Enindhilyakwa, are a rare phenomenon in Australia (Sands 1995: 261). The non-human pronouns are morphologically transparent: they consist of the human forms plus a noun class prefix, which is given in parentheses in Table 3.2 (the FEM pronoun could underlyingly be *nga-ngalhuwa*, which includes the feminine gender prefix *nga-*, which has disappeared due to haplology [Leeding 1989: 328]. The COLL form is identical to the 3a form). The noun class prefixes occur in parentheses because the formal human - nonhuman distinction is in the process of being lost: distinct non-human pronouns are only used by the older generation of speakers, and are not known by the younger speakers (Leeding 1989: 328). Hence in modern Enindhilyakwa there is only a contrast in the third person pronouns between '3m' *enuwa*, '3a/COLL' *abvrruwa,* and *ngalhuwa* used for '3f' and the other noun classes.

The pronouns can be subdivided into a direct, oblique and emphatic series (cf. Evans 2003a for Bininj Gun-Wok). The direct series bears the *-wa* suffix, as in Table 3.2, which Leeding (1989) calls a 'stem-formative' (though very occasionally this suffix is omitted). The direct series can

---

[3] Many minimal-based systems in Australia have three number-type terms (Dixon 2002: 70): minimal, unit-augmented (one person added to the minimal set) and augmented (more than one added). The Enindhilyakwa system is not unit-augmented because '12a' does not correspond to 'first inclusive trial' (hence not to 'first inclusive plus one'), but to 'first inclusive plural'. However, since trial forms can be constructed by adding the morpheme *bvkvrr-* to the augmented forms, the '12tri' form fills this gap in the paradigm. In other words, combining the minimal/augmented and the dual/trial systems roughly results in a unit-augmented system, as illustrated in the following table.

	Minimal	**"Unit-augmented"**	**Augmented**
1	*ngayuwa*	*yinuwa* (mdu) *yirrvnguwa* (fdu)	*yirrvbvkvrruwa* (tri) *yirruwa* (pl)
12	*yakuwa*	*ngarrvbvkvrruwa* (tri)	*ngakvrruwa* (pl)
2	*nvngkuwa*	*nvngkvrnuwa* (mdu) *nvngkvrrvnguwa* (fdu)	*nvngkvrrvbvkvrruwa* (tri) *nvngkvrruwa* (pl)
3	*enuwa* (m) *ngalhuwa* (f)	*abv(r)nuwa* (mdu) *abvrrvnguwa* (fdu)	*abvrrvbvkvrruwa* (tri) *abvrruwa* (pl)

This is however not a perfect unit-augmented system, as there are some asymmetries in the paradigm: the "unit-augmented" category lacks a feminine/masculine distinction in the first inclusive, which also has only one augmented form. And in terms of the forms of the morphemes, it conceals certain regularities by showing the formative *bvkvrr* in a different number category in the inclusive. See e.g. Dixon (2002: 69-70) and Evans (2003a: 260-2) for more discussion of the different types of number systems in Australia.

have subject and object function. A 'direct' pronoun as a subject is illustrated in (2a), and as a direct object in (2b). Since these are core arguments of the verb, they are caseless and they are indexed by the pronominal prefixes on the verb. The oblique series is used to express possession, and the *-wa* suffix is replaced by the POSS case suffix, as in (2c). The first person minimal oblique pronoun has a special form: *nganyangwa* [1.PRO.POSS] 'my' in (2d) (compare this to e.g. the composite form *yirra-lhangwa* [1a.PRO-POSS] in [2c]). In the emphatic series the *-wa* suffix on the pronoun is replaced by the 'Change of Referent' suffix *-aja*, as in (2e).

(2) a. *Lionel, nvngk-angmadhv-ma yelhakwa yikarba* **nungkuwa?**
    L.   2-steal.P1-*ma*   here   MASC.woomera 2.PRO
    'Lionel, have you stolen the woomera that was here?'   ('Lionel' i1)
  b. *nvng-env-lhakbv-lhakba-rnv-ma* **enuwa**
    1-3m-RDP-blame-P2-*ma*   3m.PRO
    'I used to blame him.'   (anin4_dl_tr_005)
  c. **yirra-lhangwa** *yikarba*   *yirr-arvma-lhangwa*
    1a.PRO-POSS   MASC.woomera 1a-big-POSS
    'woomeras are for us adults'   ('Lionel' i14)
  d. *akinu=wiya* **nganyangwa**
    NEUT.that=PGR 1.PRO.POSS
    'all this is mine'   (VL1 p.355)
  e. **Ngalh-ajee=ka**   *nara* *kvngi-yengbi-na.*
    3f.PRO-CofR=EMPH NEG   IRR.3f-speak-P2
    '(He told his wife.) She didn't speak.'   ('Search' z143)

The examples in (2c,d) show that pronouns can be used predicatively.

The main function of the 'Change of Referent' suffix *-aja* (Leeding 1989; WD) is discourse related: it emphasises a change of referent in an important grammatical relation from one clause to another. This suffix is restricted to pronouns. It occurs mostly on subjects, which are often intransitive, but they can be transitive as well:

(3) *Kenu-warde-na-manja, nungkw-aja kvnu-warde-na*   *arrkalha.*
    IRR.3m/2-hit-NP2-LOC 2.PRO-CofR IRR.2/3m-hit-NP2 on.the.other.hand
    'If he hits you, you can hit him back.'   ('Children' h15-6)

A formally and semantically similar discourse-related "contrastive" suffix *-ayung* occurs in Wubuy (Heath 1984: 254).

Free pronouns are not required for the grammaticality of a sentence, because most often all arguments are identified on the verb. Pronouns perform important discourse functions of emphasis, contrast and referentiality. When not all arguments are identified in the verb's prefixes, such as the direct object of ditransitive verbs, or oblique arguments of verbs such as 'say to' in (4a), a pronoun may appear (an alternative is a demonstrative, see next section). For humans, pronouns are frequently used in apposition to a demonstrative pronoun, as illustrated in (4a,b).

(4) a. *Ni-yama   ngalhuwa-wa, "Ngayuwe=ka nvng-ena nu-ngw-ena-lhangwa*
     3m-say.P2 3f.PRO-ALL   1.PRO=EMPH 1-this   3m-father-2.KIN-POSS
    nvng-abvrr-enikba.
    1-nephew-3m.KIN
    'He said to her, "I am your father's nephew".'   (Angurugu Linguistics)
  b. *Nungkuwa   nvngk-akina   akwalya.*
     2.PRO   2-that   NEUT.fish
    'you are a fish'   (anin3_dl_tr_002)

Appendix E lines up the pronominal prefixes on pronouns, adjectives and intransitive verbs, for comparison. The first and second person morphemes are formally very similar in the various word (sub)classes: for example, '2 minimal' is always *nvngk-*, whether in pronouns, nominals or verbs. The third person morphemes, by contrast, differ substantially: for example, '3 feminine minimal' as a free pronoun is *ngalhuwa*, as a nominal prefix it is *dh-*, and on intransitive verbs it is *ying-*. The recurrent morphemes that can be identified in the pronominal system, such as *rr-* 'augmented', are also included in Appendix E.

3.2.3 Demonstratives

Enindhilyakwa has six distinct sets of demonstrative roots, which differentiate locations in relation to the speaker or addressee, and visibility (Leeding 1989: 337). They are listed in Appendix F. Demonstratives have the same person, number, gender prefixes as nouns and adjectives, and an additional dual prefix *alh-* in slot [(-4)] (Leeding 1989: 352-4), as illustrated in (5).

(5) *wurrvng-alh-angakba*
    3fdu-du-that.over.there
    'those two females over there'   (VL1 p.341)

As mentioned, demonstratives are frequently used in apposition to free pronouns, as in (4) above. They can also be used alone with human reference instead of a pronoun, which appears to be restricted to two demonstratives: *ena* 'this here' and *akina* 'that there'. The former seems to be used most often for first person, as in (6a), while the latter seems to be most common for second person, as in (6b).

(6) a. *kvm-angkv-rna   memvrrerra **nvng-ena***
     IRR.1/VEG-fetch-NP2 VEG.flathead 1-this
     'I will fetch the flathead'   (LL Book 5, p.7)
  b. *kvm-angkv-rna   mvnhvnga   **nvngk-akina***
     IRR.2/VEG-fetch-NP2 VEG.burrawang 2-that
     'you will fetch the burrawang'   (LL Book 5, p.7)

Reid et al. (1983, Book 7: 5) propose that *akina* 'that there' is used with human reference when speaking of the past time, or when looking at a projected image such as a photo (*nvng-akina* 'I, that one'). They claim that *ena* 'this here', on the other hand, is used concerning the present and

the future (*nvng-ena* 'I, this one'). This prediction is however not borne out in (6), and the issue of which demonstratives are used in what context clearly requires more research.

3.2.4 Numerals

Numerals are adjectival in Enindhilyakwa, agreeing with their heads:

(7) *wulka yirrv-mangbalha yirr-ambilyvma yarnv-mamalya akwa wurr-ambilyvma*
    only   1a-five   1a-two   1a.m-people   and   3a-two
    wurri-yukujiya-kiya yirri-jawudhi-na m-akina-manja dhvraka
    3a-small-two   1a-get.into-P2   VEG-that-LOC   truck(VEG)
    'Only seven of us people and two children fitted into the car.'   (anin1_dl_tr_004)

Enindhilyakwa has a base-five number system, with number names: *awilyaba* 'one', *ambilyvma* 'two', *abiyakarbiya* 'three', *abiyarbuwa* 'four', *amangbalha* 'five', *ememberrkwa* 'ten', *amabvrrkwakbalha* 'fifteen', and *wurrakvriyabvlhangwa* 'twenty' (Stokes 1982: 38-41). Counting after five continues 5+1, 5+2, and so on, up to ten, as illustrated in the above example for 'seven'. A system beyond 'one-two(-three)-many' is typologically uncommon for an Australian language (Dixon 1980: 107-8). Worsley (1954a: 368) suggested that contact with the Macassans accounted for the development of number names beyond five.[4]

    The number for 'twenty' is invariable and does not show agreement. Stokes notes that since the introduction of English, English counting words are used almost exclusively for numbers above five. However, my informant used the traditional words for 'seven' in the above example.

    Being adjectives, numerals can incorporate body part and generic noun roots:

(8) *Awilyaba=ma angalya*   *akena **a-ngurrkw-ambilyvma** narrv-ngurrkw-arrnga-rnv-ma*
    one=EMPH   NEUT.place but   NEUT-hole-two   3a.NEUT-hole-split-P2-*ma*
    dhvrranda-ma.
    wire(FEM)-INSTR
    'There was one cage, but they had divided it into two enclosures with wire netting.'
                                      (JS2 p.124)

More examples of numerals incorporating body parts and generics can be found in Chapter 7.

3.2.5 Kinship terms

Kinship nouns take the same prefixes in slot [-6] as other nominals, but they have extra morphological possibilities. A set of specific possessive suffixes, unique to kin relationships, follows the root and denotes the possessor of the kin term. They are listed in Appendix G, taken

---

[4] Based on Stokes (1982), Butterworth et al. (2008) and Butterworth & Reeve (2008) state that Enindhilyakwa number names are borrowed (presumably from Macassan), and that children do not know them. However, Stokes does not claim this. Rather, she refers to Worsley suggestion that Macassan contact may have triggered development of number names beyond five. However, as Stokes notes (p.39), the number names themselves are not considered by speakers to be of Macassan origin. This is confirmed by the morphological transparency of the word for 'five': *a-mang-balha* [NEUT-hand-wide] 'spread out hand'.

from the dictionary and Leeding (1996). Examples are *-arrka* '1.KIN', as in *nu-ngw-arrka* [3m-father-1.KIN] 'my father', and *-enikba* '3m.KIN' in *nvng-abvrr-enikba* [1-nephew-3m.KIN] 'I, his nephew' in (4a) above.

3.2.6 Adverbs

Adverbs do not take prefixation and thus do not show agreement. However, most adverbs begin with a segment that elsewhere represents a noun class: this can be *a-* or *e-* (which normally designate NEUT noun class), *y-* (MASC), *dh-* (FEM) or *m-* (VEG). Examples include: *abalkaya* 'above', *arrawa* 'inside'; *arakba* 'now, already, completed action'; *ambaka* 'later, still'; *errekba* 'outside'; *yelhakwa* 'here'; *yangkurrangwa* 'to here', *dhvrrbvra* 'straight', *miyambena* 'what?'. Some examples of adverbs that do not begin with a segment that otherwise functions as a noun class marker are: *karrawara* 'above' and *lhukwakwa* 'on the way'. Apart from their lack of agreement, adverbs behave much like nominals: they can take case suffixes (9a), derivational prefixes (9b), they can incorporate nominals (9c,d), they can be verbalised (9d), and be used predicatively (9e,f).

(9) a. *Kwa, lhvka-ja   arrawu-wa.*
       come 2.IMP.go-NP2   inside-ALL
       'Come, go inside.'   (LL Book 5 p.23)
    b. *dh-adhv-ng-arrawa dhvmbala*
       FEM-f-ALP-inside   clothing(FEM)
       'underclothes'   (VL2 p.221)
    c. *a-ngurrkw-errekba*
       NEUT-hole-outside
       'empty hole'   (Ansec2)
    d. *karra-mungkurrkv-dhvrrbvra-kv-ni=yadha*
       IRR.3a/3a-eye-straight-FACT-P2=PURP
       'for them to teach them the right way'   (Ansec1)
    e. *n-eniyuwangkwa adhadhibina vmba ni-yukujiya alhalhvbaja*
       3m-old.man   on.this.side but   3m-small   on.the.other.side
       'the old man is on this side but the little boy is on the other side'   (JS2 p.104)
    f. *ekbarra   ambaka*
       NEUT.headache still
       'the headache is still there'   (JS2 p.86)

Another property shared by adverbs and other nominals is that some roots are defective, which means that they require a noun to attach to (section 3.4.5.1). Examples include *+bidjina* 'on this side' and *+warra* 'other side', as in *a-yaku+warra* [NEUT-river+other.side] 'on the other side of the river' (Stokes 1982: 106).

3.3 Nouns and adjectives

Nouns and adjectives roughly show the same syntactic and morphological possibilities: they take the same inflectional and derivational prefixes and case and number suffixes, and they are able to be used predicatively. There is however one criterion that distinguishes nouns from adjectives: an adjective can occur with every available pronominal/gender/noun class prefix, whereas the noun class prefix of a noun is frozen to the stem and hence cannot be omitted or substituted. For example, *dhvngarrbiya* 'FEM.crocodile' is FEM noun class, as indicated by the initial *dh* segment, irrespective of the sex of the crocodile. The FEM noun class prefix cannot be replaced by say, a MASC prefix to represent a male crocodile. The sex of a crocodile needs to be expressed by an additional nominal: *dh-enungkwarba dhvngarrbiya* 'FEM-man FEM.crocodile' (Waddy 1987: 34).

