

Chapter 7: Incorporation of body part and generic nominals

As in many Northern Australian languages, including virtually all Gunwinyguan languages, the Daly River languages, and Tiwi, nominals can be productively incorporated in Enindhilyakwa. Incorporated nominals are of two semantic types: (i) they can express a body part that belongs to a human, or occasionally a higher class animal, or (ii) they can classify items that may be further specified by an external nominal. The latter are labelled ‘incorporated generics’ or just ‘generics’ in this thesis. As the name implies, incorporated generics are abstract in nature: they may have generic meanings such as ‘something that grows’, ‘something that gives light’, and so on, or they may describe inanimate items in terms of their shape, size, consistency, and so on.

In common with some Gunwinyguan languages, Enindhilyakwa allows nominal incorporation into verbs and adjectives, as shown in (1) and (2), respectively. The (a) examples illustrate incorporation of a body part, and the (b) examples of a generic. The ‘-’ sign indicates that this type of nominal incorporation is productive (as opposed to the lexicalised noun+verb compound stems discussed in Chapter 5, where a ‘+’ sign is used to indicate the frozen boundaries). Unless otherwise indicated, the data in the current chapter come from Ansec1 (“ANindhilyakwa SECondary roots”)¹.

- (1) a. *nvng-eni-lyang-barra*
 1-3m-**head**-hit.P2
 ‘I hit him on the head’ (JS2 p.149)
- b. *narrv-ma-rreku-wurra-ngv-ma* *abvrrv-lhangwa* *mvngarukwa*
 3a-VEG-**long.and.flexible**-throw-P2-*ma* 3a.PRO-POSS VEG.fishing.line
 ‘they have thrown out their fishing lines’ (‘Malhamukwa-lhangwa’)
- (2) a. *dhv-lhakbak-awarriya*
 3f-**leg**-bad
 ‘she’s got a deformed leg’
- b. *al-jvrrvrra* *amarda*
 NEUT.**long.and.thin**-long NEUT.grass
 ‘long grass’ OR ‘the grass is long’ (Ansec2)

A generic can refer to several properties of an inanimate object at once: for instance, *rreku-* in (1b) classifies the fishing line as long and flexible, and *al-* in (2b) describes the grass as being long and thin. When the actual referent is clear to the addressee (from shared knowledge and/or from context), the specific noun may be omitted (Waddy 1988; Leeding 1989).

Incorporated nominals are restricted to particular grammatical relations, following the cross-linguistically common absolutive pattern of only incorporating intransitive subjects and transitive

¹ This is an unpublished digital file of incorporated body part nominals, compiled by Judie Waddy and colleagues at Angurugu Linguistics. They labelled incorporated nominals “secondary roots”. The “Ansec2” file consists of “secondary roots” that are non-body parts (called ‘generics’ in this thesis).

objects (e.g. Mithun 1986; M. Baker 1988; Evans 1996). The incorporated body part *lyang-* ‘head’ in (1a), for example, and the generic *rreku-* ‘long and flexible’ in (1b), correspond to the transitive object of the verb. The body part *lhakbak-* ‘leg’ in (2a) and the generic *al-* ‘long and thin’ in (2b) are associated with the subject of an adjective.

Incorporation of body parts and generics is optional, in the sense that there is an unincorporated paraphrase. For body parts, this involves an external body part nominal, as in (3), which is an unincorporated paraphrase of (1a).² Most generics do not have a corresponding unincorporated form, in which case the ‘unincorporated’ version simply lacks the generic, as in (4), which corresponds to (2b). The unincorporated versions are near-synonymous with the incorporated ones.

(3) *nvng-env-ngaja-ma env-lhangu-manja arvngka*
 1-3m-hit.P2-*ma* 3m.PRO-POSS-LOC NEUT.head
 ‘I hit him on the head.’ (VL2 p.243)

(4) *a-jvrrvrra amarda*
 NEUT-long NEUT.grass
 ‘long grass’

Enindhilyakwa nominal incorporation is of the *Classifier* type (Rosen 1989), in that the valency of the verb is completely unaffected. Incorporated nominals add selectional restrictions to the verb, because they narrow down the range of possible referents of one of the verb’s arguments (Rosen 1989). For example, *lyang-* in (1a) limits the part of the direct object being hit to ‘head’ only, and *rreku-* in (1b) restricts the objects of the throwing to ‘long and flexible’ things. This contrasts with incorporation of Rosen’s *Compound* type, which reduces the verb’s valency or otherwise alters its argument structure. Recall from Chapter 5 that Enindhilyakwa also exhibits the latter type of nominal incorporation, namely in the complex stems. These complex stems are lexicalised, unproductive, and non-compositional compounds, which lack unincorporated paraphrases and are specialised semantic units. They form single lexemes that have to be learnt rather than being put together spontaneously. Lexical compounds cannot be described in terms of clause-level syntax and the incorporated nominal may bear a variety of grammatical relations to the verb. Classifier nominal incorporation (NI), on the other hand, allows information about arguments of the predicate to be optionally registered on the predicate. The grammatical relations between the incorporated nominal and the verb stem are predictable: only intransitive subjects and transitive objects incorporate. Classifier NI is productive, compositional and can be put together on the spot.

² The ‘hit’ verb is different in (3), because *-bvrra-* ‘hit, split’ (P2 form: *-barra*) in (1a) is a bound stem that cannot occur on its own. Nonetheless, the nominal it combines with is variable: e.g. *-adheng-bvrra-* [top-hit] ‘smash’, *-al-bvrra-* [long.and.thin-split] ‘part the grass’, *-lyimberr-bvrra-* [group-split] ‘pass through a crowd’, etc.

However, as noted in Chapter 5, lexicalised compound stems may be hard to distinguish from productive NI. They can be very similar structures, which can use the same incorporated nominals and verb roots, as illustrated in (5) (repeated in part from section 5.5). Here, we find the body part *werrick-* ‘chest’ and the verb *-jira-* ‘push’ in two different configurations with different meanings. Only the productive NI pattern has an unincorporated paraphrase, given in (5c).

- (5) a. *ngv-nu-werriki+jira-nga nvng-eni-kv-lhvki=yadha Darwinu-wa*
 1.O-3m.S-chest+push-P2 1-m-NSR-go=PURP D.-ALL
 ‘he persuaded me to go to Darwin’ (Waddy n.d.-c)
- b. *ngv-nu-werriki-jira-nga*
 1.O-3m.S-chest-push-P2
 ‘he pushed me on the chest’ (Waddy n.d.-c)
- c. *ngv-ni-jira-nga yukudhukudha-manja*
 1.O-3m.S-push-P2 MASC.chest-LOC
 ‘he pushed me on the chest’ (constructed)

The structure in (5a) is a lexicalised compound, as evidenced by the fact that the incorporated body part nominal cannot be omitted and the meaning is non-compositional. There is no other way of expressing the meaning ‘to persuade’. This contrasts with the syntactically incorporated nominal in (5b), which has a compositional meaning and where the incorporated body part can occur external to the verb, as in (5c). Notice that the incorporated version of the body part nominal is formally distinct from the free nominal: *werrick-* versus *yukudhukudha*, respectively, which both mean ‘chest’.

In section 5.5 I presented further morphosyntactic tests to distinguish between lexicalised compound stems and productive syntactic noun incorporation, which, besides optionality, include productivity and the grammatical relations held between the incorporated nominal and the verb. Another feature discussed in section 5.5 is that both the lexicalised compound slot and the productively incorporated nominal slot can be filled, as again illustrated in (6).

- (6) *Narrv-makv-ruk+bijanga-ju-wa-manja e-miningku-wa angalya, ...*
 3a/NEUT-camp-body+jump-CAUS-P2-LOC NEUT-other-ALL NEUT.place
 ‘When they moved camp to another place ...’ (GED p.198)

The verb *-ruk+bijangv-* is a lexicalised compound (which is usually translated as ‘jump’, see e.g. [42b]). The causativised verb has incorporated its direct object *makv-* ‘camp’ in this example.

Since productively incorporated body parts and generics (optionally) register information about arguments on the predicate, they are allocated a separate slot in the verb template (slot [(-1)] in Table 4.1) (this is in contrast to the nominals in lexicalised compound stems, which are subsumed under the stem slot). At most one nominal can be productively incorporated at the same time.

Similar distinctions between productively incorporated nominals and lexical compounding are described by Evans (1996, 2003a) for Bininj Gun-Wok, and Heath (1984) for Wubuy.³

What makes Enindhilyakwa especially interesting is that incorporated body part nominals and generics are often the same forms. In (7a), for example, the incorporated form *lhakbak-* refers to the body part ‘leg(s)’. In (7b) the same form describes an inanimate object as ‘short and upright’. The language differs in this respect from the Gunwinyguan languages that exhibit nominal incorporation, where the incorporated body parts and generics are usually distinct forms.

- (7) a. *nvngv-lhakbak-arrkujeeyi-na*
 1-leg-be.painful-NP2
 ‘my legs are aching’
 b. *nv-lhakbak-arjiya-ju-wa-ma* *yiraka*
 3m/MASC-short.and.upright-be.upright-CAUS-P2-*ma* MASC.didgeridoo
 ‘he stood up the didgeridoo’

The compositionality of such examples is evidenced by the fact that the same verbs can be used with different incorporated nominals: compare (7a) with (8a), and (7b) with (8b).

- (8) a. *ngayuwa nvngv-ngarrk-arrkujeeyi-na madha*
 1.PRO 1-ear-be.painful-NP2 VEG.ear
 ‘I’ve got earache’
 b. *nv-ma-mvrrk-arjiya-ju-wa-ma memvrrma*
 MASC-VEG-back.of.neck-be.upright-CAUS-P2-*ma* VEG.back.of.neck
 ‘the goanna (*yaraja*[MASC]) lifted up its neck’ (‘Zoo’ e30)

The body part meaning and the generic meaning are clearly related: being short and upright in (7b) are inherent properties of a leg. This polysemy will be argued to result from the evolutionary path of nominal incorporation: many generics have developed from incorporated body parts by a meaning extension.

Another interesting aspect of Enindhilyakwa incorporated nominals is their suppletion. The majority of incorporated body parts have little or no formal resemblance with their corresponding free form. Above I mentioned the incorporated form *werrik-* and the corresponding free noun *yukudhukudha* ‘MASC.chest’. Another example is *ngarrk-* in (7a) that is associated with the body part noun *madha* ‘VEG.ear’. This suppletion will be argued to result from lexical replacement affecting the free form but not the incorporated form. An interesting consequence of the replacement of free nominals in Enindhilyakwa is that sometimes only *incorporated* nominals have corresponding forms in other languages (see Tables 7.3 and 7.4 below). An example is the root *lyang-* ‘head’ in (1a), which is not synchronically attested as a free noun in Enindhilyakwa,

³ Though the BGW structure differs from the Enindhilyakwa one in that incorporated generics and body parts occupy different slots in Bininj Gun-Wok, in this order (Evans 1996, 2003a). In Enindhilyakwa, they occupy the same slot.

but it is in other languages: the Wubuy noun for ‘head’ is *rlaang*, and the Ngandi form is *rlong* (Chapter 9 investigates the sound changes that have taken place between Enindhilyakwa and the Gunwinyguan languages). Widespread suppletion is another characteristic of Enindhilyakwa incorporated nominals that sets it apart from the Gunwinyguan languages (though suppletive incorporated forms are also common in Tiwi and Murrinh-Patha [Dixon 2002: 429]).

Incorporated nominal roots in Enindhilyakwa have received some attention in previous work (Worsley 1954b; Stokes 1982; Waddy 1988, n.d.-c; Leeding 1989, 1996), where they have been given a variety of names. Worsley (1954b) and Waddy (1988) call them ‘secondary prefixes’. In later (unpublished) work Waddy labels them ‘secondary roots’. Stokes (1982) does not explicitly discuss nominal incorporation, but includes about nine different “prefixes” that “represent a noun” in her paper. Leeding (1989, 1996) claims that an incorporated root can be either a noun or an adjective. None of these scholars, however, has analysed the relation between body part nominals and generics, or the morphosyntax of NI, in any systematic way. This is the objective of this chapter.