The prefixes on adjectives, by contrast, are flexible and always agree with the noun they modify (10a-c), or with their subject when used predicatively (10d):

(10) a. *y-arvma   yaraja*
     MASC-big   MASC.goanna
     'big goanna'
   b. *dh-arvma   dhuwalya*
     FEM-big   FEM.curlew
     'big curlew'
   c. *arvma   akwalya*
     NEUT.big   NEUT.fish
     'big fish'
   d. *ngayuwa   nvng-arvma   akwa   nungkuwa   nvngki-yukujiya*
     1.PRO   1-big   and   2.PRO   2-small
     'I am big and you are small'   (anin3_dl_tr_002)

Since the noun class marker on adjectives is variable, and the stem without a prefix is meaningful, the noun class prefix on adjectives is represented as separated from the stem by a morpheme boundary (see also Waddy 1987, 1988; Leeding 1989). By contrast, the noun class marker on a noun is inflexible and the word without the prefix is meaningless (Waddy 1988). The noun class prefix on a noun is part of the lexeme and represented in the gloss as a lexicalised morpheme boundary.[5] When the adjectival stem starts with *a*, as is the case in for instance *-arvma* 'big' in (10) above, the NEUT class form is identical to the bare stem. This is taken to be due to the merger of the NEUT class prefix *a-* with the stem: *a-arvma > arvma* 'NEUT.big' (see section 2.6.3). The NEUT class is included in the gloss, separated from the stem by a full stop.

Some common nouns, however, have flexible prefixes. These include kinship terms and other nouns with human referents, as well as domesticated animals.

---

[5] Leeding (1989) separates the noun class prefix from the stem by a morpheme boundary.

(11) a. *ngarrv-rnd-arringba*
      12a-mother-3a.KIN
      'us, their mothers'   (GED p.13)
    b. *dhv-rnd-vrrka*
      3f-mother-1.KIN
      'my mother'   (JW1 p.44)

(12) a. *N-enibv-dhv-ma*   *amandhangwa*   *Nv-bungkawa!*
      3m-alive-INCH.NP1-*ma*   truly   3m-boss
      'The Lord really is alive!'   (Akarrikarra 1990, Vol.10.2)
    b. *wunv-bungkawa*
      3mdu-boss
      'two male bosses'   (VL1 p.269)

(13) a. *wurr-angamba wurru-warda*
      COLL-where?   COLL-dog
      'where is the dog?'   (LL Book 4 p.3)
    b. *n-akina   nu-warda*
      3m-that   3m-dog
      'he is a dog'   (anin3_dl_tr_002)

These examples show that the morphological distinction is not so much between 'noun' and 'adjective' per se, but between various subcategories of noun. Nouns referring to humans and domesticated animals differ from non-human nouns in the flexibility of their prefix. The noun class prefix of the latter is frozen to the stem, whereas the former take a variety of prefixes. See section 3.4.1 for further discussion.[6]

Any nominal, allowing for its meaning, can be used predicatively in Enindhilyakwa, a common property of Australian languages first noted by Hale (1983: 33-4; see also Simpson 1991: 32). Due to their semantics, however, adjectives and nouns with human reference are much more common as the predicate of a clause than are other nouns. This may be because it is hard to construe a context for an inanimate noun to be used predicatively, a point also made by Heath (1978a: 34). Yet informants do produce them and examples can be found in the texts, such as those in (14). Due to the inflexible nature of the noun class of inanimate nouns, such examples may involve an agreement mismatch.

---

[6] Following Dixon (1980: 490) for Diyari, Leeding (1989: 144-5) lists the following criteria that distinguish nouns from adjectives: (i) only adjectives can receive verbalising derivational suffixes (save one or two exceptions); (ii) only adjectives can take the diminisher prefix *warrngk-*; (iii) the intensifying clitic *=ika* mostly occurs on adjectives; (iv) when an adjective modifies a noun, only the former takes a case marker; (v) only adjectives take first and second person prefixes; and (vi) the adjectiviser prefix *(ng)ki-* derives adjectives and the nominaliser *(ng)kwi-* (Leeding's spelling) derives nouns. However, in this chapter I argue that the distinction is between subclasses of nouns, rather than between nouns and adjectives per se. This is because nouns with human reference *can* take first and second person prefixes. Furthermore, some of Leeding's criteria are unfounded: both nouns and adjectives can take factitive and inchoative (section 5.4.1.1) verbalising suffixes, and the existence of an "adjectiviser" prefix is unmotivated (see fn38 below). The fact that only adjectives receive the diminisher prefix and intensifying clitic may be for semantic reasons, as it is hard to construe a context for modifying a noun with 'rather' or 'very'. Moreover, only when the adjective and noun are adjacent is just the adjective marked for peripheral case; when they are discontinuous, both the adjective and the noun bear case (section 8.9).

(14) a. *ngayuwa **nvng-ena** **akwalya***
　　　 1.PRO　　　 1-this　　　 NEUT.fish
　　　 'I am a fish'　　　　　　　　　　　　　　　　　　　　　 (anin3_dl_tr_002)

　　 b. *Nvngi-lyangki+yama **angbilyuwa** **dh-akina***
　　　 1-head+say.P2　　　　　 NEUT.sickness　3f-that
　　　 'I thought she was sick'　　　　　　　　　　　　　　　　 (LL Book 7 p.12)

　　 c. *Nvngi-lyangki+yama **awiyemba** **n-akina***
　　　 1-head+say.P2　　　　　 NEUT.anger　　3m-that
　　　 'I thought he was angry.'　　　　　　　　　　　　　　　 (LL Book 7 p.12)

　　 d. *y-akina　　 yinvkarrmungkwardha　yi-nu-kw-alyvbara, **akwalya**[7]　　 **y-akina***
　　　 MASC-that　MASC.little.hermit.crab　MASC-m-NSR-eat　　NEUT.flesh.food　MASC-that
　　　 'those little hermit crabs are edible, they are flesh food'　　　　　 (JW p.69)

　　 e. *Nenv-mvnv-ngaja　　 n-akina alhakba-manja kemba　**merra**[8]　　**alhakba**　n-akina*
　　　 3m/3m-BENE-hit.P2　3m-that　NEUT.leg-LOC　therefore　VEG.blood　NEUT.leg　3m-that
　　　 'He hit him on the leg and therefore he has a red leg.'　　　　 (VL1 p.484)

Simple non-human nouns that are used semantically as predicates and that take an argument of a different noun class are one of the rare cases of agreement mismatch in Enindhilyakwa (i.e. **dh-angbilyuwa dh-akina* [14b]).[9] The standard is that modifiers agree with their heads, and predicates agree with their arguments. This rather unusual dis-agreement in a language where human participants normally show agreement throughout the clause, supports the view that simple nouns with non-human referents are rigid units that do not allow a change in class marker.

More evidence for the noun class markers being frozen to the stem comes from the derivational prefixes. Nouns can take an inalienable possession prefix (INALP, section 3.4.5.1) or an alienable possession prefix (ALP, section 3.4.5.3), which allows them to agree with another nominal in the clause. The nouns to which the derivational prefixes attach maintain their inherent class marker, such as *amarda* 'NEUT.leaves' in (15a), or *makarda* 'VEG.sea' in (15b).

(15) a. *warnumamalya … narrv-ma-ma-ngv-ma　 ma-m-amarda …*
　　　 3a.people　　　　　　 3a-VEG-take-P2-*ma*　VEG-INALP-NEUT.leaves
　　　 'people took the leaves of these trees [*mabalba* 'VEG.peanut tree']…'　　 (GED p.15)

　　 b. *envngv-makarda　　 akwalya*
　　　 NEUT.m.ALP-VEG.sea　NEUT.fish
　　　 'saltwater fish'　　　　　　　　　　　　　　　　　　　　　 (VL2 p.220)

When marked for INALP or ALP, nouns with an inflexible class prefix obtain an additional, flexible, prefix that agrees in noun class with an external nominal.

---

[7] Waddy (1988: 67-8) notes that the noun *akwalya* is highly polysemous: in its most common usage it means 'fish', as in (14a), or 'flesh of fish', but it can also mean '(flesh of) bony fish' (in contrast to cartilaginous fish); '(flesh of) fish' (in contrast to other animals in the sea); 'animals in the sea' (in contrast to animals on the land); animals (in contrast to plants); and 'flesh food' (in contrast to non-flesh food), as it does in (14d).

[8] Enindhilyakwa does not have true colour words: *merra* 'VEG.blood' is used for 'red', *amarda* 'NEUT.grass' for 'green' and *makarda* 'VEG.sea' for 'blue', amongst others.

[9] Another case is found with the POSS case suffix, which occurs on the noun denoting the possessor, and shows no pronominal agreement with the possessed noun (see sections 3.4.5.2 and 8.3).

There is no formal distinction between class markers on nouns and agreement markers on modifiers in Enindhilyakwa. The language differs in this from for instance Bininj Gun-Wok, where 'noun classes' on nouns are distinct from what Evans (2003a) labels 'gender' markers on modifiers. In most Bininj Gun-Wok dialects there is a morphological distinction: nouns fall into one of five categories on the basis of the prefixes they normally take, whereas the agreement system on modifiers differentiates only four 'genders'. There is also a theoretical need to treat them as separate phenomena, Evans argues, because a 'noun class' is part of the noun lexeme, whereas 'gender' is an obligatory, governed agreement category on modifiers. Moreover, 'noun class' and 'gender' can be non-congruent: life-form plant names in Kunwunjku, for example, will go into the *kun*- noun class, but their modifiers take VEG gender *man*- (Evans 2003a: 181-3).

There is no such morphological distinction between the noun class markers on nouns and on modifiers in Enindhilyakwa, so the distinction is only a theoretical one: the class markers on nouns are part of the lexeme, whereas on modifiers they are an obligatory, governed agreement category. I will use the term 'noun class' in both cases, reserving the term 'gender' for prefixes that categorise humans and domesticated animals according to their biological sex (see next section).

3.4 Nominal prefixes

This section discusses the various prefixes that occur in the slots preceding the stem in Table 3.1 above.

3.4.1 Noun class, gender and pronominal prefixes [-6]

All nominals are obligatorily prefixed by a noun class, gender or pronominal prefix. Nominals agree with their head in adnominal use, and with their subject in predicative use. The only nominals that do not take an overt noun class marker are loanwords. They are nonetheless covertly assigned to a certain noun class, which becomes apparent on modifiers: e.g. *m-arvma dhvraka* [VEG-big truck(VEG)] 'big truck'. The noun class of a loanword is also registered on the verb, as in e.g. (23) below.

'Noun class' and 'gender' are often used interchangeably in the literature, depending on the linguistic tradition (Aikhenvald 2000: 8, 19). Corbett (1991) uses 'gender' as a cover term for agreement classes, while Aikhenvald (2000) opts for 'noun class' to cover the same phenomenon. Here I follow Sands (1995) in differentiating between the two. In Sands' terminology, 'gender' is restricted solely to systems where certain animate (e.g. human) nouns are categorised according to biological sex.[10] This contrasts with the noun class system, which subdivides all nouns, by

---

[10] Sands notes that gender prefixes tend to be derivational rather than inflectional and do not show agreement through the clause (1995: 270). The gender prefixes in Enindhilyakwa discussed here, however, can be used derivationally, but they show agreement throughout the clause, in the same way that the pronominal and noun class prefixes do.

different principles (1995: 248). In neighbouring Ngandi (Heath 1978a) and Wubuy (Heath 1984) humans are also classified according to sex and non-humans according to other principles. In Enindhilyakwa, there are morphological and semantic distinctions between noun class, gender and pronominal prefixes, along the following lines:

- *pronominal* prefixes occur on first and second person nominals with human referents. They are formally identical to the pronominal prefixes used on intransitive verbs. They distinguish between minimal, dual and augmented number
- *gender* prefixes categorise third person nominals with human referents, as well as some domesticated animals, as either male or female according to their biological sex. Except for the '3m' prefix, gender prefixes are formally distinct from pronominal prefixes used on intransitive verbs. Gender prefixes distinguish between minimal, dual and augmented number. They can be used derivationally and they occur on loanwords referring to humans/domesticated animals
- *noun class* prefixes divide non-human nouns into five classes, according to semantically unclear criteria. For simple, underived, nouns, the noun class marker is part of the noun lexeme and thus cannot be omitted, substituted or used derivationally. Noun classes prefixes are number neutral and do not occur on loanwords. They are formally distinct from the pronominal prefixes on verbs[11,12]

Table 3.3 on the next page presents the various prefixes that occur on nominals, together with the pronominal prefixes on intransitive verbs (realis mood) for comparison (see Capell 1942; Worsley 1954b; Stokes 1982; Leeding 1989; though their analyses differ from the one proposed here). Trial number is omitted here, but is addressed in section 3.4.2.

  The non-human noun classes are subdivided into 'animate' and 'inanimate' classes, which is based on an additional set of gender morphemes in slot [(-3)] (section 3.4.4) , which crosscuts the pronominal/gender/noun class system. These gender morphemes co-occur with the three derivational prefixes (inalienable possession, alienable possession and nominaliser; sections 3.4.5 and 3.4.6), but only when the derived nominal has a human referent or belongs to one of the 'animate' classes. This gender morpheme does not co-occur with the 'inanimate' classes.

---

[11] This is a property that Enindhilyakwa shares with Wubuy, but with no other Gunwinyguan language. Among the GN languages, only Wubuy, Ngandi, and Ngalakgan show verb agreement for every noun class (Baker 2008a: 4), as does Enindhilyakwa. But only in Wubuy and Enindhilyakwa are the nominal and the verbal prefixes formally distinct.
[12] Evans (2003b: 20 fn17) observes that the association of both *n-* and *y-* initial forms with Masculine is a recurrent feature in the non-Pama-Nyungan languages. A hypothesis that could account for this pattern, he suggests, is that the Enindhilyakwa human male *n-* and non-human masculine *y-* represent the original system, with collapse of the distinction in most daughter languages, either with selection of one or the other form (e.g. *yi-* in Wardaman but *na-* in Warndarang), or retention of both forms but with a change in the conditioning of the choice to case (as in Mawng ABS *[y]i-* and ERG *ni-*), or aspect (as in Wubuy Punctual *yii-* and Continuous *na-*).

			gloss	nominals	intransitive verbs
humans, domesticated animals	**pronominal prefixes**		1	*nvng-*	*nvng-*
			1a	*yirr-*	*yirr-*
			1fdu	*yirrvng-*	*yirrvng-*
			1mdu	*yin-*	*yin-*
			12	*y-*	*y-*
			12a	*ngarr-*	*ngarr-*
			2	*nvngk-*	*nvngk-*
			2a	*kvrr-*	*kvrr-*
			2fdu	*kvrrvng-*	*kvrrvng-*
			2mdu	*kvn-*	*kvn-*
	genders		3m	*n-*	*n-*
			3f	*dh-*	*ying-*
			3a	*wurr-*	*na- ~ nuw-*
			3fdu	*wurrvng-*	*narrvng-*
			3mdu	*wun-*	*nen-*
non-humans	**noun classes**	**'animate'**	MASC	*y-*	*n-*
			FEM	*dh-*	*ying-*
			COLL	*wurr-*	*na- ~ nuw-*
		'inanimate'	VEG	*m(a)-*	*nvm-*
			NEUT	*a- ~ e-*	*na- ~ nuw-*

Table 3.3: Prefixes on nominals and on intransitive verbs

Pronominal prefixes only occur on first and second person nominals referring to humans, as in (10d) and (11a) above, and the following.

(16) *yarnungkwarba   mama   yirru-kulyadhadha,   mama   yirrv-balanda,*
      1a.man   never.mind   1a-white   never.mind   1a-non.Aborigine
      yarnungkwarba   ngawa
      1a.man   still
      'it doesn't matter if we men are white, it doesn't matter if we are non-Aborigines, we are still men'   ('Mixed marriages' e39-41)

Gender prefixes only occur on third person nominals referring to humans (17) or domesticated animals (18).[13] Their plural is formed by a change in prefix, from *n-* '3m' or *dh-* '3f' to *wurr-* '3a'.

(17) a. *n-enungkwarba*   *warnungkwarba*[14]
         3m-man   3a.man
         'man'   'men'

---

[13] In the dictionary the entries *bulukwa* 'bullock' and *bujikeda* 'pussycat' do not have a noun class prefix and thus are not classified according to their sex. *Enungkwarba bulukwa* is used for a male and *adharrvngka bulukwa* for a female (GED p.67) (since *adharrvngka bulukwa* is female, the gloss 'bullock' is perhaps not right, but 'cattle' may be better). These different ways of representing the sex of domesticated animals may be a dialectal difference between the Angurugu and Umbakumba communities.

[14] This word does not involve a lexicalised morpheme boundary, but *warn-* results from contraction of the '3a' prefix *wurr-* and the first syllable *en-* of *enungkwarba* 'man'. This archaic process is described in Appendix I.

    b. *dhv-dharrvngka*   *wurrv-dharrvngka*
      3f-woman   3a-woman
      'woman'   'women'
    c. *nv-balanda*   *dhv-balanda*   *wurrv-balanda*
      3m-white.person   3f-white.person   3a-white.person
      'male non-Aborigine' 'female non-Aborigine' 'non-Aborigines'

(18) a. *nv-bulukwa* 'bull'   *dhv-bulukwa* 'cow'   *wurrv-bulukwa* 'cattle'
      b. *nv-bujikeda* 'tomcat' *dhv-bujikeda* 'female cat' *wurrv-bujikeda*'pussycat(s)' (VL1 p.291)

Gender prefixes can be used derivationally, in that they can change the sex of the referent, as illustrated in (17c) and (18). The nouns in these examples are loanwords (*balanda* comes from Macassan *balanda* 'European' (< 'Hollander'); *bulukwa* comes from English *bullock*, and *bujikeda* is the Enindhilyakwa rendition of *pussycat*). Only pronominal and gender prefixes can attach to loanwords, which distinguishes them from noun classes. Another example is the Macassan loan *bungkawa* 'boss' in (12) above (< *puŋgawa* 'boss').

    The augmented prefix *wurr-* for humans and domesticated animals does not in fact encode gender. However, it is included with the 'gender' prefixes in Table 3.3 because of the close connections between plurality and gender classification, especially of humans (cf. Corbett 1991; Harvey 1997). This prefix is distinct from the formally identical COLL noun class prefix in that it is not number neutral. Dual number is formed for humans by an additional gender prefix on the augmented prefix *wurr-*: feminine *ng-* or masculine *n-*. This is also how dual number for humans is formed in Wubuy (Heath 1984).

(19) *wurrv-dharrvngka* 'women'   *wurrv-ngv-dharrvngka* 'two women'
      warnungkwarba   'men'   *wun-enungkwarba*   'two men'[15]

Such dual formation is not possible for the COLL noun class. Here, as well as for the other non-human noun classes, dual number is represented by a suffix (Stokes 1982; Leeding 1989):

(20) *wurrajija* 'COLL.bird(s)'   *wurrajija-kiya* 'two COLL.birds'
      m-arvma malhamukwa 'big canoe' *m-arvma-kiya malhamukwa* 'two big canoes' (JS2 p.52)

The different semantics and behaviour of the non-human COLL class prefix and the human 'augmented' prefix supports their analysis as distinct prefixes.

---

[15] The masculine dual prefix *wun-* results from a contraction of human augmented *wurr-* and masculine *en-*, which results in *wurn-* (Appendix I), and subsequent loss of retroflexion (section 2.5.8), yielding *wun-*. Leeding proposes that this form results from deletion of the alveolar trill due to haplology (1989: 220). However, Worsley (1954b) writes this prefix as *wurn-*, with a retroflexed nasal. This suggests that my analysis of contraction and subsequent loss of retroflexion is more likely, and that Worsley's informants had not yet undergone the latter. No loss of retroflexion occurs in *warnungkwarba* 'men' in (17a).

As mentioned, noun class prefixes are inseparable from the root. They cannot be omitted, substituted or be used derivationally. There are, however, a handful of examples of noun stems that occur in two different classes with related meanings. Some examples are:

(21) *erra*   'NEUT.vomit'   *merra*   'VEG.blood'
      anhvnga   'NEUT.vegetable food' *mvnhvnga*   'VEG.burrawang'
      adhalyvma   'NEUT.river'   *mvdhalyvma*   'VEG.river mouth'
      edhvrra   'NEUT.mouth'   *medhvrra*   'VEG.cave'

Leeding (1989: 283-6) furthermore lists a number of nouns with different class markers, such as: *yilyambarra* 'MASC.Caspian tern' and *wurrilyambarra* 'COLL.Common Noddy'; *yandharrnga* 'MASC.Central Hill' and *andharrnga* 'NEUT.land around Central Hill' (see also Waddy 1988). Leeding furthermore recorded a number of species names where different class prefixes distinguish juveniles from adults: e.g. *dhalyuwa* 'FEM.Blue-spotted Fantail Ray (juvenile)' vs. *alyuwa* 'NEUT.Blue spotted Fantail Ray (adult)'. Such pairs of nouns, which formally only differ in their noun class marker, suggest that noun class prefixes were once flexible in Enindhilyakwa, as they still are in neighbouring languages. Synchronically, however, the majority of nouns are restricted to a single class. Noun class membership is mostly unpredictable (see section 3.4.1.1), hence the class of the noun must be listed in the lexicon.

There is one exception to the claim that noun class prefixes are inflexible: in Dreamtime stories animals may be represented as humans when they are thinking, acting or fighting as such. For example, *yirvmba* 'MASC.seagull' and *yikba* 'MASC.pheasant' can switch their MASC class marker *y-* to the masculine gender prefix *n-*, as illustrated in (22). This switching of noun class never happens with nouns belonging to the inanimate classes.

(22) *Y-akinee=ka   ni-yengbi-na   **Yirvmba**   makarda-lhangwa. Ene-ja*
     MASC-that=EMPH MASC-speak-P2 MASC.seagull VEG.sea-ABL   3m.PRO-CofR
     Yikba   *ni-yengbi-na   ariba-lhangwa. Neni-beeyi-na   kembirra awinyamba.*
     MASC.pheasant MASC-speak-P2 NEUT.land-ABL   3mdu-quarrel-P2 then   NEUT.anger
     *Ni-yama   **Nv-rvmba** "Nara nvngk-akina a-lhvka-ma yangkurrangwa nganyangu-wa*
     3m-say.P2 3m-seagull NEG   2-that   NEG-go-NP3 over.here   1.PRO.POSS-ALL
     alhvkvra." "Yawa, nganja   yelyukwa   kvn-akumv-rna=dha
     NEUT.house yes   1.PRO.CofR MASC.rain IRR.1/MASC-put-NP2=EMPH
     *nungku-lhangwi=yadha=dha", ni-yama   **N-ikba**.*
     2.PRO-POSS=PURP=EMPH   3m-say.P2 3m-pheasant
     'Seagull spoke from the sea. Pheasant spoke from the land. Then they quarrelled. Seagull
     said "Don't you come here to my house." "Yes, I'll make rain for you", Pheasant said.'
                                                    (Seagull and Pheasant' u1-7)

In contrast to gender prefixes, noun class prefixes do not occur on loanwords. Loanwords can thus easily be identified by their unusual initial segments. Examples are the Macassan loans *jurra* 'paper, book(NEUT)' (< *surat* 'book, paper'), *bajananga* 'lantern(NEUT)' (< ?*baraccuŋ*

'firecrackers'), and *libaliba* 'canoe(NEUT)' (< *lepa-lepa* 'canoe'); and the English loans *bajungkula* 'bicycle(VEG)', *bvlengkida* 'blanket(VEG)' and *jebija* 'church(NEUT)' (< *service*). More examples of loans can be found in Appendix P. It is possible for a loanword to start with a segment that functions as a noun class prefix in Enindhilyakwa; in such cases the loanword is often assigned phonologically, based on the initial segment of the root. An example is the Macassan loan *dherriba* 'trepang' (< *taripaŋ*), which is classified as FEM because of its initial *dh* (Macassan /t/ is apico-dental, which is borrowed as interdental /t̪/ if the receiving language has an interdental series [Evans 1992: 55], as is the case in Enindhilyakwa). The phonological classification is further evidence for the lexicalisation of noun class prefixes and will be addressed in more detail in the next section.

The class membership of loanwords becomes apparent through agreement on modifiers and/or verbs:

(23) ***kotton***   *nvngv-**nga**-rrvngka-ma*   *narrv-**nga**-lhungkuwabi-ju-wa-ma West Narrabri-manja*
     cotton(FEM)1.S-FEM.O-see.PST-*ma*   3a.S-FEM.O-grow-CAUS-P2-*ma*   W.   N.-LOC
     'I saw cotton that they were growing at West Narrabri'   ('A Trip South' a22)

The fact that loanwords fail to be marked by a noun class prefix indicates that overt class marking on nouns is no longer productive. This confirms the hypothesis made above, that the noun class prefixes on traditional nouns are part of the lexeme: at an earlier stage class marking on nouns was productive, but at a later stage it lost its productivity and became fixed (see Sands 1995: 260).[16] The fact that loanwords do take gender prefixes suggests that the gender system is still productive. This, then, is another difference between the gender and the noun class prefixes in Enindhilyakwa.

A final distinction between the two kinds of prefixes is their behaviour in morphological processes. Nouns combined with the verbalising inchoative suffix *-dhv-* (section 5.4.1.1), for example, retain their noun class prefix but lose their gender prefix. When for instance the noun *awinyamba* 'NEUT.anger' is verbalised, this gives *-awinyamba-dhv-* 'to become angry', where the NEUT class prefix is retained. Verbalising *dh-adhiyuwangkwa* '3f-old woman', on the other hand, yields *-adhiyuwangku-dhv-* 'to become old (for women)', where the feminine gender prefix *dh-* is lost.

As can be seen in Table 3.3, two of the human gender prefixes are formally identical to two of the non-human noun class prefixes: feminine gender and FEM noun class, as well as human augmented and COLL noun class. The two identical prefixes show the same agreement on verbs, as

---

[16] Since the Macassan loans do not take an overt class prefix, this gives us a latest date for the loss of productivity of noun class prefixes: visits from the Macassans in search for trepang probably started in the late 17th century (MacKnight 1976), and ended in 1906, when the White Australian Policy was enforced. This means that the noun classes would have lost their productivity by the end of the 17th century at the latest.

illustrated in (24). Human masculine gender and MASC noun class, although represented by formally distinct prefixes on nominals, also show the same agreement on verbs, as in (25).

(24) a. *dhv-dharrvngka / dhuwalya   yingv-lhvka-ja*
      3f-woman   FEM.curlew   3f/FEM-go-NP2
      'the woman / the curlew(s) is/are going'
    b. *wurrv-dharrvngka / wurrendhindha na-lhvka-ja*
      3a-woman   COLL.rat   3a/COLL-go-NP2
      'the women / the rat(s) is/are going'

(25) a. *n-enungkwarba / yingarna   nv-lhvka-ja*
      3m-man   MASC.snake 3m/MASC-go-NP2
      'the man / the snake(s) is/are going'
    b. *nvng-en-rrvngka   n-enungkwarba / yingarna*
      1.S-3m/MASC.O-see.P2 3m-man   MASC.snake
      'I saw the man / the snake(s).'

The fact that the feminine gender prefix and the FEM noun class prefix are formally identical, combined with the fact that they take the same agreement on verbs, has led all previous scholars to assume that these prefixes represent one and the same "feminine" noun class (Capell 1942; Worsley 1954b; Stokes 1982; Leeding 1989; see also Sands 1995: 275). For the same reason, Stokes (1982) and Leeding (1989) also take the human augmented and the COLL class prefixes to represent the same noun class. None of these researchers, however, considers the masculine gender prefix *n-* and the MASC noun class prefix *y-* to represent the same noun class, even though these take the same agreement on verbs. I propose that this classification is skewed: the "feminine" noun class includes both humans and animals, whereas the "masculine" noun class only includes humans. In addition, only for some members of the "feminine" noun class (i.e., humans) is plural established by a change in prefix, whereas this is the case for all members of the "masculine" class.

    A distinction between gender and noun class results in a more straightforward analysis: the gender prefixes classify humans and domesticated animals according to biological sex, and hence are flexible. Only humans bear marking for plurality in a regular way (as in the great majority of Australian languages [Harvey 1997: 18]). The noun class system subdivides non-humans along more subtle principles (see next section), which does not include number. The feminine gender prefix and the FEM noun class prefix are formally identical, as are the human augmented and COLL noun class prefixes -whereas the masculine gender and MASC noun class prefixes are distinct.

3.4.1.1 Semantics of the noun classes

Noun class systems are very common in the non-Pama-Nyungan languages of Australia (Sands 1995 also notes two Pama-Nyungan languages with noun classes). They are a grammaticalised

agreement system, where class may be overtly marked on the noun, on articles and modifiers within the noun phrase, and on the predicate (e.g. Dixon 1986; Sands 1995; Aikhenvald 2000). The most typical Australian system has four noun classes, which can be broadly labelled as *masculine*, *feminine*, *vegetable*, and *neuter* or *residual* (e.g. Sands 1995: 258; Evans 2003a: 182). Individual languages range from having two noun classes to eight (Dixon 1980: 273), or even up to 15 in Ngan'gityemerri (Reid 1997).

The principles by which nouns are assigned to the various classes are a topic of much discussion. Aikhenvald notes that, although these principles can be governed by formal, morphological or phonological properties of a noun, there is always a semantic core, which involves the universal semantic parameters of sex, humanness and animacy (2000: 22). No system of noun classes is completely devoid of semantic motivation, though with varying degrees: systems with a larger number of noun classes tend to have more semantic motivation than systems with smaller numbers of noun classes (ibid).

Studies of noun class systems in Australia have shown that their semantic patterning results from a clustering around central prototypical notions (e.g. Dixon 1972; Lakoff 1986; Harvey 1997; Evans 2003a). Items linked to a prototypical member can also be placed in a different class to the founding member because of a principle of opposition. For instance, tall trees are classified as masculine in Gaagudju and Wubuy, as opposed to small trees that belong to the general class for flora (Harvey 1997: 28).

The semantics of the five noun classes in Enindhilyakwa (as well as their labels) has been subject to some controversy in the previous work (Capell 1942; Moody 1951; Worsley 1954b; Stokes 1982; Waddy 1988; Leeding 1989). In Table 3.3 above the five classes are labelled according to the most typical Australian pattern of MASCULINE, FEMININE, VEGETABLE and NEUTER, plus a fifth COLLECTIVE class.[17] These are notional terms though, which are not strictly accurate, as all classes include semantically diverse groups of nouns. I will return to the motivation for these terms below, but I will first summarise some of the previous analyses (using my terms, glosses and orthography), to illustrate the debate.