Although this thesis aims to give a synchronic description of the Enindhilyakwa language, it may be the case that some of the examples in this chapter will not be used anymore. In other words, NI may be going out of use. Worsley (1954b) already noted over half a century ago that forms with incorporated generics (which he labels ‘secondary prefixes’) are more readily produced by older speakers than by younger ones. He concluded that they may be disappearing from the language. Stokes (1982) also claims that speakers under 30 years old do not produce incorporated forms, but she attributes this to their complexity. While there are numerous examples in the texts (collected by Judith Stokes and her colleagues in the 1970s and 80s), and in the Ansec files (created up to 1990 by Julie Waddy and her team at Angurugu Linguistics, assisted by Gula Lalara(†), who was a singer, poet and story teller, who was particularly gifted in exploiting the richness of his language), my attempts to elicit such constructions failed. My language teachers were over 50 years old, and they translated sentences like ‘you hit me on the head’ as *yi-ngaja-ma arvngka-manja*, with the body part *arvngka* ‘NEUT.head’ realised outside the verb. When asked for their opinion of examples with incorporated body parts they accepted them, and could play around with them, but they said that this is “how the old people used to say it” (anin1_em_au_001). Note the parallel with the ‘possession’ of body parts by means of the inalienable possession construction (section 3.4.5.1), which has also gone out of use. The part-whole relation for humans is now expressed with POSS case on the whole (e.g. [2.PRO-POSS arm] ‘your arm’).

When asked about the use of incorporated body parts with a generic meaning (e.g. ‘lips’ referring to the sharp edges of a tin in [28b]), my informants said that old people used this “picture

way” of describing things, but this is not done anymore today. This could mean that NI, although once very productive, may be disappearing from the language.⁴

7.1 Organisation of chapter

This chapter is structured as follows. Section 7.2 describes the incorporation of body parts in more detail. The incorporation of generics is addressed in section 7.3. Section 7.4 examines the polysemy of the majority of incorporated roots. Since incorporated body parts and generics may be formally very similar, section 7.5 proposes ways to distinguish between the two. The suppletion and morpho-phonemic changes that the incorporated forms have undergone are examined in section 7.6. Section 7.7 investigates the origin of generics and concludes that the majority have evolved from the incorporation of body parts. Section 7.8 discusses the wide range of semantics exhibited by most generics, while section 7.9 proposes that incorporated nominals are non-referential. Section 7.10 develops the idea that incorporated nominals are in apposition with the corresponding external nominals. The notion of ‘possessor raising’ is also addressed (section 7.10.1). Section 7.11 investigates which factors drive nominal incorporation, and section 7.12 finishes with a summary.

7.2 Incorporation of body parts

Body part noun roots can be productively incorporated into verbs and adjectives, as was illustrated in (1a), (2a), (5b), (7a) and (8) above. The attested incorporated body part nominals are listed in Appendix N. Incorporation is optional, and restricted to particular grammatical relations: only intransitive subjects (9) and transitive objects (10) can incorporate. To illustrate the compositional structure of body part incorporation, examples of two different body parts are given with the same verb (+*baja-* in [10] is a bound stem but the INs are flexible).

(9) a. *na-ruku-dhadhv-nv-mvrra alhvka*
 NEUT-foot-burn-P2-*ma* NEUT.foot
 ‘[his] foot was burnt’

b. *nu-werrikv-dhadha*
 3m-chest-burn.P1
 ‘he’s burnt on the chest’

(10) a. *Warnvmamalya na-lharrk+baji-jungu-na-ma alhakba-manja dh-aka-mvrra*
 3a.people 3a-leg+hit-REFL-NP2-*ma* NEUT.leg-LOC FEM-this-INSTR
dh-adhv-m-amarda...
 FEM-f-INALP-leaves
 ‘People hit themselves on the legs with the leaves of this bush [*dhvrvra* ‘FEM.holly leaved pea flower’] (so that they can walk fast)’ (GED p.7)

⁴ This is, of course, not the case for the lexicalised complex stems in Chapter 5 that involve a body part or generic, as these are frozen forms. Also note that a “picture way” is still in use for body parts marked for inalienable possession (section 3.4.5.1), which do not refer to a body part but to an item that has similar properties, such as shape.

- b. *Nara ngu-ngurndvrrk+bajv-ma angurnda-manja!*
 NEG NEG-ankle+hit-NP3 NEUT.ankle-LOC
 ‘Don’t hit him on the ankle!’ (‘Children’ h17)

When a body part has a different grammatical relation to the verb than absolute, it cannot be incorporated. Body parts in oblique functions have to be realised outside the verb with a case suffix indicating their oblique role, such as location in (11a,b), or instrument (11c).

- (11) a. *Dh-akina dhakulyandhadha narrv-nga-lhamvra-ngv-ma arvngka-manja*
 FEM-that FEM.bunch.of.feathers.on.stick 3a-FEM-tie-P2-*ma* NEUT.head-LOC
 ‘They tied the *dhakulyandhadha* on their heads...’ (GED p.202)
- b. *Kemba a-mvrndak-akina nganyangwa-manja mangma nvng-akuma-rnv-ma ...*
 then NEUT-many-that 1.PRO.POSS-LOC VEG.mind 1/NEUT-put-P2-*ma*
 ‘Then I put those things in my mind...’ (‘A Trip South’ a77)
- b. *m-akina mangkurrkwa yingv-ma-mvrnda-ngk-ingkarrnga-rnv-ma akarrnga-ma=dha*
 VEG-that VEG.pandanus FEM-VEG-many-RDP-tear-P2-*ma* NEUT.tooth-INSTR=EMPH
 ‘she [*dhvngarrbiya* ‘FEM.crocodile’] kept on tearing the pandanus with her teeth’
 (‘Crocodile and Bluetongue’)

There are some examples of an incorporated body part in an oblique function, but these are lexicalised stems: the body part nominal cannot be omitted, the valency of the verb may be altered and it denotes an institutionalised activity (cf. Mithun’s 1984a Type I NI). Many examples involve the (suppletive) nominal *mangb-* ~ *mam-* ‘hand(s)’, as in (12b,c). When expressed outside the verb, the body part is in oblique case: LOC in (12b) and INSTR in (12c).

- (12) a. *Arakbawiya warnvmamalya warnungkwarba nuw-awiyebe-nv-ma*
 long.time.ago 3a.people 3a.man 3a-wear-P2-*ma*
nuw-akbal+dhamvrv-nv-ma yingalyika.
 3a-waist-tie-P2-*ma* MASC.hair.belt
 ‘A long time ago man wore hair belts around their waists.’ (GED p.202)
- b. *na-mangbi+lyungkwe-nv-ma ayarrka-kiya-manja*
 3a-hand+rub-P2-*ma* NEUT.hand-du-LOC
 ‘they rubbed it [fruit of *angkayuwaya* ‘NEUT.tamarind’] in their two hands’ (GED p.44)
- c. *Arakbawiya Warnindhilyakwa warnungkwarba na-mam+baji-nv-ma ngalha-lhangwa*
 long.time.ago W. 3a.man 3a-hands+hit-P2-*ma* VEG.PRO-POSS
amarda ayarrka-mvrra ...
 NEUT.leaves NEUT.hand-INSTR
 ‘A long time ago Warnindhilyakwa men used to rub their leaves [of *marija* ‘VEG.tar.vine’]
 with their hands ...’ (GED p.58)

The verbs *-dhamvra-* ‘tie’ in (12a) and *-lyungkwe-* ‘rub, paint’ in (12b) are normally transitive (cf. [11a]⁵ and [17], respectively). In the lexicalised compound stems in (12), by contrast, they are

⁵ The verb *-dhamvra-* has some interesting characteristics: firstly, the initial consonant varies between *lh* (in 11a) and *dh* (in 12a), with hardening of the lateral happening after a stop, as proposed in section 2.5.6. And secondly, the inflectional endings also vary: in (11a) the P2 suffix is *-ngv*, which is preceded by stem-final *a*, whereas in (12a) the P2 is *-nv* preceded by stem-final *v*. Only the former is listed in the dictionary. The latter ending could be an error, or it could indicate that the verb has switched conjugations.

intransitive. Lexicalised complex stems with an oblique body part are however not common. In the lexicalised complex stems that show some semantic transparency, the body part appears to belong to an absolutive argument, in line with the productively incorporated body parts.

Some Gunwinyguan languages allow incorporation of transitive subjects for verbs of pain or disease (Evans 1996: 86). These verbs have an inanimate agent (the disease or the body part) acting on a human or other object. In Mayali, for example, the verb *ga-* ‘take, carry’ has an idiomatic meaning and argument frame: ‘hurt (SUBJ: body part, OBJ: experiencer)’. When used with this meaning it may incorporate the hurting body part, which is the transitive subject of the verb, as illustrated in (13a). The same happens in Wubuy with verbs of pain or disease: for example, ‘[X] has a headache’ is expressed as ‘headache bites [X]’, and the subject ‘headache’ may be incorporated, as shown in (13b).

- (13) a. *An-yidme-ga-n.*
 3/1-tooth-carry-NP
 ‘My tooth is hurting me.’
 Mayali (Evans 1996: 86, ex. 77)
- b. *-ambam-ba-*
 headache-bite
 ‘[X] has a headache’
 Wubuy (Heath 1984: 473)

Pain and disease are similarly expressed in Enindhilyakwa by means of an idiomatic verb and argument frame. The transitive verb *-akbvrranga-* ‘find, reach’ selects the condition as its subject argument. The pronominal prefixes on this verb show an inanimate subject acting on a human object. In (14a) the inanimate agent is ‘headache’,⁶ and in (14b) it is ‘blood’.

- (14) a. *arabwariya warnvmamalya narrak-akbvrranga-rnv-manja ekbarra...*
 long.time.ago 3a.people NEUT/3a-find-P2-LOC NEUT.headache
 ‘a long time ago when people had headaches...’ (Lit: ‘when headaches found people’) (GED p.36)
- b. *Kvrr-adhvdhiyara yikv-ngekburaka-jungu-na yikam-akbvrrangv-na-manja merra.*
 2a-girl IRR.2a-make-REFL-NP2 IRR.VEG/2a-find-NP2-LOC VEG.blood
 ‘You young girls have to be careful when you have your periods.’ (Lit: ‘when blood finds you’) (GED p.104)

In contrast to Mayali and Wubuy mentioned above, however, there are no attested examples of an incorporated nominal that is identified with the inanimate transitive subject. This could indicate a strong restriction on incorporable grammatical functions in Enindhilyakwa, which strictly excludes transitive subjects.

The pronominal prefix on the verb either encodes the possessor of the body part (the ‘whole’), as in (15), or the body part itself, as in (16) (the body part is not incorporated in every example).

⁶ An alternative way listed in the dictionary to express ‘I have a headache’ is *ne-k-barrv-na ekbarra nganyangwa* [NEUT-?-split-NP2 NEUT.headache 1.PRO.POSS] (Lit: ?‘my headache splits’).