Worsley (1954b: 275-9) and Waddy (1988: 165-8) argue that there is little point in trying to determine the semantics of Enindhilyakwa noun class membership, as the distribution of nouns across the five classes is too irregular to justify any (strong) semantic basis. The names of fish, plants, trees and birds, for instance, are scattered among the five classes. For example, *yukulbandha* 'MASC.barramundi (*Lates calcarifer*)', *dhvrnarra* 'FEM.Gilbert's rock-cod (*Epinephelus gilberti*)', *wurruwarda* 'COLL.plum-striped wasp-fish (*Minous versicolor*)',

---

[17] The classification of certain non-human nominals as plural/collective is rare in Australia. Harvey (1997: 18) mentions only two languages that do this, which are Wubuy and Ungarinyin. Enindhilyakwa is a third language with plural/collective marking for some non-human animates.

memvrrerra 'VEG.flathead (*Platycephalus endrachtensis*)', and *amukwena* 'NEUT.soldier-fish (*Apogonichthys auritus*)' are all names of fish, but each belong to a different noun class. Body parts are also irregularly distributed: compare *alhakba* 'NEUT.leg', *makarra* 'VEG.thigh' and *yina* 'MASC.knee'. The same is true for the internal organs: *awa* 'NEUT.liver', *mvrrekalhuwa* 'VEG.small intestines' and *yeyerra* 'MASC.veins'. Similarly, the distribution of edible non-flesh food is also scattered. Hence, Worsley (1954b) and Waddy (1988) conclude, there is little semantic basis that underlies the different noun classes.

Leeding (1989), by contrast, proposes a very strong semantic basis for noun class membership. The 'animate' (MASC and FEM) classes include beings from the Dreamtime, such as *dhvngarrbiya* 'FEM.crocodile' and *yibvradha* 'MASC.wallaby'. The classes also include inanimate items associated with Dreamtime creatures, or that have supernatural power causing sickness, pain or death. The COLL (*wurr-*) class contains spirits and non-human animates that live in family-like groups or colonies, such as *wurramukwa* 'COLL.evil spirits' and *wurruwarda* 'COLL.dog' (1989: 234-51).

The two 'inanimate' classes are also distinguished by their semantics according to Leeding, and are classified according to their appearance: the NEUT class contains invisible items and items with a lustrous appearance, whereas the VEG class contains lustreless items. For example, the difference between VEG and NEUT class birds is the shininess of their feathers: *angurrvrda* 'NEUT.Australian magpie' has shiny feathers and hence is allocated to the lustre class, whereas *milyangma* 'VEG.pied heron' has dull feathers and is assigned to the lustreless class. The same goes for body parts: body parts like *akarrnga* 'NEUT.teeth' and *arndvrnda* 'NEUT.heart' have a lustrous appearance and thus are NEUT, whereas *marmba* 'VEG.molar teeth' and *mangma* 'VEG.brains' apparently have a dull appearance and are VEG. Similarly, the class membership of some plants is based on whether they grow in soil (lustrous: NEUT) or in beach sand (lustreless: VEG). For example, *alhungkwalhuwa* 'NEUT.cladode pea plant' grows in the (lustrous) open forest, but *mulhungkwalhuwa* 'cladode pea plant' grows in (lustreless) sandy areas (Leeding 1989: 263, citing Levitt 1981: 114). Finally, 'abstract' concepts like *ayakwa* 'NEUT.language, word', *enindhilyakwa* (NEUT.language name) and *amvdhilya* 'NEUT.cough' are invisible and thus classified as NEUT.

There are major problems with this analysis. First of all, the semantic contrast between lustrous and lustreless is unclear. The difference in lustre between for instance *angwadha* 'NEUT.tears' (presumed "lustrous") and *mukwena* 'VEG.perspiration' (presumed "lustreless") is doubtful. Dixon (2002: 487) also notes that it seems scarcely plausible to describe *awija* 'NEUT.fog' and *awarruwalya* 'NEUT.shade' as 'lustrous' but *marrakwa* 'VEG.meteor' as 'non-lustrous'. Secondly, both classes involve nouns that do not fit semantically. For instance, general food terms such as

anhvnga 'NEUT.vegetable food' and *a-mv-dhvngvra* [NEUT-INALP-FEM.clay] 'flour' are NEUT class but they are not lustrous, and they are associated with both lustrous and lustreless habitats (Leeding 1989: 265). These exceptions cannot be explained by principles of opposition, where extraordinary instances of a certain class are assigned to a different class (Harvey 1997).

The classification of loanwords and introduced items poses a third problem for Leeding's analysis. She notes that this classification "is usually arbitrary" (1989: 269), which is unexpected if the classes were to have a strong semantic basis as she suggests. For example, *jarrangwa* 'horse' (< Mac *jaraŋ* 'horse') is FEM, *kawala* 'koala' is MASC, *bambi* 'deer' and *bikibiki* 'pig' are NEUT, and *wurruwarda* 'dog' is COLL. Also, as horses and koalas are introduced animals they cannot have occurred in the Dreamtime era, so it is unclear why they are classified as FEM and MASC, respectively. The same goes for *kalukwa* 'coconut' (< Mac *kaluku* 'coconut'), which is MASC but inanimate.

Fourth, loanwords may be classified according to their initial phoneme. Dictionary entries include the Macassan loans *dhvmbala* 'cloth, sail' (< *sombalaʔ* 'sail') and *dherriba* 'trepang' (< *taripaŋ*), and the English loans *dhvrajija* 'trousers' and *dhangki* 'donkey'. These are classified as FEM, due to their initial /dh/. The Macassan loans *mambulawa* 'waterpot' (< ?) and *minyajirra* 'tar' (< *miŋŋaʔ* 'tar'), and English *mirrijina ~ midijina* 'medicine' and *milka* 'milk' are VEG because of their initial /m/. The classification of these loanwords is phonological rather than semantic. Given that the noun class marker in traditional words is synchronically unsegmentable, it is not surprising that loanwords may be classified according to their initial phoneme.

Finally, as noted by several researchers (e.g. Allan 1977: 297-8; Senft 2000: 44 and references therein; Aikhenvald 2000: 280), no language uses colour as a basis for noun categorisation. Allan (1977) points out that there are two disadvantages to colour as a category for classification. Firstly, colours vary with the ambient lighting and in dark become muted or even indeterminable, so that classification by colour would only be effective part-time. Secondly, colour would not make an effective category of classification on its own, as a shapeless blotch of colour does not directly portray an entity, as opposed to shape or size, which are common categories of classification. 'Lustre' is comparable to colour, as it is variable depending on lighting and indeterminable in the dark. Although the fact that Enindhilyakwa would be the only language in the world to employ such ineffective means of classification does not necessarily rule out this possibility, it does make it unlikely.

In spite of the abovementioned objections, I propose that there are reasons to assume some semantic basis to the noun classes, and to label them accordingly. First of all, there are trends (some of which are also recognised by Worsley and Waddy): the inanimate classes contain the

biggest groupings of plants, and the animate classes the biggest proportions of flying animals and land animals. Furthermore, the VEG class is concerned with objects connected to the sea (e.g. *makarda* 'VEG.sea'; *mabvlhalha* 'VEG.low tide'; *mijiyelya* 'VEG.beach'). This class also consistently contains objects related to transport, such as *malhamukwa* 'VEG.dugout canoe' and *ma-m-alhvka* [VEG-INALP-NEUT.foot] 'tire, wheel'. Loanwords relating to transport are also assigned to this class: *dvraka* 'truck(VEG)', *bajungkula* 'bicycle(VEG)', *errvbvlena* 'aeroplane(VEG)'. In Wubuy, Ngandi, Ngalakgan and Bininj Gun-Wok, vehicles such as cars and boats are also assigned to the VEG class (Brett Baker, p.c.).[18] As in most Arnhem Land languages with multiple noun classes, the NEUT class includes abstracts such as *ayakwa* 'NEUT.language', *amalhawudhawarra* 'NEUT.Dreaming', *enungwarrakbakiya* 'NEUT.Dreamtime', as well as the nouns for 'country' (*angalya*), 'fire' (*angura*) and 'water' (*akungwa*).

A second reason to assume a semantic basis of the noun classes is that classification of loanwords and introduced items is not as arbitrary as Leeding (1989: 269) suggests. As already mentioned, introduced vehicles are allocated to the VEG class. And as in most Arnhem Land languages, the NEUT class typically takes new artefacts (apart from vehicles and cloth), such as the Macassan loans *jurra* 'book, paper' (< *surat* 'book, paper'); *lyelyinga* 'knife' (< *ladiŋ* 'knife'); *bajikala* 'billycan' (< *bassi kaleŋ*); *jinaba* 'gun' (< *sinapaŋ* 'rifle'); *bangkilya* 'tomahawk' (< *paŋkuluʔ* 'axe'); *baja* 'nail' (< *pasoʔ* 'nail'), and many more. The English loans *mijila* 'measles' and *jebija* 'church, service' are also NEUT class, as are most introduced food items: e.g. *jukwa* 'sugar'; *bvrrvda* 'rice' (< Mac *bərasaʔ* 'rice'); *damba* 'damper'; *diya* 'tea'. Newly coined words are consistently placed in certain classes: new artefacts like *envng-alhvka* [NEUT.m.ALP-NEUT.foot] 'shoe'; *a-kv-rrvbvrrvngka* [NEUT-NSR-RDP.see] 'television'; and *a-kv-dhvdhaka* [NEUT-NSR-RDP.cook] 'stove' (GED) are all NEUT class. An exception is feminine *dha-k-ajijarra* [FEM-NSR-RDP.wash] 'washing machine', which is thus associated only with women. The consistent classification of loanwords supports a semantic basis (Allan 1977: 290).

Some loanwords have dual classification, such as *milka* 'non-human milk' and *mirrijina ~ midijina* 'medicine', which are either NEUT (*a-*) or VEG (*m-*) class. This ambivalence may be due to a conflict between classifying these items by their initial phoneme *m-* (i.e., VEG), or by the fact that they are introduced items, which are mostly classified as NEUT. The word *budbula ~ burrbula* 'ball' (< *football*) is both MASC and NEUT, which may be due to a conflict between its association with men, and it being a new artefact. The dual classification of *dhvmbala* 'cloth' as both FEM and

---

[18] Brett Baker (p.c.) suggests that the inclusion of vehicles in the VEG class in these languages may be because this class is associated with round things such as fruit and yams, and, by extension, vehicles. Alternatively, it could be because dugout canoes are assigned to the VEG class in these languages, and consequently other modes of transport too (cf. Enindhilyakwa *malhamukwa* 'VEG.dugout' - but see *alhamukwa* 'NEUT.bark canoe').

VEG class could be due to its initial phoneme and/or its association with women (i.e. FEM *dh-*), and its association with the VEG (*m-*) class noun *merra* 'string' (see Leeding 1989: 272).

Most of the bigger land and marine animals, as well as some birds, are classified as FEM or MASC. These include *dhvlandha* 'FEM.Little Rock wallaby' and *dhvnungkulhangwa* 'FEM.dugong'; and *yaraja* 'MASC.goanna', *yakarra* 'MASC.Purple Cod', *yingwa* 'MASC.Torresian Crow'. Note that this classification does not depend on biological sex. Sex has to be expressed separately, such as *yi-dharrvngka yijarra* [MASC-female MASC.silver.gull] 'female Silver Gull' (Leeding 1989: 292). Introduced big animals are assigned to the animate classes too, such as *jarrangwa* 'horse(FEM)' (< Mac *jaraŋ* 'horse') and *kawala* 'koala(MASC)'. Table 3.4 presents the five noun human classes and their very general semantic groupings

	Gloss	Form	Semantic domain
'animate'	FEM	*dh-*	some higher animals of either sex, some lower animals, some plants, celestial entities, artefacts associated with women (e.g. washing machine, clothing)
	MASC	*y-*	some higher animals of either sex, some lower animals, some plants, some body parts and body products, honey, moon, artefacts associated with men (e.g. football)
	COLL	*wurr-*	some higher animals of either sex, some lower animals, some animals living in flocks or herds, some plants, spirits
'inanimate'	VEG	*m(a)-*	some lower animals, some plants, some body parts and body products, sun, weather, vehicles, things associated with the sea, cloth
	NEUT	*a- ~ e-*	some lower animals, some plants, some body parts and body products, languages and speech, new artefacts, introduced food

Table 3.4: Noun classes and semantic groupings

All classes include animals, plants, edible flesh food and edible non-flesh food. These are, however, not evenly distributed: the 'animate' classes contain a total of 72% of edible animal taxa, and the 'inanimate' classes a total of 79% of the edible plants taxa (based on Waddy 1988). It should thus be kept in mind that these labels are notional and do not imply any more predictability than that given in the table. The VEG class, for instance, contains only 41% of all edible plants (Waddy 1988: 168), such as *mvnhvnga* 'VEG.burrawang', and *mvrungkurra* 'VEG.round yam'. The word 'vegetable food' itself, *anhvnga*, is NEUT class, which also contains many other (introduced) edible non-flesh food items. Thus, whereas most languages of Arnhem Land and the North Kimberleys have one class referring exclusively (or almost exclusively) to edible non-flesh food,

the prefix of which is *ma-*, *mi-* or *m-* (Dixon 1980: 273), Enindhilyakwa does not seem to have any clear semantic 'vegetable' class, at least not synchronically. This is also true of the neighbouring Gunwinyguan languages: while for example Ngalakgan otherwise has a fairly clear underlying semantic basis for class allocation, the VEG and NEUT classes have to be lexically specified (Baker 2002). In Wubuy (Heath 1984) and Ngandi (Heath 1978a) noun class allocation is generally semantically opaque (although with some visible patterns) and the noun class has to be learned as part of the lexical entry.

The Wubuy, Ngandi and Ngalakgan noun class prefixes behave differently from those in Enindhilyakwa, in that they are absent under certain circumstances. Baker (2008b) proposes that in Wubuy and Ngalakgan, a zero-marked noun has a number of uses: it can mark focus and contrast, and it is also the form of nouns used predicatively and in citation. Baker argues that in these two languages noun class prefixes function as articles. This is very different from Enindhilyakwa, where the noun class markers have no such flexibility. This gives interesting correspondences for Enindhilyakwa and Wubuy nouns, some of which are listed below (the Wubuy data come from Heath 1982, 1984; the Enindhilyakwa lexicalised prefixes are indicated by a '+' sign here, for clarity):[19]

(26) Enindhilyakwa   Wubuy

    a+yarrka   'NEUT+hand'   *a-yarrka*   'NEUT-hand'
    yi+nvkarrka   'MASC+hawk sp.'   *yii-nikarrka* 'MASC-hawk sp.'
    dhv+makbvlha 'FEM+pelican'   *yii-maabulhu* 'FEM-pelican'
    ma+mvngba   'VEG+hair'   *ama-muung*   'VEG-hair'

These correspondences support the claim that the Enindhilyakwa class prefixes are frozen to the root, for the Wubuy cognates have flexible prefixes (many more examples can be found in Appendix P, which lists all Enindhilyakwa and Wubuy correspondences that this study has uncovered). However, this is far from the complete story, because sometimes the noun classes do not match in the two languages, such as: Enindhilyakwa *yi+lharda* 'MASC+mudwhelk' vs. Wubuy *waa-lhaardu* 'COLL-mudwhelk', and Enindhilyakwa *dhv+lhvngena* 'FEM+salt' vs. Wubuy *yii-lhanganik* 'MASC-salt'. And in other cases the Wubuy nouns appear to have an additional class marker. Some examples are: Enindhilyakwa *mulkwa* 'VEG.stomach' vs. Wubuy '*ama-murlku* 'VEG-stomach'; and Enindhilyakwa *yambiya* 'MASC.throat' vs. Wubuy *yii-yambiya* 'MASC-throat'. It is far beyond the scope of this thesis to go into these mismatching noun classes. One explanation for the latter correspondences is that Enindhilyakwa noun classification is partly phonological,

---

[19] The situation in Wubuy actually is more complex than portrayed here, because non-human nouns can take two different noun class prefixes: 'continuous' and 'punctual', which are used in different contexts (Heath 1984: Chapter 4). The Wubuy prefixes listed here are only the 'punctual' ones, as these most resemble the Enindhilyakwa prefixes. The punctual MASC and FEM prefixes are both *yii-*. See Appendix P.

based on the initial segment of the noun root. This is supported by the classification of some Macassan loans into both languages. The Macassan word *timoro?* 'east wind', for example, maps onto *dhvmbvrra* in Enindhilyakwa, and *dhimburra* in Wubuy. In Enindhilyakwa it is FEM, presumably on the basis of its phonology, while in Wubuy it is assigned to NEUT class.