- (15) a. *nenv-rak-ayi-ja* *mvrirba-ma* *akwa neni-lyang-bvrra-nga y-akina*
 3a/MASC-hollow-stand-CAUS.P1 VEG.back-INSTR and 3a/MASC-head-hit-P2 MASC-that
 ‘they laid the turtle [*yimendha*(MASC)] on its back and hit it on the head’ (GED p.171)
- b. *nanga-mvlk-arrnga-rna dh-akina ngalha-lhangwa mamvngba*
 3f/3f-hair-cut-P2 3f-that 3f.PRO-POSS VEG.hair
 ‘she cut her hair’
- c. *nenv-memvrrk-arrka-rnv-ma memvrrma*
 3m/3a-back.of.neck-pull-P2-*ma* VEG.back.of.neck
 ‘he strangled them [the children]’ (Lit: ‘he pulled their necks’) (‘Nvbardvbarda’ s57)
- (16) a. *Kembirra ne-beki-nv-ma m-akina ma-m-alyirra akena abvrra-lhangwa*
 then 3a-drink-P2-*ma* VEG-that VEG-INALP-liquid and 3a.PRO-POSS
mulkwa nvm-arrkujeeyi-nv-ma akwa nvmv-bvdhv-nv-ma.
 VEG.stomach VEG-be.painful-P2-*ma* and VEG-swell-P2-*ma*
 ‘Then they drank the liquid [of *marrvngmvrnvvrna* ‘VEG.quinine bush’] and their
 stomachs hurt and swelled.’ (GED p.7)
- b. *menba nvm-ebingkv-lharrv-ma yakujina*
 VEG.eye VEG-solid.and.round-fall.P1-*ma* over.there
 ‘her eye fell down over there’ (‘Rainbow Snake’)
- c. *Kembirra akv-m-ajirre-na-ma ngakurra-lhangwa menba vmba*
 then IRR.12a-VEG-wash-NP2-*ma* 12a.PRO-POSS VEG.eye and
aku-ngurru-mungkudhe-na-ma edhvrra ...
 IRR.12a/NEUT-mouth-rinse-NP2-*ma* NEUT.mouth
 ‘Then we wash our eyes or rinse our mouth...’ (GED p.10)

The object prefix in (15a) encodes a MASC object, agreeing with the possessor *yimendha* ‘MASC.turtle’. The prefix cannot represent the body part, because this is NEUT class (cf. *arvngka* ‘NEUT.head’). The same is true for (15b,c), where the body parts are VEG class nouns (*mamvngba* ‘VEG.hair’ and *memvrrma* ‘VEG.back of neck’, respectively), but the object prefixes in these examples agree with the wholes. In (16), by contrast, the subject prefixes in (16a,b) and object prefix in (16c) cross-reference the whole.

The choice of whether to represent the part or the whole in the pronominal prefixes of the verb is semantically motivated: encoding the possessor as the verb’s main argument makes it seem more affected than treating the body part as such. Hence in (15a), the desired effect of hitting the turtle on the head is to affect the turtle as a whole, rather than just its head. Cutting somebody’s hair (15b) does not affect just the hair but gives the whole person a new look. And strangling somebody, as in (15c), does not just affect their neck.

Cross-referencing the part, on the other hand, appears to occur if the intended effect of the action denoted by the verb concerns the part only. The example in (16a) tells about a liquid that women drink to avoid getting pregnant. This liquid is intended to affect their stomachs only, and not any other part of their being. In (16b), only the eye falls down, and not the possessor of the eye. And in (16c) we only wash our eyes, and we only rinse our mouths, which has no effect on us as whole beings.

The semantic contrast between treating the part or the whole as the main argument of the verb is illustrated once more in the following example, which has both constructions in one sentence. In the first verb, the part is encoded as the direct object argument, emphasising that the action denoted by the verb only applies to the part and does not affect the whole. This contrasts with the second verb, which treats the whole as the core argument, because affecting the part counts as affecting the whole:

- (17) *nenv-ma-ngv-ma* *y-aka-lhangwa* *yi-nv-mu-kwarnjirrema* *akwa narri-lyungkwe-nv-ma*
 3a/MASC-take-P2-*ma* MASC-that-POSS MASC-m-INALP-resin and 3a/NEUT-rub-P2-*ma*
abvrra-lhangwa-manja alhakba kajungwa nari=yadha karr-env-marnda-nga yarrnga
 3a.PRO-POSS-LOC NEUT.leg so.that NEG=PURP IRR.MASC/3a-stick-P2 MASC.leech
 ‘(when women went into the billabong) they took the resin from these trees [*yinvbarrnginja*
 ‘MASC.ghost gum’] and rubbed their legs so leeches wouldn’t stick on them’ (GED p.24)

Since rubbing their legs with resin of the *yinvbarrnginja* tree does not affect the women as a whole, the body parts are treated as an independent object. But when leeches stick on the women’s legs, this presumably does not just affect the part, but the women as whole beings (physically and psychologically).

Incorporation of the body part is independent of the semantic choice of whether to treat the possessor or the body part as the main argument of the verb: in both cases the part may be incorporated. In (17), for instance, the body parts are not incorporated, whereas in e.g. (15), (16b) and one verb in (16c) they are.

In BGW also, the part can be cross-referenced as the main argument of the verb rather than the whole, but this has slightly different semantics. In BGW it strongly implies separation, whether physical or cognitive (Evans 1996, 2003a). Furthermore, cross-referencing the part is very rare. The body part ‘teeth’ in (18) has direct object status; although they belong to the speaker, they have been pulled out by a dentist.

- (18) *abanmani-yidme-ga-n*, *aban-yidme-bukka-n*
 1/3du-tooth-take-NP 1/3pl-tooth-show-NP
 ‘I’ll take my two teeth and show them to everyone’ Mayali (Evans 2003a: 464, ex. 10.300i)

Treating the part rather than its possessor as the main argument is much rarer in BGW than in Enindhilyakwa: in BGW the two need to be separated, whereas in Enindhilyakwa the only effect is that the action affects the part, rather than the whole.

In the Gunwinyguan languages (e.g. Evans 1996, 2003a), as well as cross-linguistically (Mithun 1984a), incorporated nominals drop their affixes. This is true for Enindhilyakwa also, although it is not as obvious as in a language like Mayali, where an incorporated form is identical to the free form minus its noun class prefix (the free form of ‘tooth’ in [18], for example, is *gun-*

yidme, with noun class IV prefix *gun-*). Since the majority of incorporated body parts are suppletive, incorporated forms are not attested as free nominals. Yet the incorporated forms occur without a noun class marker, that is, they do not tend to begin with *m(a)-*, which could represent VEG class, or *y-* (MASC), *a-* (NEUT), and so on (cf. *lyang-* ‘head’, *ngurr-* ‘mouth’, *lharr-* ‘bones, leg’, etc.). In the few cases where the incorporated form *is* attested as a free form, it also occurs without its class prefix: examples are *mvr-* ‘back of neck’ (cf. *me+mvrma* ‘VEG+back of neck’ [8b]), *lhakba-* ‘leg’ (cf. *a+lhakba* ‘NEUT+leg’ [7a]) and *rvng-* ‘eye, head’ (cf. *a+rvngka* ‘NEUT+head’). I argued in Chapter 3 that the noun class prefix is synchronically inseparable from the noun stem, but the fact that incorporated nominals occur without this prefix suggests that it was once separable from the noun stem - as it still is today in neighbouring languages such as Wubuy (Heath 1984), Ngandi (Heath 1978a) and Ngalakgan (Baker 2008b).

In sum, body parts can be productively incorporated in Enindhilyakwa, obeying the common cross-linguistic patterns of being stripped of their noun class prefix (as far as we can tell), and the incorporable grammatical functions being restricted to intransitive subject and transitive object. The majority of incorporated body part nominals, however, are not attested as free forms (the suppletion issue is addressed further in section 7.6).

7.3 Incorporation of generics

A generic nominal root classifying an external specific nominal occurs in the same slot as an incorporated body part. In fact, it is often a body part noun root that has broadened its meaning to become a generic, describing the specific noun in terms of its inherent features. For example, *lhakbak-* in (7) above is used to refer to the body part ‘leg’ belonging to a human, or it can be used to describe an inanimate item as being ‘short and upright’.

Generics can be incorporated into verbs and adjectives, as was illustrated in (1b), (2b) and (7b) above. As with the incorporation of body parts, generic incorporation is optional, and the incorporable grammatical relations are restricted to the absolutive pattern. The generic *rrek-* in (19a) classifies an intransitive subject as being long and flexible, while in (19b) it classifies a transitive object. These examples also show that the external specific noun is optional; if the context is clear, it can be omitted (Waddy 1988; Leeding 1989).

- (19) a. *na-rrekv-rndangmv-na*
 NEUT-long.and.flexible-make.a.noise-P2
 ‘it [the wire(NEUT)] twanged’ (VL1 p.365)
- b. *nv-rrekv-rndangmi-ji-na*
 3m/NEUT-long.and.flexible-make.a.noise-CAUS-NP2
 ‘he is strumming it [the guitar(NEUT)]’ (VL1 p.362)

There are no attested examples of an incorporated generic corresponding to a transitive subject, or to an oblique nominal.⁷

Generics serve to classify external specific nouns. Consequently, the same specific noun can co-occur with a variety of generics, emphasising its different features, or providing a different perspective on a noun. In the following examples, *mvnhvnga* ‘VEG.burrawang’ is classified by *lyak-* as an ‘elongated solid’; by *lyang-* as ‘hard and round’; by *arrk-* as ‘small, round and many’; and by *embirrk-* as ‘round and flat’.

- (20) a. *mi-lyakv-babvrvngka* *mvnhvnga*
 VEG-elongated.and.solid-RDP.dry VEG.burrawang
 ‘pile of dry burrawang nuts’
- b. *mi-lyang-bvlhvrra* *mvnhvnga*
 VEG-round.and.hard-unfinished VEG.burrawang
 ‘unripe burrawang nuts, not ready to use’
- c. *m-arrk-inungkurakba* *mvnhvnga*
 VEG-small.and.round.and.many-old VEG.burrawang
 ‘many old burrawang nuts’
- d. *m-embirrk-ambilyvma* *mvnhvnga*
 VEG-round.and.flat-two VEG.burrawang
 ‘two crushed burrawang nuts’

Unlike with incorporated body parts, where either the part or the whole can be cross-referenced on the predicate, with the generic-specific construction only the external specific noun can be cross-referenced on the predicate. This is because incorporated generics only serve to categorise an external referent; they have no reference of their own (section 7.9) and have no corresponding free form. Thus, in Enindhilyakwa there are no pairs of examples involving an unincorporated and an incorporated generic, such as the following from Mayali:

- (21) a. *an-barnadja* *an-mim* *ngarri-bowo-ni*
 VEG-owenia.vernicosa VEG-fruit 1a-put.in.water-PI
 ‘we used to put the *owenia vernicosa* fruit in the water’ Mayali (Evans 1996: 73, ex. 27)
- b. *an-barnadja* *ngarri-mim-bowo-ni*
 VEG-owenia.vernicosa 1a-fruit-put.in.water-PI
 ‘we used to put the *owenia vernicosa* fruit in the water’ Mayali (Evans 1996: 73, ex. 26)

⁷ In Van Egmond (2008) I argued that incorporated generics (which I called classifiers) *can* be obliques. However, examples are few and far between, and they are also not clear-cut. For instance, *kuw-* in (i) could refer to ‘water’ and thence instantiate a locative oblique, but it could also be a shortened version of *kuwak-* ‘body’, in which case it represents the intransitive subject:

(i) *ngayuwa nvngu-kuw-arjeeya* *a-kuyak-bijina*
 1.PRO 1-?fluid/body?-stand.PI NEUT-river-beside
 ‘I was standing beside the river’ (‘Bujikeda’ y15)

I conclude for now that obliques cannot be incorporated in Enindhilyakwa and leave this issue for future research.

In (21a), the generic *an-mim* occurs external to the verb, while in (21b) it is incorporated. In Enindhilyakwa, generics only occur as incorporated forms (Dixon 2002: 427 notes the same for Tiwi).

The generic-specific relationship between the incorporated nominal and the external NP is reminiscent of *noun classifiers* (Aikhenvald 2000: 150). Noun classifiers categorise a noun and co-occur with it in a noun phrase (Aikhenvald 2000: 81). They occur in many of the world's languages and also in numerous Australian languages (for the Australian situation see e.g. Dixon 1982, 2002; Wilkins 1989; Sands 1995; Aikhenvald 2000; and the papers in Harvey & Reid 1997). The following examples come from Thai (22a), Jacaltec (22b) and Yidiny (Cape York) (22c).