Foley (1991) argues for a similar classification for Yimas (Papuan) nouns, which is partly on a conceptual basis and partly on a phonological basis. Any noun not assigned to a noun class on conceptual grounds will have its noun class assigned on the basis of its phonology (see also Aronoff 1993). If this were also the case for Enindhilyakwa, the phonological assignment of certain nouns could explain the great semantic diversity of nouns in each noun class. The matching and mismatching noun class prefixes in Enindhilyakwa and Wubuy thus open up an interesting avenue for further research into noun class assignment.

3.4.2 Trial number [(-5)]

The prefix *bvk-* follows the pronominal/gender/noun class prefix and creates trial number for humans and non-humans alike.[20]

(27) a. *ngarrv-bvkv-dhv-dhiyara*
     12a-tri-RDP-girl
     'we three girls'   (= [1c])
    b. *dhv-bvk-arvmv-rvma*
     fem-tri-RDP-big
     'three big [FEM.Rock-wallabies]'   (VL1 p.226)
    c. *yi-bvk-ingma*
     MASC-tri-putrid
     'three putrid [*yukurna* 'MASC.Baler Shell']'   (VL1 p.226)

Leeding suggests that the trial number morpheme used to be paucal (1989: 225). This is confirmed by the following data, where *bvk-* on the verb is used to refer to four people.

(28) *Wurr-abiyarbuwa wurrv-dharrvngka na-**bvkv**-lhvke-na mvrungwenu-wa mijiyelya-manja*
    3a-four   3a-woman   3a-tri-go-P2   VEG.jungle-ALL VEG.beach-LOC
    *na-**bvk**-abvrangka-ma mungunu-wa.*
    3a-tri-look.for.P2-*ma*   VEG.morinda.roots-ALL
    'Four women went to the jungle at the beach and they looked for roots from the morinda tree.'   (GED p.184)

In modern Enindhilyakwa, trial number is only used when the speaker is being very specific; otherwise the plural is used (Leeding 1989: 225).

---

[20] Stokes (1982: 36) notes that the trial prefix applies to humans only, but Leeding's data suggest otherwise. However, this could also be a dialectal difference between the Angurugu and Umbakumba communities.

3.4.3 Quantifier [(-4)]

Demonstratives have an additional dual/trial number prefix *alh(ak)-*, which can refer to humans, non-human animates and inanimates (Leeding 1989). This morpheme occurs in a separate slot because it follows trial number in slot [(-5)]. When used without the latter, *alh(ak)-* denotes dual number (29a,b), but with the trial prefix it 'agrees' with the preceding number prefix (29c).

(29) a. *dh-alhak-bvkaya*
     FEM-du-this.coming
     'these two(FEM) approaching'   (VL1 p.353)
  b. *kvrrvng-alh-angakba*
     2fdu-du-that.over.there
     'you two females over there'   (VL1 p.354)
  c. *yirrv-bvk-alhak-ibina*
     13a-tri-du-that.unseen
     'us three invisible'   (VL1 p.354)

The morphemes *wurra-* and *mvrnda-* 'many' are one of the means of expressing plurality for non-humans, but they can also be used for humans. This quantifying prefix is also assumed to occupy this slot, because it follows the trial number *bvk-* in verbs (Leeding 1989: 226). The prefix can occur with any nominal, but it is most common on demonstratives.

(30) a. *mu-wurra-jirra*
     VEG-many-long
     'many lined-up [yams(VEG)]'   (VL1 p.227)
  b. *akwa ni-beka-ju-wa*   *akungwa*   *a-mvrndak-akina jiba.*
     and 3m/NEUT-drink-CAUS-P2 NEUT.water NEUT-many-that sheep(NEUT)
     'and he gave the many sheep water to drink'   (Angurugu Linguistics)

Reduplication of the prefix indicates a very large number:

(31) *a-wurru-wurrakv-dhvrrbvra*
     NEUT-RDP-many-straight
     'many straight [NEUT.sticks]'   (VL1 p.227)

The quantifier prefix *mvrnda-* has a cognate in Bininj Gun-Wok: *mirnde-* (Evans 2003a).

3.4.4 Inner gender [(-3)]

The two gender prefixes that occur in this slot are feminine *adh-* and masculine *en-*. I refer to them as the 'inner' gender prefixes because they follow the outermost gender prefixes in Table 3.3. The inner prefixes are morphologically very similar to the 'outer' human feminine and masculine prefixes *dh-* and *n-*, respectively. The inner gender prefixes co-occur with the three derivational prefixes: inalienable possession (INALP) *m-*, alienable possession (ALP) *ng(w)-* and nominaliser (NSR) *k-*, but then only when the derived nominal refers to a human, or to a non-human belonging to one of the three 'animate' classes. In other words, the value of the inner gender prefix is

determined by the outer prefix. The inner gender agrees with the biological sex of the referent, as in (32). With respect to the animate noun classes, the MASC and COLL classes take masculine gender *en-*, while the FEM class takes feminine gender *adh-*, as can be seen in (33).[21,22] By contrast, the two 'inanimate' classes do not take a gender prefix, as illustrated in (34).

(32) a. *yirrvng-adhv-m-alhvka-kiya*
     1fdu-f-INALP-foot-du
     'feet of us two females'   (VL1 p.170)
   b. *n-env-ki-yengbi-yengba*
     3m-m-NSR-RDP-speak
     'loquacious man'   (VL1 p.179)

(33) a. *yi-nv-m+adhangkwa*
     MASC-m-INALP+flesh
     'flesh of MASC class animal' (e.g. *yimendha* 'MASC.turtle')
   b. *warnv-m+adhangkwa*
     COLL.m-INALP-flesh
     'flesh of COLL class animal' (e.g. *wurrendhindha* 'COLL.rat')
   c. *dh-adhv-m+adhangkwa*
     FEM-f-INALP-flesh
     'flesh of FEM class animal' (e.g. *dhvngarrbiya* 'FEM.crocodile')

(34) a. *a-m+adhangkwa*
     NEUT-INALP+flesh
     'flesh of NEUT class animal' (e.g. *akwalya* 'NEUT.fish')
   b. *ma-m+adhangkwa*
     VEG-INALP+flesh
     'flesh of VEG class animal' (e.g. *mangma* 'VEG.crab')

The masculine inner gender prefix is used to refer to groups of people consisting of both men and women (35a), or to a man and a woman (35b).

(35) a. *warnu-m+amalya*
     3a.m-INALP+body.fat
     'Aboriginal race, people, relations, friends'   (JW1 p.41; VL1 p.169)
   b. *wun-env-ki-yakaja*
     3mdu-m-NSR-stay.together
     'married couple'   (VL1 p.179)

---

[21] Leeding (1989) labels the gender prefixes *adh-* 'human.feminine' and *en-* 'non-human.feminine'. Stokes/Waddy do not recognise the existence of separate gender morphemes that accompany the derivational prefixes, but assume the latter prefixes to be non-segmentable (i.e. INALP *adhvm-*, ALP *adhvng-*, and so on).

[22] Thus, strictly speaking, these are not 'gender' prefixes as defined above, because they also classify non-humans as masculine or feminine though not according to biological sex. However, they do approximate the gender system as defined here, because their main usage is with humans according to biological sex, so it is likely that they originated from a gender system (see Sands 1995: 276-7).

The INALP and NSR prefixes take an inner gender prefix when the derived nominal belongs to one of the animate classes, as in (35a) and (35b), respectively. The ALP prefix *ng(w)-* is different, because this always takes an inner gender prefix, regardless of the referent of the derived noun:

(36) a. *envng-akungu-ma*
         NEUT.m.ALP-water-PRIV
         'waterless [place]'   (VL1 p.193)
      b. *m-envng-angwinyamba malhamukwa*
         VEG-m.ALP-anger   VEG.canoe
         'war canoe'   (VL2 p.221)

I propose that the sequence [gender+ALP] is lexicalised and synchronically inseparable. For nominals derived with the NSR prefix, speakers seem to have some freedom to play around with the inner gender prefixes and the concept of animacy. Some nominals belonging to the animate classes do not take an inner gender prefix, or it may be optional, as in (37).

(37) a. *dha-ki-lyingajanga*
         FEM-NSR-pop.out
         'star'   (VL1 p.173)
      b. *dh-(adhv-)ku-warrku-warrka*
         FEM-f-NSR-RDP-weave
         'spider'   (VL1 p.172)
      c. *n-(env-)kv-ribv-ribvka*
         3m-m-NSR-RDP-eat.raw.fish
         'Macassan male'   (VL1 p.173)

The 'star' in (37a), although belonging to an animate noun class, may not be considered animate enough to deserve a gender prefix. 'Spider' in (37b) may be considered animate by some speakers, but not by others. And interestingly, a Macassan male (37c) is apparently not considered by all speakers to be animate/human.

To summarise, nominals derived with the INALP or NSR prefix take an inner gender prefix when referring to a human, or when belonging to one of the animate noun classes.[23] The value of the inner gender prefix is determined by the noun class of the derived noun: FEM nominals take feminine inner gender, and MASC and COLL class nominals take masculine inner gender. Derived nouns belonging to the inanimate noun classes do not take an inner gender prefix. The ALP

---

[23] Leeding (1989) proposes that *all* derivational prefixes are always preceded by a gender prefix. She claims that the absence of a gender morpheme is due to haplology, but the scope of what elides is much extended (p.172). One of the reasons she proposes a deletion of the gender morpheme rather than an absence is that the full form varies with the shortened form in a few words, as in (37b,c). Furthermore, she labels the *adh-* prefix 'human feminine' and *en-* 'non-human feminine', and claims that they distinguish human females from animates and inanimates that are classified as feminine but are not human (p.169). However, this is inaccurate, because the *adh-* gender prefix also occurs with FEM nominals referring to non-humans and inanimates, such as *dh-adhv-m+adhangkwa* 'flesh from FEM class animal' in (33c) and *dh-adhv-ku-warrku-warrka* 'spider' in (37b) above. Thus, the term 'human feminine' is oddly chosen.

derivational prefix is different because the combinations with the two gender prefixes are frozen and synchronically unsegmentable.

3.4.5 Derivational prefixes [(-2)]

This section discusses two derivational prefixes in Enindhilyakwa that encode different types of possession: inalienable possession (INALP) *m-* (section 3.4.5.1) and alienable possession (ALP) *ng(w)-* (section 3.4.5.3). They convert a root into a derived nominal of a specific target noun class, which agrees with that of an external nominal. The INALP prefix attaches to a body part noun or other 'part' noun to express parts of inanimate objects, plants, some animals, and also parts of human body parts - but not of humans. Body part nouns marked for INALP have often shifted their meaning to refer to something linked to or resembling the body part (e.g. foot > tracks, mouth > hole, or nose > hook). Body parts of humans are expressed by two independent words: a nominal with POSS case denoting the possessor, and a body part noun denoting the possessum (section 3.4.5.2). The third possession construction, alienable possession, entails a sense of 'belonging to' or 'associated with'.

All three constructions may involve body parts, as illustrated in (38) with *alhvka* 'NEUT.foot'.

(38) a. *env-lhangwa   alhvka*
          3m.PRO-POSS   NEUT.foot
          'his foot/feet'
       b. *n-env-m-alhvka*
          3m-m-INALP-NEUT.foot
          'his tracks'   (JW1 p.40)
       c. *envng-alhvka*
          NEUT.m.ALP-NEUT.foot
          'shoe'   (JW1 p.42)

These possession constructions are all very productive, as we will see in the following sections.

3.4.5.1 Inalienable possession *m-*

Inalienable possession can be defined as "an indissoluble connection between two entities - a permanent and inherent association between the possessor and the possessed" (Chappell & McGregor 1996: 4). In Enindhilyakwa, nominals derived with the INALP prefix refer to parts of inanimate objects, plants, (to a lesser extent) animals, and to components of body parts (Leeding 1996). The 'part' is marked for INALP and agrees in noun class with the 'whole'. The INALP prefix is preceded by an inner gender prefix for humans and the animate classes (39), but not the inanimate classes (40). The INALP prefix derives a nominal from a simple noun that maintains its inherent noun class prefix, as this is frozen to the stem. This may result in double class marking

(or, if one includes the inner gender prefixes, triple marking), which is a rare phenomenon in the world's languages (Aikhenvald 2000: 66).[24]

(39) a. *yi-nv-m-emindha*   *yikarba*
     MASC-m-INALP-NEUT.nose   MASC.woomera
     'woomera hook'   (VL2 p.212)
   b. *dh-adhv-m-arvngka*   *dvrija*
     FEM-f-INALP-NEUT.head   dress(FEM)
     'dress bodice'   (VL2 p.212)
   c. *yi-nv-m+akulya*   *kalkwa*
     MASC-m-INALP+skin   coconut(MASC)
     'coconut husk'   (VL2 p.211)

(40) a. *ma-m-ayama*   *menba*
     VEG-INALP-NEUT.body.hair   VEG.eye
     'eyebrow'   (VL2 p.215)
   b. *ma-m+akulya*   *menba*
     VEG-INALP+skin   VEG.eye
     'eyelid'   (VL2 p.215)
   c. *a-mu-kudhukudha* *alhvka*
     NEUT-INALP-chest   NEUT.foot
     'ball of the foot'   (VL2 p.215)
   d. *ma-ma-mulkwa*   *(ma-m-alhvka)*
     VEG-INALP-VEG.stomach   VEG-INALP-NEUT.foot
     'tube of tire'   (WD)

The combination *-m+akulya* 'skin' in (39c) and (40b) is lexicalised, as the noun root cannot occur without the INALP prefix (i.e. there is no independent word *akulya*). The derived nominal is very flexible and can take any pronominal/gender/noun class prefix to agree with the 'whole'. This is also the case for *-m+adhangkwa* [INALP+flesh] in (33) and (34) above (i.e. **adhangkwa*). Both roots have cognates in Gunwinyguan languages, which have been reconstructed for proto-Gunwinyguan as independent nouns: **kurlak* 'skin' and **dhangku* 'meat' (Harvey 2003a). Hence these roots have considerable time depth, which could be a reason for their merging with the INALP prefix in Enindhilyakwa.