- (22) a. *khru lâj khon*
 teacher three CL:PERSON
 'three teachers' (Allan 1977: 286, from Haas 1942)
- b. *xil naj xuwan no7 lab'a*
 saw CL:MAN John CL:ANIMAL snake
 '(man) John saw the (animal) snake' (Aikhenvald 2000: 82, from Craig 1992: 284)
- c. *minyã ganguul jana-ŋ jugi-il gubuma-la*
 CL:ANIMAL.ABS wallaby.ABS stand-PRES CL:TREE-LOC black.pine-LOC
 'The animal wallaby is standing by the tree black pine.' (Dixon 1982: 186, ex. 2)

In the Australianist tradition, noun classifiers are called 'generic classifiers' or 'generics' (Sands 1995: 269-70; Harvey & Reid 1997: 9-10; Aikhenvald 2000: 81). However, I will reserve the term 'noun classifier' for the classifiers that occur in noun phrases which are free forms, as in the above examples. Noun classifiers are absent in Enindhilyakwa. I will use the term 'generic' for the verb-incorporated generics as these are attested in some Northern Australian languages (and in other polysynthetic languages in the world; see Aikhenvald 2000: 170 for a map).⁸ Dixon (2002: 424) provides a detailed map of languages in Northern Australia that exhibit nominal incorporation, which include the majority of Gunwinyguan languages (Evans 1996), Tiwi (Osborne 1974), Marrithiyel (Green 1997), Murrinh Patha (Walsh 1997), Ngan'gityemerri (Reid 1997), and Enindhilyakwa. All of these languages can incorporate body part nouns, and some of them can also incorporate generics.

Noun classifiers and incorporated generics are both nominal classification systems. They differ from a third nominal classification system, noun classes, as the latter are grammaticalised bound forms, whereas noun classifiers and generics are (or at least can be) optional. Also unlike noun classes, noun classifiers and generics have meaning. The differences between noun classes, noun

⁸ Other names in the literature for verb-incorporated generics are: 'non-initial prefix' (Heath 1978a), 'compound initial' (Heath 1984), 'secondary prefix' (Worsley 1954b; Waddy 1988), 'verbal classifier' (Aikhenvald 2000), 'classificatory noun incorporation' (Mithun 1984, Rosen 1989).

classifiers and incorporated generics in Australian languages are listed in Table 7.1 (based on Dixon 1982, 1986; Sands 1995; Aikhenvald 2000).

	Noun classes	Noun classifiers	Incorporated generics
Size	small, closed class	large, semi-open class	
Realization	bound grammaticalised forms	free forms	bound forms
Scope	agreement on other constituents (e.g. on modifiers, verb)	no reference outside the noun phrase	classify an argument of the verb; no reference outside the verb phrase
Semantic basis	there may be some, but often the distribution of nouns into classes is arbitrary and the class of a noun must be listed in the lexicon	yes, often generic - specific relation with external noun (e.g. meat - kangaroo)	
Flexibility	can be inflexible; noun class of nouns is often fixed	one noun can be classified by several classifiers/generics, with a change in meaning (e.g. 'snake' can be classified as 'long and flexible', as 'meat', or as 'poisonous')	
Exhaustiveness	can be exhaustive: in some languages, every noun must take a class marker	not every noun needs to occur with a classifier/generic	

Table 7.1: Noun classes, noun classifiers and incorporated generics

In Enindhilyakwa, the differences between noun classes and incorporated generics are clear: the language has five noun classes, but there are about 80 different generics, listed in Appendix N. The noun class prefixes are grammaticalised agreement markers: they are obligatory parts of the noun lexeme, every noun (except loanwords) takes an overt class marker, and all modifiers agree in noun class with their head. The noun class of a verb's argument is also encoded in the verb's prefix. Incorporated generics, on the other hand, are optional. Their appearance is determined by semantics, not by inflectional properties of nouns with other constituents. Enindhilyakwa generics are not free forms, but they are incorporated into verbs and into adjectives, which include adverbials and numerals.⁹

In sum, generics can be productively incorporated into verbs and adjectives in Enindhilyakwa, with strong restrictions on the incorporable grammatical functions: obliques do not incorporate, nor do grammatical functions other than intransitive subject and transitive object.

⁹ Aikhenvald notes that numeral classifiers are absent from Australia (2000: 124). However, generics can be incorporated into numerals in Enindhilyakwa, as in (20d) and (23b) - and also, to some extent, in BGW (Evans 2003a: 127), and other Gunwinyguan languages (Brett Baker, p.c.). Nonetheless, since Enindhilyakwa numerals are adjectival (section 3.2.4), one could still argue that these are not true numeral classifiers like the Thai example above.

7.4 Polysemy

The majority of incorporated roots in Appendix N are polysemous between a body part reading and a generic reading. A body part belongs to a human or occasionally an animal, whereas a generic describes features of non-humans, which are most often inanimates but can also be animals. This polysemy is illustrated in the following examples. In (23a) the incorporated noun root *lhakbak-* refers to ‘leg’, but in (23b) it categorises a woomera as ‘short and upright’. The root *arr-* denotes ‘teeth’ in (24a), but it describes a collection of billycans as ‘small, round and many’ in (24b). *Lyang-* in (25a) refers to the body part ‘head’, while in (25b) it classifies a rock as being round and hard. In (26a), *adheng-* refers to a human face, whereas in (26b) it denotes the top of an inanimate object. And finally, *lharr-* in (27a) means ‘body’, and in (27b) it means ‘place’.

- (23) a. *nvngv-lhakbak-arrkujeeyi-na*
 1-leg-hurt-NP2
 ‘my legs are aching’ (= [7a])
- b. *yi-lhakbak-ambilyvma yikarba*
 MASC-short.and.upright-two MASC.woomera
 ‘two woomeras standing up’
- (24) a. *nvng-arrv-mardhv-na*
 1-teeth-hurt-NP2
 ‘I’ve got toothache’
- b. *yirrv-mvrndak-arrv-mvrndukw-a-ma bajikala*
 13a/NEUT-many-small.and.round.and.many-gather-P2-ma billycan(NEUT)
 ‘we gathered our billies’ (‘Awurukwa’ w36)
- (25) a. *nvngeni-lyang-barra*
 1/3m-head-hit.P2
 ‘I hit him on the head’
- b. *na-lyangk-arrnga awarnda*
 NEUT-hard.and.round-break.P1 NEUT.rock
 ‘the rock broke’
- (26) a. *ying-adheng-mvrrkulhvnga*
 3f-face-lie.NP1
 ‘she lies face down’
- b. *ying-adheng-baja-nga bajikala*
 3f/NEUT-top-hit-P2 billycan(NEUT)
 ‘she hit around the top of the tin’
- (27) a. *nenv-memvrrk-arrka-rnv-ma memvrrma nenv-lharrk+baja-ngv-mvrra*
 3m/3a-back.of.neck-pull-P2-ma VEG.back.of.neck 3m/3a-body+beat-P2-ma
 ‘he strangled them [the children] (Lit: ‘he pulled their necks’) and he beat their bodies’
(‘Nvbardvbarda’ s57-8)
- b. *a-lharr-ngekbvrna angalya*
 NEUT-place-good NEUT.place
 ‘good, tidy place’

The meanings of the body part and the generic are mostly clearly related: a leg is typically short and upright (the generic originates from the free form *alhakba* ‘lower leg’, which is short compared to the whole leg); teeth are small, round and many; rocks may be round and hard; and a face can be equalled to the top of something. In section 7.7 I will argue that the body part meaning appears to be the original meaning, and that the generic meaning has arisen through semantic extension. This is because firstly, some incorporated roots are formally similar to free body part nominals but not to free generic nominals (e.g. *lhakbak-* ‘leg, short and upright object’ in [23] compares to the noun *a+lhakba* ‘NEUT+leg’). And secondly, some incorporated forms correspond to free body part nouns in other languages. An example is *lyang-* ‘head, hard and round object’, which is related to the free forms *rlaang* ‘head’ in Wubuy and *rlong* ‘head’ in Ngandi (allowing for the sound changes discussed in Chapter 9: **rl > ly* in Enindhilyakwa being one of them).

Some Gunwinyguan languages also have polysemous incorporated body parts. Evans (1996: 78) lists three incorporated body part terms in Mayali that have extended their meaning to generics. These are *gun-gurlah* ‘skin’, which is also used to refer to ‘pelt, hide’; *an-mim* ‘eye’¹⁰, which can also mean ‘fruit, seed pod’; and *gun-ganj* ‘flesh, muscle’, which has the additional meaning of ‘meat’. Heath (1984: 467) lists ten incorporated nominals in Wubuy, mostly body parts, which have extended their meaning to include features related to the body part. Examples include *bira-* ‘back end, anus’, which can also mean ‘back (of anything)’; *rlang-* ‘head’, which can also refer to ‘mentality, emotion’; and *kwurrij-* ‘chest’ and ‘feelings, emotions’. As a free noun, these forms have a body part reading only in Wubuy.

Thus, whereas in some other languages only a few body parts have extended their meaning to a generic meaning, in Enindhilyakwa this has been taken to the extreme.

7.5 How to distinguish between incorporated body parts and generics

Sands (1995: 272) and Aikhenvald (2000: 151) note that in languages exhibiting both noun incorporation and incorporated generics, the decision of where to draw the line between the two is hazy. As has become clear from the previous sections, the incorporation of body part nouns and of generics in Enindhilyakwa is also very similar: they may use the same incorporated roots, both can occur without an external noun, and both leave the argument structure of the verb intact. Moreover, the grammatical relations between the incorporated nominal and the verb are the same in both cases: body parts belong to intransitive subjects or transitive objects, and generics classify intransitive subjects or transitive objects (recall that this is not the case for lexicalised noun+verb compounds, where the incorporated noun can bear a variety of grammatical relations to the verb).

¹⁰ Evans glosses both the body part meaning and the generic meaning of *an-mim* as ‘fruit, seed pod’ in his (1996) paper (p.78), as well as in his (2003a) book (p.334). I have corrected this mistake here, based on examples like *ngamim-baba-ng* ‘my eye hurts’, where *-mim-* is glossed as ‘eye’ (1996: 74, ex. 31).

In addition, generics can also refer to *parts* of external specific nouns. In most of the above examples a generic classifies a specific noun in terms of one or more of its physical features, such as being long, tall, round, flexible, and so on. Here, the part-whole relation is irrelevant. But in the following examples a generic refers to a part only of the external noun:

- (28) a. *nvmv-ngurrkv-dhidi-jungu-na mabalba*
 VEG-opening-close-REFL-P2 VEG.peanut.tree
 ‘the peanut tree seed pods closed’
 b. *wi-lyibvrrku-wurri-ya bajikala!*
 IMP.2a/NEUT-sharp.edge-discard-NP1 tin(NEUT)
 ‘throw the sharp-edged tin away!’
 c. *nvm-arrkv-lharree-yi-na mangkarrkba*
 VEG-small.and.round.and.many-fall-RECP-NP2 VEG.wild.plum.tree
 ‘*mangkarrkba* fruits are falling (because they are ripe and ready)’

The generics in these examples function like body parts, because they classify only a part of the external ‘whole’. And as for body parts, the ‘whole’ is encoded as the core argument on the verb and the ‘part’ is incorporated.

Conversely, body parts can lean towards a classificatory meaning in that they can refer to a group of different body parts:

- (29) *wurri-yukwayuwa aka-ngina-dhadhe-na-ma yina-manja akwa arnda-manja*
 3a-small.PL IRR.12a/3a-joint-poke-NP2-*ma* MASC.knee-LOC and NEUT.elbow-LOC
 ‘we will poke the children’s knees and elbows’ (GED p.138)

In this example, the body part *ngina-* ‘joint’ describes both ‘knees’ and ‘elbows’.¹¹

Body parts and generics can usually be distinguished by a difference in reference: body parts refer to parts of humans, whereas generics describe non-humans. But this semantic distinction can be blurred when the prefix on the predicate is ambiguous between a human and a non-human referent, and the incorporated nominal is ambiguous between a body part reading and a generic reading. The following is an example of this ambiguity.

- (30) *nara ngu-ngurndvrrk-bajv-ma*
 NEG NEGNP-ankle/fruit-hit-NP3
 ‘don’t hit me on my ankle!’ OR ‘don’t shake the fruit from the tree!’ (Fieldnotes DL 6/04/09)

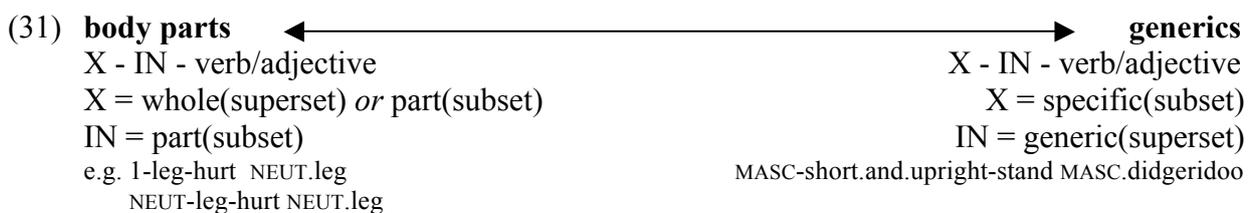
The negated non-past prefix *ng-* replaces the pronominal prefixes on the verb (section 4.2) and has no anaphoric reference. The incorporated root *ngurndvrrk-* can either denote an ankle of a human,

¹¹ The fact that the external body parts appear in LOC case here does not mean that they are obliques. I will argue in sections 7.10.1 and 8.5 that objects of verbs of surface contact such as ‘hit’, ‘poke’, etc. are differentially marked with LOC case, which is thus used as a grammatical case. So the generalisation that obliques do not incorporate in Enindhilyakwa still holds.

or fruit of a tree. This ambiguity can only be resolved by context (or by adding an external noun, such as *angurnda-manja* [NEUT.ankle-LOC] in [10b] above).

Incorporated body parts and generics thus overlap not just formally, but also semantically and structurally. They can therefore best be analysed as constituting a continuum, ranging from a clear body part meaning to a clear classificatory meaning. Incorporated nominals that have both a body part reading and a generic reading (which is the case for the majority of incorporated nominals) occur across the entire continuum, with the expected range of functions. Incorporated nominals that only have a body part reading, such as *lhabvrr-* ‘face, nose’ and *ngvrndarr-* ‘chin’, are restricted to one extreme end of the continuum. Those that only have a generic reading, such as *mak-* ‘place’ and *yak-* ‘river’ are restricted to the other extreme end. A continuum analysis can explain the range of uses of incorporated nominals, from referring to parts of humans, to parts of non-humans, and to (whole) inanimate items.

However, there are important asymmetries in this continuum. First of all, the type of element that is incorporated differs: in the part-whole construction, the incorporated element is the part, which we can call the *subset* (the ‘whole’ being the *superset*). By contrast, in the generic-specific construction the incorporated element is the generic, or the *superset* (the specific being the *subset*). And secondly, for the part-whole relation, the pronominal prefix on the verb can represent either the part (*subset*) or the whole (*superset*) (section 7.2). But in the generic-specific construction the prefix can only represent the external specific noun (*subset*). This asymmetry can be represented as follows (where X represents the prefix and IN the incorporated nominal).



Associated with the body part reading is the notion that the incorporated nominal represents a member of the subset. And associated with the generic reading is the notion that the incorporated nominal represents the superset, and that the pronominal prefix on the verb represents the subset. In between these two extreme ends of the continuum we find incorporated generics functioning as parts/subsets, as in (28), and body parts leaning towards a generic/superset usage, as in (29).

This asymmetry helps in restricting which nominals can incorporate. That is, a mechanism is required to rule out examples like *1-baby-hurts ‘my baby hurts’ and *2-house-big ‘your big house’. In this analysis these are ungrammatical because ‘baby’ is not a subset of ‘me’, and ‘house’ is not a subset of ‘you’.

Evans (1996) discusses a similar difference in which element is incorporated in the part-whole and generic-specific constructions in Mayali. He suggests that this asymmetry helps to explain why incorporating languages do not always use the same construction for the part-whole and generic-specific relations. Ngan'gikurungurr (Reid 1982), for example, allows incorporation of body parts but not of generics (Evans 1996: 102-3). On the other hand, Evans notes, the constructions are sufficiently similar to explain their recurrent morphosyntactic encoding in the world's languages: both involve thinking of one thing as another thing. In the generic-specific construction, one thinks of a specific entity X as a type of generic entity Y (e.g. 'snakes' are thought of as a type of 'long and flexible things', as are 'ropes', 'hoses', etc.). In part-whole constructions, when one thinks of a part X, one is bound to consider the existence of the whole Y (e.g. if one thinks of 'my leg', one will also think of 'me'). These common semantics help explain why the two constructions are treated in a grammatically identical way in Mayali, Enindhilyakwa and many other of the world's languages.

7.6 Suppletion and morphological reshaping

More than half of the 80 or so incorporated nominals in Appendix N are suppletive. The free noun that corresponds to the incorporated form *adheng-* 'face' in (26a), for example, is *amukurra* 'NEUT.face'. The incorporated form for 'place, camp' is *mak-*, contrasting with the free form *angalya* 'NEUT.place'. Generics in Gunwinyguan languages do not often exhibit such widespread suppletion. In the Bininj Gun-Wok dialect chain, for instance, most incorporated body parts and generics are identical to their free forms minus their noun class prefix (Evans 1996, 2003a). Mayali exhibits only one suppletive incorporated form, *bo-* 'water' (free form: *gukku*). Kune and Kuninjku have two suppletive incorporated forms: for 'water' (*kolk-* versus *kun-ronj*), and 'shit' (*kord-* versus *kudduk*). The only suppletive form in Ngalakgan is also the root for 'water' (free form *we?*, incorporated form *binyi-*) (Evans 1996: 105). In Ngandi, the incorporated form for 'water' is suppletive as well (*bun-* versus *(ku)djark*), but this language has seven additional suppletive forms, including the words for 'smell', 'taste' and 'behaviour' (Heath 1978a: 116). Wubuy is similar to Enindhilyakwa in having about fifty cases of suppletion, a third of which are body parts, and which also includes the incorporated root *ar-* 'water' (free forms *gugu* 'fresh water' and *lhagayag* 'salt water') (Heath 1984: 465). However, many incorporated forms are formally very similar to their cognate noun in Wubuy, which is not the case in Enindhilyakwa. In Tiwi (a language isolate) verb-incorporated generics are also distinct from their free forms (e.g. *mangu-* 'fresh water' vs. *kukuni*; *keli-* 'eye' vs. *pithara*) (Osborne 1974: 46-50, cited in Sands 1995: 273).

The following examples from Mayali and Wubuy illustrate the frequent formal similarity of incorporated and free forms. The Mayali incorporated generic *dulk-* in (32a) represents the noun *kun-dulk* ‘tree’, and Wubuy *rnuga-* in (32b) represents the noun *mana-rnuga* ‘stone’.¹² The incorporated forms occur without their class marker.

- (32) a. *Gabani-dulk-di an-dubang.*
 3uaNP-tree-stand.NP VEG-ironwood
 ‘Two ironwood trees are there.’ Mayali (Evans 1996: 80, ex. 43)
- b. *ma-rnuga-ngu-burra mana-rnuga*
 VEG-stone-linker¹³-sit.NP2 VEG-stone
 ‘the stone sits’ Wubuy (Heath 1984: 464, ex. 14.ii)

In Enindhilyakwa, such formal similarities between an incorporated and a free form are very rare. For example, the free noun *eeka* ‘NEUT.tree, wood, stick’ can be represented by a variety of incorporated generics, none of which resemble the noun. These generics emphasise different features of a tree, such as its shape: ‘tall’ in (33a), ‘flat’ in (33b), or ‘short and fat’ in (33c), to name a few. Alternatively, a generic can refer to the foliage of a tree (33d), or its bark (33e).

- (33) a. *a-lhvnga-dhvrralhvnga eeka*
 NEUT-tall.and.standing-heaped.up NEUT.tree
 ‘tall and lumpy tree (with lumps protruding from the trunk)’ (JS2 p.135)
- b. *a-biyakarbiya a-rembv-remberr-bvrra eeka*
 NEUT-three NEUT-RDP-flat-wide NEUT.tree
 ‘three flat pieces of wood’ (GED p.196)
- c. *a-rrakv-rrakv-dharrba eeka*
 NEUT-RDP-short.and.fat-short NEUT.tree
 ‘short, fat pieces of wood’
- d. *na-lhungku-warri-ji-na arrvrra*
 NEUT/NEUT-foliage-move-CAUS-NP2 NEUT.wind
 ‘the wind is shaking the tree’ (Ansec2)
- e. *narrv-ma-rija-ngv-ma mv-ngarrkv-wurrvmalyi=yadha*
 3a-VEG-rub-P2-ma VEG-rough.skin-smooth=PURP
 ‘they rubbed it [*membvrrkwa* ‘VEG.ironwood tree’] to make it smooth’ (GED p.197)

These examples show that generics add nuances to the meaning of the external nominal. In (33a), *lhvnga-* specifies that the tree is tall; *remberr-* in (33b) tells us that the wood is flat, and so on. Such is the typical semantic function of noun classifiers/generics (Aikhenvald 2000: 84).

Interestingly, the generic *ika-* ‘fire, firewood, glowing things, light source’ is formally similar to the noun *eeka* ‘NEUT.tree, wood, stick’, minus its NEUT noun class prefix *a-* (cf. rule P-6: /a/ + /i/ > [e]). This generic has cognates in (at least) two other languages: the suppletive incorporated root

¹² Heath (1984: 464) rather unenthusiastically suggests some sort of copying rule for Wubuy, according to which the root of an external NP is copied into the verb or predicative adjective. He acknowledges however that this rule would run into problems for the suppletive forms.

¹³ This ‘linker’ is a meaningless epenthetic element inserted at certain morpheme boundaries before a stop (Heath 1984). This morpheme may be cognate to the Enindhilyakwa ALP prefix *ng-* (section 3.4.5.3).

Free form	Incorporated form	Body part meaning	Generic meaning
<i>alhakba</i> ‘NEUT.leg’	<i>lhakba-</i>	‘leg’	‘short and upright’
<i>angvrnda</i> ‘NEUT.chin’	<i>ngvrndvrr-</i> ~ <i>ngvrndarr-</i>	‘chin, jaw’	-
<i>angurnda</i> ‘NEUT.ankle’	<i>ngurndvrr-</i>	‘ankle’	?’fruit’
<i>arnda</i> ‘NEUT.elbow’	<i>arnda(k)-</i> ~ <i>arndvrr-</i>	‘elbow’	‘outside edge’
<i>arra</i> ‘NEUT.forehead’	<i>rra-</i>	‘forehead’	‘short, fat, sticking out’
<i>(mv)mvilha</i> ‘VEG.nostril hair’	<i>mvilh-</i>	‘hair’	‘grass’
<i>yingamba</i> ‘MASC.groin’	<i>amba-</i> ~ <i>ngamba-</i>	‘groin’	‘hollow, shallow open U-shape’
<i>yiraka</i> ‘MASC.didgeridoo, trachea’	<i>ra-</i>	‘trachea’	‘hollow and round’
<i>amungkurra</i> ‘NEUT.cheek’	<i>mungskurr-</i>	‘cheek, eye, face’	‘(heap of) round things’
<i>alhvka</i> ‘NEUT.foot’	<i>lhvkarr-</i>	‘tracks’	‘road, canoe’
<i>arvngka</i> ‘NEUT.head’	<i>rvng-</i>	‘eye’	‘house’
<i>memvrrma</i> ‘VEG.back of neck’	<i>mvrr-</i> [ex. 8b] <i>memvrr-</i> [ex. 28a]	‘back of neck’	-

Table 7.2: Incorporated generics formally similar to free body part nouns

Many incorporated forms in this table and in Appendix N end in *-rr*. In the more transparent forms this segment appears to be a suffix, as in *ngurndvrr-* ‘ankle’ (cf. *angurnda* ‘NEUT.ankle’) and *lhvkarr-* ‘tracks’ (cf. *alhvka* ‘NEUT.foot’). This suffix could be analysed as an archaic marker of incorporated nouns.