The noun *yukudhukudha* 'MASC.chest' in (40c) appears to have lost its noun class prefix when marked for INALP. This also seems to have happened with the body part *yuwalkurra* 'MASC.knee cap' in *ma-mu-walkurra mamarra* 'bark of *mamarra* tree' in Table 3.5 below. Both examples come from Leeding (1996), who does not distinguish between [u] and [i] in her orthography, representing both as *i*. Her transcriptions of these two examples are: *a-mwi-kwithikwitha a-lhika*

(p.215) and *mwa-mwi-walhkwirra mwa-mwarra* (p.212).[25] It is possible that the MASC prefix *y- is* present here, and that it is to be found in the *i* vowel that precedes the noun roots. In other words, these examples could be conceived as *a-mw-**i**kwithikwitha* and *mwa-mw-**i**walhkwirra*, with the bolded *i* vowel representing the MASC prefix. The only instances of a noun losing its class marker when marked with an INALP prefix, involve MASC nouns ([53b] below is another example). Further research will have to determine the specifics of this; for now I do not consider these cases as counterevidence to the claim that nouns marked for INALP maintain their class prefix.

The nominal root in the INALP construction is frequently a body part noun. However, this noun has undergone a change in meaning: it no longer refers to a body part, but to an item that resembles the body part, such as 'nose' and 'hook' in (39a) above, and the following.

(41) a. *nvng-env-m-alhvka*
       1-m-INALP-NEUT.foot
       'my footprints, my tracks'   (JW1 p.40-1, VL2 p.226)
      b. *ma-m-alhvka*
       VEG-INALP-NEUT.foot
       'tire, wheel, wheel track, tracks of VEG class animal'   (WD)

(42) a. *e-m-edhvrra*   *akungwa*
       NEUT-INALP-NEUT.mouth   NEUT.fresh.water
       'water hole'   (VL2 p.212)
      b. *e-m-edhvrra*   *emindha*
       NEUT-INALP-NEUT.mouth   NEUT.nose
       'nose hole'   (GED p.201)

(43) a. *ma-m-alhakba*
       VEG-INALP-NEUT.leg
       'tail of shark' (*mangiyuwanga* 'VEG.shark')   (GED)
      b. *ma-m-alhakba-manja*   *dingki*
       VEG-INALP-NEUT.leg-LOC   dinghy(VEG)
       'in the back of the dinghy'   (GED p.216)
      c. *dh-adhv-m-alhakba*
       FEM-f-INALP-NEUT.leg
       'skirt of dress(FEM)'   (WD)

The derived nominals in these examples denote items that are inherently linked to the body part noun marked for INALP, either as an indissoluble connection (such as 'foot' and 'track' in [41a]), or by resemblance, which can be literal ('mouth' and 'hole' in [42]), or metaphorical ('leg' and 'back or bottom of something' in [43]). Table 3.5 lists the extended meanings of the body parts found in the INALP construction, based on Leeding (1996: 205), using my orthography and glosses.

---

[25] According to Leeding (1989, 1996) the INALP prefix is *mwi-*. She separates noun class prefixes from the stem with a hyphen.

Body part noun	Extended meaning in INALP construction	Example (from Leeding 1996 unless indicated otherwise)
arvngka 'NEUT.head'	top of something	*dh-adhv-m-arvngka dvrija* 'dress bodice'
eminda 'NEUT.nose'	hook, bowl	*yi-nv-m-eminda yikarba* 'woomera hook'
edhvrra 'NEUT.mouth'	hole, well, birthplace	*e-m-edhvrra akungwa* 'water hole'
akarrnga 'NEUT.teeth'	spikes	*ma-m-akarrnga mangkurrkwa* 'pandanus spikes'
ayarrka 'NEUT.hand, lower arm'	handle, fin, gift	*ma-m-ayarrka mukayuwa* 'handle of dilly bag' ('Merra' n30)
mulkwa 'VEG.stomach'	inside of something	*ma-ma-mulkwa* 'tire tube'
alhakba 'NEUT.leg'	tail of fish, back end or bottom of something	*ma-m-alhakba* 'tail of shark'
alhvka 'NEUT.foot'	track, tire	*nvng-env-m-alhvka* 'my tracks'
angurnda 'NEUT.ankle'	knot, scar, lump	*ma-m-angurnda merra* 'knot in rope'
ayama 'NEUT.body hair'	body hair	*ma-m-ayama menba* 'eyebrow'
yuwalkurra 'MASC.knee cap'	bark	*ma-mu-walkurra mamarra* 'bark of mamarra ('small-leaved paperbark')'
engengbilya 'NEUT.armpit'	concave shape	*a-m-ingengbilya alhvka* 'arch of foot'
yukudhukudha 'MASC.chest'	convex shape	*a-mu-kudhukudha alhvka* 'ball of foot'
alyelyikba 'NEUT.lips'	thin lining	*ma-m-alyelyikba* 'eyelid' (GED)
engengkuwa 'NEUT.life, pulse, breathing'	sensatory side of limbs or body	*a-m-ingengkuwa ayarrka* 'palm of hand' *a-m-ingengkuwa alhvka* 'sole of foot' (WD)
adhvdhvra 'bone'	shell, nut, hard part	*a-m-adhvdhvra anhvnga* 'edible nuts'
+kurra 'face'	point of something	*ma-mu+kurra mamvlherrbirra* 'point of hooked spear' (JS2 p.128)
+akulya 'skin'	bark, cover	*ma-m+akulya mulkwa* 'inside lining of stomach'
+amalya 'body fat'	soft part, 'real, true' things, people	*a-m+amalya alhvka* 'sole of foot' *a-m+amalya ayakwa* 'true words' *warnu-m+amalya* 'people, Aborigines'
+jingula 'feathers'	wool	*dh-adhv-mv+jingula jiwada* 'wool plucked from sweater'
+ebinga 'torso'	bundle, pile	*me-m+ebinga merra* 'bundles of rope' (Ansec1)
+adhangkwa 'flesh'	meat	*a-m+adhangkwa* 'meat of NEUT class animal'

Table 3.5: Extended meanings of body part nouns marked for inalienable possession

The last six examples in this table are 'defective' noun roots, which always require an INALP prefix. In addition to those in the table, Leeding (1996: 201) lists the following: *+ikirra* 'name',

+*awurrvna* 'spirit', and +*awarruwalya* 'shadow'.[26] These apparently have not undergone a meaning shift. Defective body part noun roots marked for INALP can belong to a human:

(44) a. *ebina   amalyirra narri-ngamba-ju-wa-ma   abvrra-lhangwa arvngka*
     NEUT.that.same NEUT.juice 3a/NEUT-bathe-CAUS-P2-*ma* 3a.PRO-POSS   NEUT.head
     akwa   warnu-m+adhangkwa
     and   3a.m-INALP+flesh
     'they poured the [hot] liquid over their head and their body'   (GED p.9)
   b. *akv-ngekburaka-jungu-na-ma   ngarnv-m+awarruwalya*
     IRR.12a-make-REFL-NP2-*ma*   12a.m-INALP+shadow
     ak-angbilyuwa-dhv-na=maka
     IRR.12a-NEUT.sickness-INCH-NP2=EVIT
     'we should be careful of our shadows lest we might get sick'   (GED p.142)
   c. *n-env-m+ikirra*
     3m-m-INALP+name
     'his name'   (VL2 p.208, ex.5)
   d. *dh-adhv-m+ebinga*
     FEM-f-INALP+body
     'her body, body of FEM class animal (e.g. *dhvngarrbiya* 'FEM.crocodile')'   (JS2 p.134)

The defective roots are the only body part nouns that have retained a body part meaning in the INALP construction, and that can refer to a body part belonging to a human. All other body part nouns have shifted their meaning in the INALP construction, and now refer to something resembling the body part.

Body part nouns in Wubuy, as described by Heath (1984; see also Horrack 2010), behave similarly: they take a derivational prefix that enables them to match the noun class of an independent noun. As in Enindhilyakwa, the derived noun refers to parts of inanimate objects, plants and (to a lesser extent) animals, but not of humans. But in Wubuy also, there is a set of body part noun roots that *can* refer to parts of humans when marked with a derivational prefix. This is a similar set as the one in Enindhilyakwa, including the nouns *wubulu ~ kubulu* 'body, torso', *ngakara* 'bone(s)', *muwaj* 'name' and *mawurr* 'spirit', among others (1984: 173-4). Apart from 'spirit' (Enindhilyakwa: +*awurrvna*), the forms are not cognate in the two languages though.

The body parts *awarruwalya* 'NEUT.shadow' and *adhvdhvra* 'NEUT.bone' occupy an intermediate position in Enindhilyakwa: Leeding (1996: 201) lists them as defective noun roots that require an INALP prefix and can refer to a human body part, as illustrated in (45a,b) for *adhvdhvra*. However, they can also occur as independent body part nouns that belong to a human,

---

[26] Some of these roots are not really defective, because they can occur as independent nouns. When an Enindhilyakwa speaker is asked for the words for 'name' or 'bone', he or she will say *ekirra* and *adhvdhvra*, respectively. Furthermore, *ebinga* is also an independent noun meaning 'ant hill'. Nevertheless, these words require an INALP prefix when the whole is a human being or animal.

as in (45c).[27] When marked for INALP, *adhvdhvra* has undergone a change in meaning and denotes the hard part of an inanimate item, as in (45d).

(45) a. *adhvnvbawiya   narra-ma-ngv-ma   warnv-m+adhvdhvra*
     first   3a/COLL-take-P2-*ma*   COLL.m-INALP+bone
     'first they took the baby's bones'   (GED p.203)
   b. *ngarnv-m+adhvdhvra*
     12a.m-INALP+NEUT.bone
     'our skeletons'   (GED p.160)
   c. *adhvdhvra   abvrra-lhangwa   narr-ararvka-ma*
     NEUT.bone 3a.PRO-POSS   3a/NEUT-tie.P2-ma
     'people tied their [broken] bones'   (GED p.14)
   d. *yukudhukudha   yi-nv-m-adhvdhvra*
     MASC.chest   MASC-m-INALP-NEUT.bone
     'chest bone'   (GED p.160)

I will assume that the last example, where the body part marked for INALP denotes a part of an inanimate item, is a productive instance of the INALP construction. By contrast, the examples in (45a,b), where the body part noun marked for INALP belongs to a human, are lexicalised instances of this construction; the regular way to express a human body part is with POSS case, as in (45c).

Some (older) speakers accept body parts other than the defective roots in the INALP construction while maintaining their body part meaning, as in (32a) above, and the following:

(46) a. *nvng-env-m-arvngka*
     1-m-INALP-NEUT.head
     'my head'   (anin1_em_au_001)
   b. *nvng-env-m-alhakba*
     1-m-INALP-NEUT.leg
     'my leg'   (VL2 p.225)

However, speakers say that this is "how the old people used to say it", and that it is no longer used today (see also Leeding 1996: 225).[28] Body parts marked for INALP possession now have a different function, which is to describe parts of inanimate items, where the body part resembles this part, or is inherently related to it (cf. *nvng-env-m-alhvka* 'my tracks' in [41a]).

Apart from the defective roots that have a variable noun class prefix to match that of the possessor, there seem to be some defective roots with an INALP prefix and a fixed noun class. The noun roots are sometimes recognisable, and sometimes not. The following examples come from GED.

---

[27] An example of 'shadow' is *awarruwalya ngalha-lhangwa* 'her shadow' (Akarrikarra 1990, vol.10). See also Leeding 1989: 187).

[28] Leeding (1996: 225) suggests that the external but not the internal body parts may have been traditionally marked for INALP. However, there are defective roots that denote internal body parts, such as +*adhvdhvra* 'bone' and +*amalya* 'body fat', which contradict this claim.

(47) a. *a+mv+lhvrrngwa*
      NEUT+INALP+heel
      'NEUT.heel'
   b. *a+mv+ngina*
      NEUT+INALP-joint
      'NEUT.wrist, knuckle'
   c. *ma+mv+radhvna*
      VEG+INALP+?
      'VEG.base of skull at top of neck' (cf. *-radhv-na* 'hit head in mourning-NP2')

These examples are lexicalised because the noun roots are not attested as free forms, the prefixes cannot be separated from the stem, and their noun class is not based on the noun class of an associated referent. These nouns are interesting because the roots *lhvrrngwa* and *ngina*, although not attested as free forms synchronically, occur as *incorporated* nominals (on which I base their gloss in [47]). Incorporated nominals are very often suppletive, and in Chapter 7 I argue that they may represent archaic free nominals. This hypothesis is supported by the examples in (47), where these archaic nominals take an INALP prefix - just like nominals do today.

The INALP construction is very productive. It is used to coin terms for introduced items:

(48) a. *a-mv-dhvngvra*
      NEUT-INALP-FEM.white.clay
      'flour'   (WD)
   b. *a-mi-jurra*   *angwarnda*[29]
      NEUT-INALP-paper   NEUT.stone
      'paper money'   (WD)
   c. *a-ma-bulkwa*   *engeemina*
      NEUT-INALP-cattle   NEUT.breast.milk
      'cows milk'   (GED p.67)
   d. *a-mi-lyelyinga*
      NEUT-INALP-knife
      'metal'   (GED p.47)
   e. *a-m-amamuwa*   *jinaba*
      NEUT-INALP-round   gun(NEUT)
      'bullet'   (JS2 p.132)
   f. *ngayuwa nvng-andhiya-ma*   *nganyangwa* *dhv-mamawura*
      1.PRO   1-look.for.NP2-*ma* 1.PRO.POSS   FEM-VEG.sun
      'I am looking for my watch'   (anin4_dl_au_003)

As we saw in section 3.4.1.1, the nouns *jurra* 'paper, book, plastic(NEUT)', *lyelyinga* 'knife(NEUT)' and *jinaba* 'gun(NEUT)' are Macassan loans, which do not take an overt noun class marker. The inherited nouns in the other examples retain their class marker. The lack of the INALP prefix in (48f) could be due to haplology (see Leeding 1989): i.e. *dhv-ma-mamawura* [FEM-INALP-VEG.sun]

---

[29] The noun *angwarnda* traditionally meant 'stone', but this meaning was extended to refer to coins as well. In this example, the meaning of 'coin' is further extended to refer to money in general.

> *dhv-mamawura*. It is taken as an instance of the INALP construction here because of its semantics: the derived noun 'watch' is inherently related to the embedded noun 'sun'.

The newly coined examples in (48) are also interesting in another respect: they differ from the INALP examples listed earlier. First of all, they do not involve a body part noun. Secondly, whereas in the earlier examples the body part marked for INALP represented the part/subset, and the external noun the whole/superset (e.g. [INALP-foot truck] 'truck wheel'), this is the reverse for the non-body parts in (48). Here, the external nominal represents the subset, while the noun marked for INALP denotes the superset (e.g. [INALP-cattle milk] 'cow's milk'). These different patterns suggest a fundamental divide between body part nouns and non-body part nouns in Enindhilyakwa: the former are conceived as inherent parts of something, which is not the case for the latter.

3.4.5.2 Possession of body parts

Possession of a body part for humans and some animals is expressed by an independent nominal with POSS case denoting the possessor, plus an independent noun denoting the possessed body part. The body part noun has its own lexically specified noun class and there is no noun class harmony between the whole/possessor and the part/possessum. The body part noun is the head of the noun phrase and is encoded on the verb as one of its arguments:

(49) a. *nganyangwa arvngka   nuw-arrkujeeyi-na-ma*
    1.PRO.POSS   NEUT.head NEUT-be.painful-NP2-*ma*
    'my head hurts'   (anin1_em_au_001)
  b. *Ak-akuma-manja   ngakurra-lhangwa ayarrka   env-lhangwa-manja*
    IRR.12a/NEUT-put.NP1-LOC 12a.PRO-POSS   NEUT.hand NEUT.this-POSS-LOC
    edhvrra,   kembirra aken-angi-ya-ma   kvnv-ngkarrngv-na-ma   ayarrka.[30]
    NEUT.mouth then   IRR.MASC/12a-bite-NP1-*ma* IRR.MASC/NEUT-cut-NP2-*ma* NEUT.hand
    'If we put our hands in their [*yulkwa* 'MASC.toadfish'] mouths they will bite our fingers off.'   (GED p.115)

An alternative way to express the part-whole relation for humans is to treat the whole/possessor as the main argument of the verb, and to put the part/possessum in direct (unmarked) case, as in (50).