When the following stem starts with a vowel, liquid or glide, /k/ is inserted between a productively incorporated nominal and its host. This happens regardless of whether the incorporated nominal ends in a vowel or in a consonant. An epenthetic vowel is inserted after the epenthetic /k/ when this is followed by a liquid or glide (rule P-1). No /k/ is inserted when the following stem starts with a stop or nasal. The /k/ insertion rule is formalised in (35) and illustrated in (36).

(35) /k/-insertion: $\emptyset \rightarrow k / X- ___ [+continuant]$
where X- is a productively incorporated nominal

(36) a. *mv-ngarr-balhvwalha madha*
VEG-ear-wide VEG.ear
‘ears sticking out (teasing)’
b. *a-ngarr-mvlhv-mvlha*
NEUT-rough.skin-RDP-coarse
‘metal rasp’

(VL1 p.151)

- c. *dh-embirri-jvrrvrra dh-adhv-mamuwa*¹⁵ *jukujuku-lhangwa*
 FEM-round-long FEM-f-round chicken(FEM)-POSS
 ‘ovoid egg of a chicken’ (JS2 p.133)
- d. *nvmv-ngarrki-yindhe-na madha*
 VEG-ear-hurt-NP2 VEG.ear
 ‘ear is hurting’
- e. *nvmv-ngarrki-lyangbadhv-na mijiyanga*
 VEG-rough.skin-anchor-NP2 VEG.ship
 ‘the ship is anchored’ (WD)
- f. *akv-nv-lhabvrrkv-rrvngkv-na-ma*
 IRR.12a-3m-face-see-NP2-*ma*
 ‘we will see him face to face’
- g. *nvngv-ngarrk-awarriya amakulya*
 1-rough.skin-bad NEUT.skin
 ‘I have dry scaly skin’

The stem begins with a stop in (36a,c), a nasal in (36b), a glide in (36d), a lateral in (36e), a rhotic in (36f), and a vowel in (36g); /k/ only appears in the latter four as predicted by the rule in (35).¹⁶

An alternative analysis is that /k/ is the final consonant of the incorporated nominal, which is deleted when the following stem begins with a stop or nasal. However, Wubuy has a similar phonological rule to the one in (35), suggesting that /k/ insertion is a common phonological process in the two languages. In Wubuy /k/ is inserted between an incorporated nominal or derivational prefix and a stem starting with a vowel (Heath’s 1984 “Velar Insertion rule”). An example is the verb root *-abi-* ‘to jump’, which, when combined with the derivational prefix *ngarrarn-* ‘multiple’, becomes *-ngarrarn-kabi-* (ibid p.48). The precise conditions for /k/ insertion differ in the two languages: in Wubuy, the incorporated morpheme has to end in a stop or nasal and the following stem has to begin with a vowel, whereas in Enindhilyakwa the only condition for /k/ insertion is that the following stem begin with a continuant.¹⁷

¹⁵ The adjective *-mamuwa* is most likely a lexicalised inalienable possession construction, which explains the appearance of the feminine gender prefix *-adh*, which normally only occurs with derived nouns (see section 3.4.5.1 for a description of the INALP construction). I propose this form to be lexicalised because: (i) it can incorporate a generic (e.g. *arrk-amamuwa* [NEUT.small.and.round.and.many-round] ‘tablets’ (WD), and (ii) it can take another INALP prefix (e.g. *a-m-amamuwa jinaba* [NEUT-INALP-round gun(NEUT)] ‘bullet’ [JS2 p.132]).

¹⁶ There are a few cases in which a /k/ occurs before a stem-initial stop, such as *n-arndak-biyiya* [3m-elbow-big] ‘big, strong, muscly man’ and *nvm-arrk-ba-ma* [VEG-small.and.round.and.many-hit.p2-*ma*] ‘a wave hit [the boat(VEG)]’. Since there is no motivation for epenthetic /k/ here, this suggests it is underlying.

¹⁷ Another reason for assuming that /k/ is inserted in certain environments rather than deleted in others, could be that it may correspond to the glottal stop /ʔ/ that appears at certain morpheme boundaries in a number of Gunwinyguan languages. The glottal stop (orthographic symbol: *q*) is phonemic in all Gunwinyguan languages except Wubuy (Harvey 2003a), and Enindhilyakwa (see Chapter 2). Harvey (2003a: 218), following Trubetzkoy (1969: 275-9) analyses *q* as a boundary signal in the Gunwinyguan languages (see also Baker 2008a). He reconstructs **q* with a boundary-marking function for nominal roots in the eastern Gunwinyguan languages. The fact that epenthetic *k* appears at the same position in Enindhilyakwa and Wubuy could mean that it is related to the eastern Gunwinyguan **q*. The fact that epenthetic *k* is phonologically conditioned in Enindhilyakwa and Wubuy could indicate phonological erosion: only traces of **q* are left in these languages, in specific phonological environments.

Final nasals of incorporated roots that fail to be marked with /k/ frequently assimilate in place to the following consonant.¹⁸ This is illustrated here for the generic *abvrrvng-* ‘fluid’.

- (37) a. *abvrrvngk-awarriya engeemina*
 NEUT.fluid-bad NEUT.breast
 ‘bad tasting breast milk’ (Ansec2)
- b. *nuw-abvrriny-jalhe-na*
 NEUT-fluid-hang.out-NP2
 ‘fluid leaking out’ (Ansec2)
- c. *m-abvnh-dhebvrra makarda*
 VEG-fluid-empty VEG.sea
 ‘empty sea’ (JS2 p.142)

In (37c) the generic is further reduced, losing an entire syllable. The following are some more examples of reduction of generics: the root *mangbvrr-* ‘hand’ is reduced to *mangb-* ~ *mamb-* in (38a) and to *man-* in (38b) (here, the final nasal assimilates to the following lamino-dental stop).

- (38) a. *ying-akv-mamb~mangb~mangbvrrk-ardharrv-ma*
 3f.O-NEUT.S-hand-jab.P1-*ma*
 ‘it [stick(NEUT)] jabbed her hand’
- b. *ying-akv-manh-dhadhv-ma*
 3f.O-NEUT.S-poke.P1-*ma*
 ‘it [stick(NEUT)] poked her hand’

Such drastic and widespread phonological reduction is not common in the Gunwinyguan languages. In Biniñ Gun-Wok, for instance, most incorporated nominals are identical to their free forms minus their noun class prefix, with only some minor phonological changes (Evans 2003a).

7.7 Origin of generics

There are reasons to believe that incorporated generics may have developed from body part nominals through semantic extension. First of all, as repeatedly mentioned, a generic may be formally identical to an incorporated body part, and have a related meaning: *ngarr-*, for instance, refers to ‘ear’ and also to ‘items with rough skin’ (e.g. bark, reptiles, etc., as in [33c,e,g]). Secondly, only incorporated body part nominals may have attestations as free forms (although the majority is suppletive). Examples were given in Table 7.2 above. Incorporated generics are not attested as free nouns in Enindhilyakwa.¹⁹ Thirdly, some of the Enindhilyakwa suppletive incorporated body parts correspond to free forms in other languages. I already mentioned *lyang-* ‘head’, which is related to the free forms *rlaang* ‘head’ in Wubuy and *rlong* ‘head’ in Ngandi. Table 7.3 presents the correspondences that this study has uncovered of Enindhilyakwa

¹⁸ Assimilation of nasals to following consonants also happens in Wubuy: cf. Heath’s (1984) rule P-27.

¹⁹ With the exception of *ika-* ‘fire’ discussed in the previous section, which related to the noun *eeka* ‘NEUT.tree’. Based on correspondences of *ika-* in other languages (e.g. Wubuy *yika-* ‘fire’), however, I suggested that the incorporated form is archaic, and that the free noun *eeka* ‘NEUT.tree’ is derived from it.

incorporated body parts to free body part nouns in Wubuy (Heath 1982, 1984) and proto-Gunwinyguan (pGN) (Harvey 2003a).²⁰

Enindhilyakwa incorporated body part	Wubuy free body part	pGN free body part
<i>lhabvrr-</i> ‘face, nose’	<i>dhaarrak</i> ‘beard’	* <i>dhawarrak</i> ‘beard’
<i>lyang-</i> ‘head’	<i>rlaang</i> ‘head’	* <i>rlong</i> ~ * <i>long</i> ~ * <i>rong</i> ‘head’ (Ngal: <i>rlong</i> ‘head’; Ngai: <i>rong</i> ‘chin, face’)
<i>yeng-</i> ‘voice’	<i>yang</i> ‘voice, sound’	* <i>yang</i> ‘language’
<i>lharr-</i> ‘bones, leg’	? <i>lharrbij</i> ‘leg’	* <i>dharr</i> ‘thigh, leg’
<i>werri-</i> ‘chest, emotions’	<i>wurrij</i> ‘chest, emotions’	
<i>mvrr-</i> ‘face, eye, cheek’	<i>yimurrk</i> ‘nose’	
<i>marrang-</i> ‘hands’	<i>marang</i> ‘hands’	

Table 7.3: Enindhilyakwa incorporated body parts corresponding to free forms in Wubuy and pGN

These correspondence sets suggest that the incorporated body parts in Enindhilyakwa are archaic, as they are also found in other languages. Their generic meanings (if present, see Appendix N) then developed later by semantic extension. Body parts are a semantic subgroup of nouns that frequently develop into generics/classifiers cross-linguistically (Aikhenvald 2000: 353). The fact that not all body parts have undergone a meaning extension, such as *lhabvrr-* ‘face, nose’ and *marrang-* ‘hands’, which only have a body part meaning, supports this hypothesis. Only in Enindhilyakwa have the free forms frequently been replaced, as suggested in section 7.6.

The meaning extension of body parts to generics is reminiscent of the semantic shift of body parts marked for inalienable possession (INALP) discussed in section 3.4.5.1 (Table 3.3), though in most cases the resulting meanings in the two constructions are different. For example, the body part ‘head’ marked for INALP refers to the top of something (e.g. *dh-adhv-m-arvngka dvrija* [FEM-f-INALP-NEUT.head dress(FEM)] ‘dress bodice’). As an incorporated generic, on the other hand, ‘head’ describes items as having a similar shape and hardness (such as *angwarnda* ‘NEUT.rock’ in [25b]). Another example is the noun *yukudhukudha* ‘MASC.chest’: when marked for INALP it refers to a convex shape (e.g. *a-mi-yukudhukudha alhvka* [NEUT-INALP-MASC.chest NEUT.foot] ‘ball of foot’), whereas as a generic it refers to emotions (‘chest’ being the seat of emotions, as in many Australian languages). In other cases the meaning extensions of the body parts in the two constructions have had similar results. The nominal ‘lips’, for instance, refers to a thin lining of something, whether marked for INALP (e.g. *ma-m-alyeyikba menba* [VEG-INALP-NEUT.lips VEG.eye] ‘eyelid’), or as an incorporated generic. More similarities can be found when comparing Table 3.3 and Appendix N. Note that the INALP construction uses free nouns that maintain their noun class prefix, whereas noun incorporation often uses forms that are not attested as free forms.

²⁰ These correspondences involve a number of regular sound changes, to be discussed in detail in Chapter 9. Some of the changes exhibited here are: **dh* > *lh* and **rl* > *ly*.

This indicates that INALP is synchronically more productive than noun incorporation - as was suggested in Chapter 3.