(50) *nvng-arrkujeeyi-na   arvngka*
    1-be.painful-NP2   NEUT.head
    'my head hurts'   (Ansec1)

This construction is called 'possessor raising' or 'external possession' in the literature (see e.g. Payne & Barshi 1999), which poses a well-known syntactic problem because it appears to add an argument to the argument frame of the verb: in (50), both 'I' and 'head' are represented as

---

[30] Note that there is no agreement between the demonstrative *ena* 'this(NEUT)' and the noun *yulkwa* 'MASC.toad fish' in this example. This is unusual, as demonstratives normally agree with the head noun. The only explanation I can offer for this is sloppiness or a typographical error.

arguments of an otherwise intransitive verb ('I' by the pronominal prefix on the verb, and 'head' by being in direct case). This phenomenon will be addressed further in section 7.10.1, where I argue that the part and the whole form a constituent. This way, the argument structure of the verb remains intact. The current section focuses on possession of body parts expressed by POSS case.

There are instances in the data where parts of non-humans such as trees, which are normally expressed by the INALP construction, are represented by the pronominal modifier construction. These examples co-exist with the INALP construction with more or less the same meaning, as in (51).

(51) a. *ak-akumv-rna-ma*   *awalyuwa*   *akwalya* *ngalha-lhangwa-manja* *amarda*
         IRR.13a/NEUT-put-NP2-*ma* NEUT.cooked NEUT.fish VEG.PRO-POSS-LOC   NEUT.leaves
         'we put the cooked fish on its leaves [of *mawurrmalha* 'VEG.rosewood']'   (GED p.17)
      b. *narrv-ma-ma-ngv-ma* *ma-m-amarda*   *akwa* *narrv-m-akuma-rnv-ma* *karrawara*
         3a-VEG-take-P2-*ma*   VEG-INALP-leaves and   3a-VEG-put-P2-*ma*   above
         akwalya-manja
         NEUT.flesh.food-LOC
         'they took its leaves [of *mabalba* 'VEG.peanut tree'] and put them on top of the flesh food'
                                                                                           (GED p.15)

The co-occurrence of these two constructions with no obvious difference in meaning could indicate two things. Either the INALP construction for parts of plants is in the process of being replaced by the pronominal modifier construction, in line with the expression of human body parts. Alternatively, the two constructions could have a slightly different meaning. The noun marked for INALP in (51b) could have a stronger sense of inalienability than the free form in (51a). For example, the leaves may be freshly picked from the tree in (b), whereas they might have been picked a long time ago in (a), in preparation to be used later as a plate to put fish on.

Leeding (1996) claims that POSS case represents alienable possession. She suggests that POSS case has replaced the INALP construction for human body parts due to the influence of English (p.226). I do not believe this is a plausible analysis: first of all, it is standard in Australian languages for the possession of human parts and the possession of non-human parts to be treated differently (e.g. Blake 1987; Chappell & McGregor 1996). Secondly, since POSS case features so prominently on human body parts, it is unlikely that it denotes alienable possession. Thirdly, pronouns with POSS case may co-occur with nominals marked for INALP, as in (52).

(52) a. *kvrrv-nga-rrvngkv-na-ma* *ngalhv-lhangwa* *dh-adh-ingaba* *dh-adhv-m+adhangkwa*
         2a-3f-see-NP2-*ma*   3f.PRO-POSS   3f-f-good   3f-f-INALP+body
         'you can see her nice body'   (VL2 p.244)
      b. *nenv-ma-ngv-ma*   *y-akaka-lhangwa*   *yi-nv-m-akarrnga*
         3a/MASC-take-P2-*ma* MASC-this.here-POSS MASC-m-INALP-NEUT.tooth
         'they took their [*yukurrvrrvndhangwa* 'MASC.sawfish'] teeth'   (GED p.123)

119

The pronouns with POSS case denoting the possessor are redundant as the possessor is already encoded in the prefix on the derived nominal. Their co-occurrence with an inalienably possessed nominal suggests that POSS case does not entail alienable possession. These examples also show that there is some overlap between the two constructions, and that the boundary between them is a fuzzy one.

3.4.5.3 Alienable possession *ng(w)-* [31]

Alienability can be defined as "a variety of rather freely made associations between two referents, that is, relationships of a less permanent and inherent type" (Chappell & McGregor 1996: 4). The Enindhilyakwa alienable possession (ALP) derivational prefix *ng- ~ ngw-*[32] denotes a sense of 'associated with' or 'belonging to'. This prefix derives a nominal from a noun (53), which is often a non-body part, adverb (54), or adjective (55), although the latter is rare.[33] The ALP prefix is always preceded by a gender morpheme, whether the nominal belongs to an animate or inanimate noun class. The sequence gender+ALP was proposed in section 3.4.4 above to be lexicalised. The noun root marked for ALP retains its class marker.[34]

(53) a. *envng-erriberriba*   *anhvnga*
         NEUT.m.ALP-NEUT.bush   NEUT.veg.food
         'bush tucker'   (Angurugu Linguistics)
      b. *m-envngv-mendha*
         VEG-m.ALP-turtle
         'rope for turtle harpoon' (*merra* 'VEG.rope')   (WD)
      c. *envng-alhvka*
         NEUT.m.ALP-NEUT.foot
         'shoe, sandal, boot'   (=[38c])
      d. *Nara karrv-use-mvndha-nga   ebina   amangakina   enungu-mijiyelya-manja.*
         NEG   IRR.3a/NEUT-"-VERB-P2 NEUT.that whats.it   NEUT.m.ALP-VEG.beach-LOC
         'They never use those plants that grow at the beach.'   ('Spider')

(54) a. *dh-adhvng-arrawa dhvmbala*
         FEM-f.ALP-below   clothing(FEM)
         'underclothes'   (VL2 p.221)

---

[31] Leeding (1989) and Waddy (n.d-a) also call this prefix 'alienable possession', but in later work Leeding labels it 'associative possession' (the term 'alienable possession' being reserved for the POSS case suffix) (Leeding 1996). Stokes (1982) does not propose a name for this morpheme but glosses it as 'belonging to'.

[32] Leeding (1989, 1996) claims that the ALP/ASSP prefix is (her spelling) *ngwi-*. The nominaliser is *ngkwi- ~ kwi-* and an additional adjectiviser prefix is *ngki- ~ ki-*. See fn38 below for arguments against this analysis.

[33] Although they do not state this explicitly, both Waddy (1987) and Leeding (1996) seem to suggest that the prefix only occurs with nouns and adverbs, hence not with adjectives. I find this unlikely, since the distinction between them only lies in the flexibility of the noun class marker. However, adjectives are rare in the ALP construction, which may be for semantic reasons, as it is hard to conceive of a context of 'something being associated with or belonging to X', where X is an adjective.

[34] Again, an exception is a MASC noun, *yimendha* 'MASC.turtle' in (53b), which appears to have lost its class marker *y-* (this was also the case for two MASC nouns marked for INALP discussed in the previous section, e.g. [40c]).

b. *n-envng-angkawura*
3m-m.ALP-forever
'he is gone for good' (Lit: 'he belongs to forever') (JS2 p.85)
c. *envng-adhuwaba*
NEUT.m.ALP-today
'belonging to today, modern' (JW1 p.42)

(55) a. *envng-arvmvrvma   ayakwa*
NEUT.m.ALP-elders   NEUT.word
'law, commandments, covenant' (WD)
b. *enungw-eniyerringka   angalya*
NEUT.m.ALP-aged   NEUT.camp
'the old men's camp' (JW2 p.70)
c. *warnvng-engka-lhangwa   warnvmamalya*
3a.m.ALP-other-ABL   3a.people
'strangers' (GED p.203)

In the alienable possession construction, the independent noun belongs to, comes from, or is associated with the nominal marked for ALP. The class prefix on the derived nominal matches that of the independent noun. Thus, *envng-erriberriba anhvnga* 'bush tucker' in (53a) literally means 'something of NEUT class, vegetable food, belonging to the bush'.

The semantic difference between the INALP and ALP construction in Enindhilyakwa is overlapping reference: while in the INALP construction one item is a part of the other, the ALP construction does not tend to have such overlap. Rather, it denotes that the external noun "has something to do with" the nominal marked for ALP. This difference is especially clear when the same noun occurs in both constructions, such as the following.

(56) a. *envngv-menba*
NEUT.m-ALP-VEG.eye
'glasses, spectacles' (WD)
b. *ma-m-ayama   menba*
VEG-INALP-NEUT.body.hair VEG.eye
'eyebrow' (VL2 p.215)

(57) a. *n-enungw-akarrnga-manja*
3m-m.ALP-NEUT.tooth-LOC
'male dentist' (VL2 p.220)
b. *ma-m-akarrnga   mangkurrkba*
VEG-INALP-NEUT.tooth   VEG.pandanus
'pandanus spikes' (VL2 p.212)

The ALP constructions in the (a) examples denote an item that is associated with the body marked for ALP, but it is not an inherent part of it: the two can be separated and the body part is not a part of an external whole (which here is only represented by a prefix). The body parts marked for INALP in the (b) examples, by contrast, are an indissoluble part of the external noun. They are not separable and the body part denotes a part of an external noun that denotes the whole.

121

Like the INALP construction, the ALP construction is very productive. It is used to coin new words for introduced items, such as 'glasses' in (56a) and 'dentist' in (57a), and the following:

(58) a. *N-envngv-karrawara*
       3m-m.ALP-above
       'God' (Lit: 'he belonging to above')   (WD)
     b. *n-envngi-jebija*
       3m-m.ALP-church
       'minister, priest'   (WD)
     c. *envng-arrvrra*
       NEUT.m.ALP-NEUT.wind
       'tire pump, fan'   (WD)

Adverbs marked with ALP often function as modifiers, agreeing in noun class with a free noun:

(59) a. *kv-me-na   amarda,   enungw-erribvrra   amarda   alhabvra,*
       IRR.1/NEUT-take-NP2 NEUT.leaves NEUT.m.ALP-anyhow NEUT.leaves NEUT.stringy.bark
       mangkarrkba, ...
       VEG.wild.plum
       'I would take some leaves, any kind of leaves, stringybark, wild plum …'   (JW2 p.70)
     b. *y-akina   arakba   kemba kvnv-dhaka-ma   yi-nvng-angkawura*
       MASC-that compl.act. then   IRR.2/MASC-cook.NP1-*ma* MASC-m.ALP-forever
       'then you will cook it thoroughly'   (WD)
     c. *ngarri-yekirrerra ak-ambilya-ma   ngarnvng-angkawura*
       12a-happy   IRR.12a-stay.NP2-*ma* 12a.m.ALP-forever
       'we will be happy all the time'   (JS2 p.84)

In (59b,c), the derived nominal is semantically an adverbial modifier, but formally adjectival, as it agrees with the subject or object of the verb.[35]

Finally, some ALP constructions have lexicalised to become nouns.[36]

(60) a. *dh-adhvngv-mamawuru-manja*
       FEM-f.ALP-VEG.sun-LOC
       'brown tree snake' (Lit: 'she who is associated with [being] in the sun')   (VL2 p.219)
     b. *envngv-mukumuku-manja*
       NEUT.m.ALP-VEG.deep.sea-LOC
       'octopus' (Lit: 'he who is associated with [being] in the deep sea')   (VL2 p.219)

3.4.6 Deverbalising nominaliser *k-*

The nominaliser (NSR) prefix *k-* derives nominals from verbs (Leeding 1989; Waddy n.d.-a). This prefix takes an inner gender gender prefix for humans and the animate noun classes, but not for the inanimate noun classes. A nominalised verb stem is often reduplicated and does not include

---

[35] An alternative analysis is to view adverbial modifier as a secondary predicate, which would bring the semantics in line with the morphosyntax (Jean-Christophe Verstraete, p.c.). This is an interesting topic for further research.
[36] Leeding (1989: 311) claims that these examples instantiate a derivational usage of the locative case, which creates a new noun lexeme. However, in Chapter 8 I show that LOC case can only be used for inflection, not derivation. In (60), the referential noun is created by the ALP prefix, not by the LOC case suffix.

tense/aspect suffixes. A nominalised verb can function as a common noun and as a non-finite verb. If the non-finite verb is transitive, the prefix on the nominalised verb can represent either the subject or the object. Non-finite clauses are unusual among polysynthetic languages such as those in Northern Australia.[37]

(61) a. *a-ki-yengba*
        NEUT-NSR-speak
        'speech, speaking, talking'   (WD)
      b. *dh-adhv-ki-yengbi-yengba*
        3f-f-NSR-RDP-speak
        'loquacious woman'   (VL1 p.179)

(62) *Dh-aka   dha-ki-lyangki-lyangku-wama   dh-ibina*
      FEM-this   FEM-NSR-RDP-head-nod   FEM-that.same
      yingi-lyangki-lyangku-wama-ji-na-ma   arvngka.
      FEM/NEUT-RDP-head-nod-CAUS-NP2-*ma*   NEUT.head
      'The name *dhakilyangkilyangkuwama* ['FEM.click beetle'] means "the one who nods her
      head".'   (GED p.94)

The prefix on nominalised verbs represents the noun class of the referent (e.g. nouns referring to speech or language are NEUT class).

A nominalised verb can include one or two verbal derivational suffixes such as factitive, reflexive and inchoative, also without tense/aspect suffixation.

(63) a. *a-ki-dhidi-ka-jungwa*
        NEUT-NSR-shut-FACT-REFL
        'gate, door' (Lit: 'the one that shuts itself')   (VL1 p.180, WD)
      b. *dh-adhv-k-abiyarbuwa-dha*
        3f-f-NSR-four-INCH
        'fourth female' (Lit: 'she who becomes fourth')   (VL1 p.177)

The NSR prefix is very productive, as it is used to coin new words for introduced items:

(64) a. *a-ku-ngwanji-na-mv-lhangwa*
        NEUT-NSR-stop-NP2-*ma*-ABL
        'traffic lights' (Lit: 'NEUT class item after which is stopped')   (VL1 p.180)
      b. *warnv-k-abvbvrrakiyuwa*
        3a.m-NSR-closely.follow
        'disciples'   (WD)
      c. *a-kv-mvrndv-mvrnda-dha*
        NEUT-NSR-RDP-cold-INCH
        'fridge'   (WD)

---

[37] In fact, M. Baker's (1996) theory of polysynthesis predicts that non-finite clauses are impossible in polysynthetic languages. However, Evans (2003a: 628, fn1) notes that there are polysynthetic languages which have non-finite constructions: Yimas (Foley 1991) in Papua New Guinea, and, closer to home, Warray (Harvey 1986) and Rembarrnga (Nordlinger & Saulwick 2002). Evans (2006) discusses non-finite clauses in Dalabon.

d. *dh-adhv-k-abalhv-mungkwa*
    FEM-f-NSR-abdomen-partically.cover
    'trousers'   (VL2 p.244)

The example in (64a) appears to be a verb inflected for case that is nominalised. Case suffixes on verbs follow the tense/aspect suffixes and create adverbial subordinate clauses (section 8.11); hence such nominals do include tense/aspect suffixes. I only found one such example in the data. The fact that 'trousers' in (64d) is assigned to the FEM noun class may be due to the corresponding English loan *dhvrajija* 'trousers', which is also classified as FEM due to its initial phoneme (see section 3.4.1.1).

Being nominals, nominalised verbs can in turn enter into another cycle of derived nominal formation, as illustrated in (65).

(65)   a. *ma-mv-kv-mvrnda-dha*
          VEG-INALP-NSR-cold-INCH
          'cold weather' (Lit: 'something of VEG class resembling a fridge')   (WD)
       b. *envng-ak-alyvbara-ma*
          NEUT.m.ALP-NSR-eat-PRIV
          'inedible' (Lit: 'something of NEUT class that is not associated with food')   (WD)

The INALP and ALP prefixes thus further derive the unit [NSR-VERB].

The main evidence for the productivity of the NSR prefix comes from the fact that any verb can be nominalised and function as a non-finite verb. A non-finite verb takes nominal prefixes and thus is formally identical to a nominalised verb that functions as a nominal, as demonstrated in (66).

(66)   a. *kvngv-lhvka-ja-ma   dh-adhv-k-ajarra*
          IRR.3f-go-NP2-*ma*   3f-f-NSR-wash
          'she is going to wash [it]'   (VL1 p.419)
       b. *dh-adhv-k-ajarra   dvrija*
          FEM-f-NSR-wash   dress(FEM)
          'clean dress'   (VL1 p.419)

A non-finite nominalised verb has a purposive meaning. It frequently takes the PURP clitic =*yadha*:

(67)   *Arakba=wiya   nara-wiya   wurrv-mangkadhvrra-lhangwa angura,   warnvmamalya*
        compl.act=PRG NEG=PRG   3a-white.person-ABL   NEUT.fire 3a.people
        *na-mambv-mam+baji-nv-ma miyanga   kajungwa **warnv-kv-lhvraki=yadha** angura.*
        3a-RDP-hands+hit-P2-*ma*   VEG.firesticks so.that   3a.m-NSR-light.fire=PURP NEUT.fire
        'A long time ago before white people brought matches and lighters, our people used to rub
        firesticks to light a fire.'   (GED p.198)

The following three examples, involving a nominalised non-finite verb, a finite irrealis verb, and a finite realis verb, respectively, were said to have the same meaning. These examples also show that the PURP clitic on nominalised verbs is not obligatory.

(68) a. *narrv-ngayindha-ngv-ma* **warnv-k-alyvbara** *akwalha* *a-m+adhangkwa*
     3a/NEUT-want-P2-*ma*   3a.m-NSR-eat   NEUT.some   NEUT-INALP+meat

   b. *narrv-ngayindha-ngv-ma* **kuw-alyvbarv-nv-ma** *akwalha* *a-m+adhangkwa*
     3a/NEUT-want-P2-*ma*   IRR.3a-eat-P2-*ma*   NEUT.some   NEUT-INALP+meat

   c. *narrv-ngayindha-ngv-ma* **nuw-alyubarv-nv-ma** *akwalha* *a-m+adhangkwa*
     3a/NEUT-want-P2-*ma*   3a-eat-P2-*ma*   NEUT.some   NEUT-INALP+meat
     'they wanted to eat some meat'   (Fieldnotes, DL, 12/2/2008)

Leeding (1989: 419-22) claims that the prefix on a nominalised verb agrees with the intransitive subject or transitive object of the verb in the main clause when this is animate. When the object in the main clause is inanimate, she proposes, agreement is with the subject of the transitive verb. I do not find this a plausible analysis; rather, agreement on the nominalised verb is with the argument that is focussed on. Consider the following two examples, which only differ in which argument is represented on the non-finite verb:

(69) a. *nen-akbvrranga*   *yaraja*   *yi-nu-kw-alyvbari=yadha*
     3m/MASC-catch.PST   MASC.goanna MASC-m-NSR-eat=PURP
     'they had caught goanna to eat'   (Fieldnotes, DL, 12/2/2008)

   b. *nen-akbvrranga*   *yaraja*   *warnu-kw-alyubari=yadha* *wurr-akina*
     3m/MASC-catch.PST   MASC.goanna MASC.m-NSR-eat=PURP   3a-that
     'they had caught goanna to eat'   (Fieldnotes, DL, 12/2/2008)

The first example literally means: 'they had caught goanna to be eaten' (focussing on the object argument), and the second example 'they had caught goanna for eating' (focussing on the subject argument). [38,39]

    The PURP clitic in these examples is the only element that occurs on nominalised verbs in the data; there are no attestations of a non-finite verb followed by a case suffix (the 'traffic lights' example in [64a] is not a counterexample, because here it is a case-marked verb that is nominalised). This is unusual in Australia, where nominalised verbs typically bear a variety of case markers (Dench & Evans 1988: 19). The PURP clitic is discussed further in Appendix H.

---

[38] Leeding (1989: 194-9) proposes a fourth derivational prefix in Enindhilyakwa, namely the 'adjectiviser' (ASR) *ngki-* ~ *ki-*, which derives adjectives from verbs. The nominaliser is *ngkwi-* ~ *kwi-* in her analysis and orthography, which only differs from the ASR in the presence of a [w]. However, this analysis is problematic, for several reasons. First of all, the [w] of the NSR often disappears, making it formally identical to the ASR (e.g. *dh-adhi-k-awiyeba* [FEM-f-NSR-enter] 'clothes' [p.179] involves the NSR *kwi-* in her analysis, which is realized as *k-*). Secondly, she concedes that some adjectives seem to involve the NSR instead of the ASR prefix, so that "the formal distinction does not always correlate with the semantic distinction" (p.196). Thirdly, some adjectives are split up into phantom morphemes. For example, the adjective *engma* 'putrid' is analysed as *a-ng{ki}-mwa{tja}* [NEUT-ASR-smell] (p.195, original orthography), where the final CV of both the ASR and the verb are deleted for no apparent reason. A more simple analysis would be to consider the adjective *engma* to be monomorphemic. Fourthly, there is no theoretical motivation for distinguishing between prefixes that derive adjectives and that derive nouns, as there is no morphological distinction between the two in Enindhilyakwa (as in most Australian languages). I conclude that Enindhilyakwa has three derivational prefixes that derive nominals from various parts of speech: inalienable possession *m-*, alienable possession *ng(w)-* and nominaliser *k-* ~ *kw-*.
[39] All previous authors have recognised that the NSR prefix varies between *k-* and *kw-*, but none of them has provided an explanation. The latter allomorph only shows up before vowels. In Appendix Q I suggest that some verb stems may have historically started with *w-* (i.e. *-walyvbar-* 'eat'), but that this stem-initial consonant has disappeared in most environments. The *kw-* allomorph could then be a remnant of this archaic stem-initial *w-*, i.e. *-k-w....* > *-kw....*.

3.5 Nominal stem [0]

Nominal stems may comprise:

- a simple root, such as *arvma* 'big'; *akungwa* 'NEUT.fresh water'; *amarda* 'NEUT.grass'

- a reduplicated root, such as *-bvrvbvra* 'childless'; *dhuwarruwarra* 'FEM.Jupiter'

- a defective root that requires a nominal to bind to, such as the adjectives *+bvdha* 'strong'; *+adharrba* 'short'; as well as a defective body part noun roots such as *+akulya* 'skin' in section 3.4.5.1 that require an INALP prefix (cf. *-m+akulya*)

Nominal stems may be reduplicated to indicate plurality, as illustrated in the following examples.

(70) a. *ngarr-arvmvrvma*
 12a-RDP.big
 'big us'   (VL1 p.222)
 b. *mv-lhvkarrku-wilyarra   yirr-arrangba-ma   anhvng-anhvnga*
 VEG-track-middle   1a/NEUT-collect.P2-*ma*   RDP-NEUT.vegetable.food
 'on the way we collected lots of food'   ('Awurukwa' w15)

Reduplication of the stem is one of the ways to indicate plurality for non-humans. Other ways involve the use of the quantifiers *mvrnda-* and *wurra-* 'many' (section 3.4.3), or the suffix *-murriya* 'et cetera' (section 3.6). Alternatively, adjectives can be used to express plurality, such as *ababvrna* 'many' or *angkulyvmvdha* 'all, many' for count nouns, and *arvma* 'big' and *adhvrrungwarna* 'huge' for non-count nouns (Stokes 1982: 45).

3.5.1 Polysemy

O'Grady (1960) first drew attention to the fact that, in Australian languages, a single lexeme may represent something that actually is, and also something that it has the potential to become. For example, a single lexeme may cover 'wood' and 'fire' (wood will burn to make fire), 'animal' and 'meat' (an animal is potential meat), or a type of plant and the fruit it bears (an appropriate tree will bear fruit) (Dixon 2002: 56-7). This type of Actual/Potential polysemy is also common for Enindhilyakwa nominals. Thus *mvnhvnga* 'VEG.burrawang' is used to refer to the tree (*Macrozamia communis*), its nuts and the bread made from the nuts. *Alhabvra* is both the stringybark tree and the coolamon that is made from its bark (Waddy 1988: 69). And in (71), the noun *dhvngarrkwa* 'FEM.spear grass' is used to refer to its seeds.

(71) *Akv-nga-rrvngkv-na-manja   kvngu-wurrakv-lharrv-na-manja   dhvngarrkwa…*
 IRR.12a-FEM-see-NP2-LOC   IRR.FEM-many-fall-NP2-LOC   FEM.spear.grass
 'When we see the spear grass seeds falling …'   (GED p.47)

There is however another, more curious, type of polysemy in Enindhilyakwa. This involves common nouns, often body parts, which have an additional flora or fauna meaning. Some are

listed in Table 3.6 below (see GED and Waddy 1988 for more examples). In some cases speakers are aware of the polysemy and can give an explanation on the grounds of perceived likeness: *alhvkvra* 'NEUT.darter', for instance, "spreads its wings and takes the shape of a house"; *yibilyibilya* 'MASC.gecko' "flashes like lightning when we shine on it with a torch"; and hearing *ekbarra* 'NEUT.drongo' "gives us a headache" (Fieldnotes, DL 15/3/2011). *Wurruwarda* 'COLL.sandpaper fish' is said to bark like a dog when caught (Waddy 1988: 67). In the case of the body parts, the flora and fauna have a similar shape: 'brain' and 'crab', 'kneecap' and 'Cyrene shell', and so on.

	Meaning 1	Meaning 2
alhvkvra	house	darter (bird)
yibilyibilya	lightning	gecko
makarda	sea	sandpaper fig
yimendha	turtle	water beetle
wurruwarda	dog	sandpaper fish
dhvngalhuwa	boobook owl	hawksbill turtle
ekbarra	headache	spangled drongo
engeemina	breast milk	legless burrowing lizard
mangma	brain	crab
yuwalkurra	kneecap	Cyrene shell
arimba	wart	stingray (with warts)
arnda	elbow	whiting (fish)
memvrrkura	ribs	potato bean
mandarra ~ marndarra	type of fish, hammer oyster	tomahawk

Table 3.6: Polysemous nouns

Using body part nouns to refer to other items is very common in Enindhilyakwa: we have seen this in the INALP construction in section 3.4.5.1 above, and we will see it again in incorporated body part noun roots that have developed into generics in Chapter 7.

3.6   Number suffixes [(+1)]

There are two nominal number suffixes: *-kiya* 'two' and *-mvrriya* 'et cetera' (or 'associative plural'; see Daniel & Moravcsik 2011). They can be attached to any or all words in the noun phrase (Leeding 1989: 299). The *-kiya* suffix is one of the ways to denote dual number for non-humans, but it can also be used for humans:

(72)   *n-enu-kw-enikba-kiya*
       3m-m-son-3m.KIN-two
       'his two sons'   (VL1 p.300)

The following example illustrates the use of *-murriya*.

127

(73) *Arakba=wiya nara=wiya bakida-mvrriya akwa bajikala-mvrriya…*
    compl.act=PRG NEG=PRG   bucket(NEUT)-etc. and   billycan(NEUT)-etc.
    'A long time ago before there were any buckets and billycans and the like …'   (GED p.199)

Note that the number suffix occurs on both conjuncts. This is what case suffixes do as well (Chapter 8).

3.7   Summary

The prefixes that precede the Enindhilyakwa nominal stem represent a variety of nominal classification systems. The obligatory noun class prefixes in slot [-6] overtly assign all non-human nouns apart from loanwords to one of five noun classes. This system is no longer productive, as evidenced by the fact that (i) noun class prefixes are inseparable from the stem; (ii) loanwords do not receive an overt noun class marker; and (iii) noun classification may partly be on a phonological basis. Humans, on the other hand, are categorised according to number and biological sex by a distinct set of productive prefixes occurring in the same slot as the noun class prefixes. The productivity of this (outer) gender system is evidenced by the flexibility of the prefixes, and their occurrence on loanwords.

A second nominal classification system can be found in the optional inner gender prefixes in slot [(-3)], which co-occur with the three derivational prefixes. They categorise humans and non-humans belonging to the animate noun classes as either masculine ('m') or feminine ('f'). For humans this is done according to their biological sex, whereas for non-humans gender is determined by the noun class of the referent: FEM nouns take the feminine prefix, and MASC and COLL nouns the masculine prefix.

Incorporated generic nominals in slot [(-1)], to be discussed in Chapter 7, constitute a third nominal classification system. They classify an external specific noun according to one or more of its inherent features.

In addition, Enindhilyakwa has a set of three very productive derivational prefixes:

1) the inalienable possession prefix (slot [(-2)]) is used to express the part-whole relation for inanimate objects, plants, some animals, and human body parts - but not of humans (human body parts take POSS case on the possessor)

2) the alienable possession prefix (slot [(-2)]) marks the nominal that an external nominal 'belongs to' or is 'associated with'. This is usually not a part-whole relation

3) the nominaliser prefix derives nominals from verbs; deverbalised nominals can be used as common nouns, or as non-finite verbs

These three derivational prefixes create nominals that can take the full range of pronominal/gender/noun class prefixes. The two possession derivational prefixes attach to nominals that have a

frozen noun class marker, resulting in double noun class marking, which is a rare phenomenon in the world's languages. This degree of productive nominal derivation does not occur in the Gunwinyguan languages: Bininj Gun-Wok, for example, has no derivational prefixes at all, whereas other languages have only such one derivational affix: Wubuy only has a set of prefixes with a function comparable to the Enindhilyakwa inalienable possession prefix. Rembarrnga has an infinitive suffix (Nordlinger & Saulwick 2002).

Body part noun roots play a major role in Enindhilyakwa, and are a principal way to indicate shape: when marked for inalienable possession, a body part noun root denotes a part of an external noun that has a similar shape to the body part (e.g. 'nose' is used for 'hook'). When incorporated into an adjective or verb, it classifies an external nominal in terms of its shape (e.g. 'head' is used to refer to 'stone' and other hard and round objects - Chapter 7). And as free noun, body parts are often polysemous with a flora or fauna name, which also may have a perceived likeness (e.g. the noun 'brain' is also used for 'crab').