Some incorporated generics lack a body part meaning. These roots are of two types (see also Leeding 1996: 201). One type has a noun-like meaning, such as *mak-* ‘place, camp’ (free form: *angalya*); *yak-* ‘river’ (free form: *adhalyvma*), *merrk-* ‘sun, full moon’ (free forms: *mamawura* ‘VEG.sun’, *yimawura* ‘MASC.moon’); *ika-* ‘fire, light source’ (free forms: *angura* ‘NEUT.fire’, *ekalhara* ‘NEUT.burnt off bush’, etc.); *lharrngk(w)-* ‘things’ (which lacks a corresponding free form); *anjalk-* ‘cloth’ (free form: *dhanjalka* ‘FEM.old women’s dress’). An example of each is given below. The fact that the root-final /k/ is also present when followed by a stop or nasal indicates that it is underlying, and not inserted by the phonological rule proposed in (35) above.

- (39) a. *a-mak-balhuwalha angalya*
 NEUT-place-wide NEUT.place
 ‘wide place’ (Ansec2)
- b. *eeka a-yakv-bidjina adhalyvmv-manja*
 NEUT.tree NEUT-river-beside NEUT.river-LOC
 ‘tree beside the river’ (JS2 p.106)
- c. *me-merrk-bvddha mamawura*
 VEG-round-strong VEG.sun
 ‘strong light/sun’ (Ansec2)
- d. *ne-ka-barrv-na angura*
 3m/NEUT-fire-split-P2 NEUT.fire
 ‘he split the fire in half’ (Ansec2)
- e. *a-lharrngkv-lharrngkv-dharrba*
 NEUT-RDP-things-short
 ‘many short things’ (VL1 p.154)
- f. *nara anjalk-abvrrv-ma dhvrija*
 NEG NEGNP.cloth-put.down-NP3 dress(FEM)
 ‘don’t put the dress down’ (Ansec2)

Some Enindhilyakwa generics have correspondences in other languages that are free nouns, listed in Table 7.4.

Enindhilyakwa incorporated generic	Wubuy free noun	pGN free noun
<i>akbal-</i> ‘plain, flat area’	<i>abarla</i> ‘plain, flat area’	* <i>kabbal</i> ‘plain, flat area’
<i>mvnjvrr-</i> ‘skin, body, bark, leaves’	<i>manjarr</i> ‘leaves’	* <i>manjarr</i> ‘leaves’
<i>jalk-</i> ‘ground’		* <i>jolkko</i> ‘ground’
<i>ika-</i> ‘fire’	<i>yika-</i> ‘fire’ (incorporated form)	
<i>mak-</i> ‘place, camp’		(Wambaya: <i>maka</i> ‘camp’ [Jane Simpson, p.c.])

Table 7.4: Enindhilyakwa incorporated generics corresponding to free nouns in other languages

In this table we find one body part meaning that appears to have developed from a generic meaning, which is the reverse direction from the one proposed above: *mvnjvrr-* ‘skin, body, bark, leaves’ is conceivably related to pGN **manjarr* ‘leaves’. If this is correct, it indicates that semantic extension may have taken place in two directions: body part > generic, and generic > body part. However, the former shift is much more common than the latter.

The second type of generic that is unrelated to a body part classifies a variety of nouns according to their shape. Examples include *embvrr-* ‘round’; *alh-* ‘long and thin’; and *rrek-* ‘long and flexible’:

- (40) a. *m-embvrr-mvrdha*
 VEG-round-dark
 ‘dirty VEG class round thing, e.g. plate’ (VL1 p.149)
- b. *al-jvrrvrra* *amarda*
 NEUT.long.and.thin-long NEUT.grass
 ‘long grass’ (= [2b])
- c. *nvngv-rrek-abvrra* *hose*
 I/NEUT-long.and.flexible-put.down.P1 " (NEUT)
 ‘I put the hose down’

Presumably due to their semantics, Leeding (1989, 1996) claims that these roots are incorporated adjectives. However, this is unlikely, as adjectives do not tend to develop into generics/classifiers cross-linguistically (Aikhenvald 2000: 353). These forms are not cognate with free adjectives, and there is no other evidence of adjectives being incorporable in Enindhilyakwa. Therefore I suggest that these incorporated roots derive from incorporated nouns, just like other generics do. This is supported by the existence of apparent cognates in Wubuy: *embvrr-* ‘round’, for example, may be cognate with Wubuy *amburru* ‘rainbow’, and *amba-* ‘hollow’ may be related to Wubuy *ramba* ‘boat, canoe’. However, often the origin of generics that describe shape but that do not derive from a body part is unclear.

In sum, I propose that Enindhilyakwa provides evidence for Mithun’s (1984a) proposal that verb-incorporated generics originate from noun incorporation (see also Sands 1995: 274): one main source of incorporated generics in Enindhilyakwa is body parts. These have extended their meaning and can now be used to classify inanimate objects according to one or more of their features (these can be inherent features, such as its shape, or a generic can bring out features that are not necessarily inherent but provide a different perspective on the object). Generics may also have originated from the incorporation of a generic noun. This is suggested for a handful of suppletive forms, e.g. *mak-* ‘place, camp’; *yak-* ‘river’; and *ika-* ‘fire’, which may have correspondences in other languages and which are the kind of generics that typically incorporate in other languages (see e.g. Evans 2003a for BGW). The origin of the remaining generics is less clear because of the absence of cognate nominals, language-internally as well as in other languages.

7.8 Semantics of generics

The use of generics to classify nouns offers us a unique insight into how people categorise the world through their language (Aikhenvald 2000: 5). Royen (1929) points out that nominal classification systems do not classify in an abstract-logical way, as language is not a strictly logical system, but rather a psychological event that is more than just speculative logic. Therefore, an interdisciplinary approach - including anthropology, psychology and sociology - is a requirement for any research and analysis of generic systems (Royen 1929, cited in Senft 2000: 25).

An interdisciplinary approach does not lie within the scope of this thesis, but we can ask ourselves what do we actually do when we try to describe and analyse the semantic domains of generics? Senft (2000: 25-6) observes that we usually start by labelling semantic domains according to certain (presumably universal) features including humanness, animacy, sex, shape, size, and so on. The danger is that this ordering results in ‘static’ semantic domains that we treat as if they were static wholes that were actually to be found in the language - but they are just the result of our pre-analytical classifications. It is tempting to present a nicely ordered system of semantic classification, Senft states, but this does not represent the reality of the actual linguistic system to be described. The actual system is a dynamic one, displaying a dynamic interaction between the semantic domains. The semantic domains thus have fluid boundaries and generic/classifier categories have fuzzy edges and graded membership (Craig 1986: 1).

The fuzzy category edges of generics are also evident in Enindhilyakwa. Generics can classify a variety of nouns, which sometimes seem to have no common semantic ground. Consider for example *mvlh-*, which can refer to ‘hair’, ‘head’, ‘mind’, ‘stone’, ‘feathers’ and ‘tealeaves’:

- (41) a. *ma-mvlkv-mvradhadha mamvngba*
 VEG-hair-bright VEG.hair
 ‘fair hair’
- b. *nenv-mvlhvk-ba-mvrra enungkwa-mvrra*
 3m/3m-head-hit.P2-*ma* NEUT.spear-INSTR
 ‘he hit him in the middle of the head with a spear’
- c. *ma-mvlhvk-ambilyuma mangma*
 VEG-mind-two VEG.mind
 ‘two minds’
- d. *nvmv-mvlhvk-ardji-na-mvrra malharra*
 VEG-stone-be.upright-NP2-*ma* VEG.stones
 ‘stones piled up’
- e. *wurrv-mvlk-awarriya*
 COLL-feather-bad
 ‘out of shape feather’ (*wurrajija* ‘COLL.bird’)
- f. *na-mvl-kwa-ji-na*
 3a-long.and.thin-give-RECP-NP2
 ‘they leave tea leaves in bucket, or hair standing out’

(WD)

The large range of meanings of this root could be due to various meaning extensions, all diverging from the basic body part meaning ‘hair’:^{21,22}

- (42) hair → head → round and hard → stone
 hair → head → mind
 hair → feather
 hair → long thin things like tealeaves

Determining the semantics of generics is thus not an easy task. The meanings listed in Appendix N are based on the work of Leeding (1989, 1996), and, especially, the unpublished ‘ANindilyakwa SECondary roots’ files (Ansec1 and Ansec2) - combined with my own fieldwork and study of the data. The basic meaning of most generics involves shape. This is especially the case for generics that originate from body parts, as they denote a shape related to the shape of the body part. Other physical features expressed by generics are size, flexibility and hardness. Enindhilyakwa thus conforms to Friedrich’s (1970: 404, cited in Senft 2000: 24) characterisation that the feature ‘shape’ is the ultimate semantic primitive. Generics give subtle nuances to the expression of shape:

- (43) a. *y-embirrkv-mamuwa yimendhv-lhangwa*
 MASC-round-egg MASC.turtle-POSS
 ‘the round egg of a turtle’ (JS2 p.133)
- b. *dh-embirri-jvrrvrra dh-adhv-mamuwa jukujuku-lhangwa*
 FEM-round-long FEM-f-egg chicken(FEM)-POSS
 ‘the ovoid egg of a chicken’ (= [31b])

Evans (1996: 78) notes that the incorporated root *guk-* ‘body’ in Mayali, though basically a body part, can sometimes be used as a sort of dummy generic, to make up for the lack of a generic for humans or animates. The incorporated body part *ruk-* in Enindhilyakwa seems to have a similar function. This root means ‘foot’ in (44a), and, by extension, ‘body of creature with feet’ in (44b) and ‘body’ in general, in which case it can also refer to inanimates, as in (44c). This root can also be used as a dummy generic referring to humans, where it is bleached of this meaning (45).

- (44) a. *na-ruku-dhadhv-nv-mvrra alhvka*
 NEUT-foot-burn-P2-*ma* NEUT.foot
 ‘his foot was burnt’
- b. *nga-ruku-dhakv-na dharruwurukukwa*
 IMP.2/FEM-body-cook-NP2 FEM.dove
 ‘cook the doves!’ (JW p.169)

²¹ Note the existence of the generic *alh-* ‘long and thin things’ (e.g. ‘grass’ in [40b] above). This root is conceivably related to *mvlh-*, the latter possibly involving an archaic VEG class prefix *m-*, and the former a NEUT class prefix *a-*.

²² An alternative explanation for this polysemy is that ‘head’ is the basic meaning from which the other meanings derive: head → hair → “hair” of tree → leaf, and head → hair → body hair → feather. I thank Maïa Ponsonnet for pointing out this possibility (email, 13/12/2011).

c. *wu-ruku-warrukwa-ji-ya* *bread*
 IMP.2a/NEUT-body-move-CAUS-NP1 " (NEUT)
 'turn over the bread!'

- (45) a. *nv-ruki-lyuwaka-jungu-nv-ma*
 3m-body-circle-REFL-NP2-*ma*
 'he is going around and around in circles' (JS2 p.130)
- b. *yirrv-mvrndakv-ruk+bijangee-yi-na*
 13a-many-body+jump-RECP-P2
 'we all jumped off' (VL1 p.467)
- c. *yingu-ruk-awiyeba dh-akina-lhangwa-manja*
 3f-body-enter.P2 3f-that-POSS-LOC
 'she went into her [poison cousin's house]' ('Crocodile and Bluetongue')

The incorporated form *ing-* appears to be used for unspecified things (Leeding 1989: 194; Waddy p.c.), including "whatsit".²³ The use of this root is illustrated in the following example, where the narrator is watching an animal that is running some distance away.

- (46) "*Yirukujilhangwa=bu*", *nvngi-yama=dha. Nvng-andheeya akena ngalha-ja*
 MASC.bandicoot=MIST.TH 1-say.P2=TRM 1-look.P2 but NEUT.PRO-CofR
ne-ng-bijangi-na.
 NEUT-UNSPEC-jump-P2
 "It's a bandicoot", I thought [but it wasn't]. I watched, and it jumped.' ('Bujikeda' y18-21)

Finally, reduplication of a generic expresses plurality, as in (39e) above and (47a), or intensification (47b).

- (47) a. *a-rrakv-rrakv-dharrba* *eeka*
 NEUT-RDP-short.and.fat-short NEUT.tree
 'short, fat pieces of wood' (Ansec2)
- b. *a-lhungku-lhungku-wilyarra*
 NEUT-RDP-foliage-middle
 'middle of dense foliage' (VL1 p.159)

²³ According to Leeding (1989), *ing-* can also instantiate the nominaliser (*ng*)*kw-* or adjectiviser (*ng*)*k-* prefix (the *i* vowel presumably being generated by a number of phonological rules). She claims that when the identity of an incorporated object is unknown, due to distance or darkness, the nominaliser or adjectiviser can be substituted for the incorporated root, as in the following example. (This claim is cited in Sands 1995: 272-3).

- (i) *n-ingk-arrngv-na*
 3m-ASR-chop-P2
 'he chopped it' (VL1 p.363)

However, in section 3.4.6 (fn38) I argued that there is no evidence for the existence of an adjectiviser in Enindhilyakwa. There is only the nominaliser prefix *k-*. Moreover, the substitution of an incorporated object by a derivational prefix is theoretically unmotivated, because this prefix does not change the word class and the result is still a verb. Therefore, I exclude the possibility of inserting a derivational prefix in lieu of a body part or generic; rather *ing-* is used as a generic for 'unspecified' items.

7.9 Non-referentiality of incorporated nominals

Mithun (1984a) observes that, although the identity of incorporated nominals is often deducible from context, they themselves are not, strictly speaking, referential. They are not normally used to establish discourse referents. This is expected, given their cross-linguistically common function of backgrounding of old or insignificant information. Rather, incorporated nominals qualify - or, as Rosen (1989) puts it, they add selectional restrictions to the verb. The external NP must be within the class of objects delineated by the incorporated nominal root.

Incorporated nominals in Enindhilyakwa also appear to be non-referential. Their only function is to classify and, therefore, to narrow down the range of possible referents of one of the verb's arguments: the external NP must be within the class of objects delineated by the incorporated nominal - whether these are body parts or generics. Incorporation of a body part delineates which part of the whole the action denoted by the verb applies to. Incorporation of a generic adds the selectional restriction that the external specific nominal must be properly included in the set delineated by the generic.

The non-referentiality of incorporated nominals is supported by the fact that they are compatible with fully specified NPs, as in (48) and many of the above examples. If they functioned to establish a discourse referent, this doubling would be unnecessary.

- (48) a. *Nara ngu-ngurndvrrk-badjv-ma angurnda-manja!*
 NEG NEG-ankle-hit-NEGNP NEUT.ankle-LOC
 'Don't hit his ankle!' (= [10b])
- b. *Ne-yaku-warrukwa ebina adhalyvma m-ebina-lhangwiya*
 NEUT/NEUT-river-go.across.P2 NEUT.that.same NEUT.river VEG-that.same-ABL.PRG
mamarra.
 VEG.small.leaved.paperbark
 'It [cat(NEUT)] crossed the river along the paperbark.' ('Bujikeda' y44)

The incorporated nominals put selectional restrictions on the verb, as the external NP must be within the class of objects delineated by the incorporated nominal root (Rosen 1989). Thus *ngurndvrr-* in (48a) delimits the hitting to just the 'ankle' part of the direct object, and *yak-* in (48b) narrows the range of arguments to 'rivers' only. Incorporated nominals can also classify items that are indefinite, non-specific and non-referential, as in the following excerpt from *Merra* 'String' (next page). This story is about a potential event in the future (as indicated by the Irrealis prefix) of going to the forest and digging roots for making string. The generic *alh-* in the last word of this passage limits the range of possible direct objects selected by the verb to 'long and thin' things. The long and thin bits of the *mukuwara* 'cocky apple tree' are its roots. That the roots are indefinite and non-specific here comes from the fact that collecting the roots is a hypothetical event in the future of collecting an undefined number of roots for making string.

- (49) *Biya nara mabalba, mu-wurrariya, vmba mukuwara nvngk-ena*
 and NEG VEG.peanut.tree VEG-bad but VEG.cocky.apple 2-this
kv-mungkwadhv-na-ma=dha. Mukuwara m-akina m-eningaba kayuwa-lhangwa.
 IRR.2-dig-NP2-*ma*=EMPH VEG.cocky.apple VEG-that VEG-good dillybag(VEG)-DAT
Kv-mungkwadhv-na-ma biya kvm-adhabaje-na-ma kvm-alkv-rerrma-ji-na-ma.
 IRR.2-dig-NP2-*ma* and IRR.2/VEG-hit-NP2-*ma* IRR.2/VEG-long.and.thin-dry-CAUS-NP2-*ma*
 ‘Don’t [get roots of] peanut tree, it’s no good, but dig [roots of] cocky apple tree. Cocky apple
 tree is good for dillybags. You dig [up roots] and crush them [and] dry them in the sun.’
 (‘Merra’ n3-10)

7.10 Apposition

Part-whole and generic-specific constructions often share the same surface syntax in Australian languages. They are typically analysed as appositional structures, in which neither nominal can be clearly identified as the head of the phrase (e.g. Hale 1981 for Warlpiri; Blake 1983 for Kalkatungu; Evans 1995 for Kayardild; Evans 1996 for Mayali; Wilkins 2000 for Mparntwe Arrernte; Evans 2003a for Biniñ Gun-Wok; Gaby 2006 for Kuuk Thaayorre; see also Nordlinger & Sadler 2008; Sadler & Nordlinger 2009). The nominals in these constructions jointly refer to the same entity and they hold the same grammatical relations to the verb. Evans argues explicitly for Kayardild (1995) and Mayali (1996) (which is part of Biniñ Gun-Wok dialect chain) that “there are no syntactic reasons for considering one nominal to be the head, and it is better to treat them as apposed nominals” (1995: 247). Similar arguments have been advanced for analogous constructions in other Australian languages.²⁴

The appositional nature of the part-whole and generic-specific relations is especially evident in dependent-marking Australian languages, where these nominals are all inflected for the same case feature. This is illustrated in (50a) from Martuthunira (PN, West Australia), where the ‘parts’ and the ‘wholes’ are all in ACC case. Likewise, the generic and specific in (50b) from Kalkatungu (PN, Queensland) are both in DAT case.

- (50) a. *ngayu nhuwa-rninyji nyimi-i, ngurnaa muyi-i, jal.yu-u thani-l.yarra-waara*
 1sg.NOM spear-FUT rib-ACC that.ACC dog-ACC occiput-ACC hit-REL-SEQ
 ‘I’ll spear that dog in the ribs, and then hit it in the back of the neck.’
 Martuthunira (Dench & Evans 1988: 16)
- b. *Nyayika ati-ntji ari-li thuwarr-ku.*
 I meat-DAT eat-APASS snake-DAT
 ‘I am eating snake.’ Kalkatungu (Blake 2001: 419, cited in Sadler & Nordlinger 2009)

²⁴ As Nordlinger & Sadler (2009) observe, some researchers have gone so far as to claim for particular Australian languages that these do not have noun phrases at all. Rather, nominals are seemingly juxtaposed without any evidence of syntactic asymmetry (e.g. Heath 1978a for Ngandi; Blake 1983 for Kalkatungu; Heath 1986 for Wubuy; Evans 1995 for Kayardild). It is unclear whether this is the case for Enindhilyakwa. On the one hand, there is no strict order for e.g. case-marked ‘modifiers’ and their ‘heads’, and both can function alone as the head. But on the other hand, when two or more oblique nominals in the same function are contiguous, only one of them needs to be case-marked. This will be discussed in more detail in section 8.10, where I will argue that this suggests the existence of an NP constituent. However, this does not necessarily imply that this must therefore be an NP with hierarchical relations; it is possible that an ‘NP’ consist of a string of nominals, without any syntactic dependency.

In head-marking Australian languages with productive noun incorporation (e.g. Enindhilyakwa, most Gunwinyguan languages, and Tiwi), the ‘part’ and the ‘generic’ can be incorporated, as was demonstrated for Enindhilyakwa in the preceding sections. Despite the lack of case-agreement, Evans (1996, 2003a) argues that the part-whole and generic-specific relations are also best analysed as appositional structures in Biniñ Gun-Wok, where incorporation picks out one of the apposed nominals. In the following part-whole examples from Mayali, the apposed nominals are juxtaposed (though discontinuous) in the syntax in (51a), whereas one of them is incorporated in (51b). A similar generic-specific pair from Mayali was given in (21) above.

- (51) a. *Bamurru a-bom gun-godj.*
 magpie.goose 1-shoot.PP IV-head
 ‘I shot the magpie goose in the head.’ Mayali (Evans 1996: 65, ex. 1)
- b. *Bamurru a-godj-bom.*
 magpie.goose 1-head-shoot.PP
 ‘I shot the magpie goose in the head.’ Mayali (Evans 1996: 65, ex. 4)

Evans (1996) claims that, aside from some pragmatic and discourse differences, the incorporated and unincorporated versions have the same meaning.²⁵

Such neat pairs of examples, where one has both the part and the whole, or the generic and specific, nominals occurring external to the verb, while in the other one of the two nominals is incorporated, are not attested in Enindhilyakwa. Generics only occur as incorporated forms, and free body part nouns are often suppletive with their incorporated form. (In addition, as mentioned in the introduction, nominal incorporated no longer appears to be used, so one cannot simply ask a speaker to produce incorporated versions of a part-whole construction.) However, there are some examples in the data of an both the part and the whole occurring external to the verb, i.e. that are syntactically in juxtaposition (though discontinuous).

- (52) a. *dh-akina na-milyirrkki-yindhe-na-ma amvdhilya*
 3f-that NEUT-body.fluid-ache-NP2-ma NEUT.cold
 ‘she has a bad cold’ (WD)
- b. *biya dh-akina-lhangwa dhv-dharrvngka arndvrnda na-werrik-arda-dha arakba*
 and 3f-that-POSS 3f-woman NEUT.heart NEUT-chest-hot-INCH.P2 compl.act
 ‘and his wife got very angry inside’ (Lit: ‘woman heart became hot’) (GED p.189)

²⁵ A third construction that may receive the same morphosyntactic encoding is secondary predication. In dependent-marking languages the nominals in the (a) part-whole, (b) generic-specific and (c) secondary predicate constructions may have identical case-marking, whereas in head-marking languages one of pair of the nominals may be incorporated, as happens in e.g. Biniñ Gun-Wok. Although incorporation of parts and generics is common in Enindhilyakwa, my data do not display incorporation of secondary predicates. Rather, these are adjectives, agreeing in noun class with their heads. Therefore, I will leave them out of the discussion here.

- c. *Arakbawiya warnvmamalya yingv-lhungkuwarrvngv-nv-manja*
 long.time.ago 3a.people FEM-grow-P2-LOC
dhinyinya abvrra-lhangwa-manja menba ...
 FEM.white.stuff.growing.in.eyes 3a.PRO-POSS-LOC VEG.eyes
 ‘A long time ago when people had a white bit growing in their eyes ...’ (GED p.48)
- d. *ngayuwa nvngv-ngarrk-arrkujeeyi-na madha*
 1.PRO 1-ear-be.painful-NP2 VEG.ear
 ‘I’ve got earache’ (= [8a])

The part and the whole nouns are both in direct (unmarked) case, which means that they have the same grammatical function. Two nominals holding the same grammatical relations to the verb and jointly referring to the same entity are characteristics of an appositional structure. The Enindhilyakwa part-whole, as well as the generic-specific, constructions are thus also best analysed as appositional structures: the nominals involved share a single grammatical function (either S or O), they combine to identify a single referent and neither nominal can be clearly identified as the head.

It should however be noted that this type of apposition diverges from the traditional view. Traditionally, apposition involves “identity or similarity of reference” (Crystal 1997: 24, cited in Sadler & Nordlinger 2009). This definition relates to English examples such as *my husband, the father of my children*, where the two apposed NPs refer to the same person. However, it does not cover part-whole relations such as ‘magpie goose, head’ in the Mayali example in (51), nor does it fully account for generic-specific relations such as ‘fruit, *owenia vernicosa*’ in the Mayali example in (21). This is because the nominals involved do not have a similar or identical reference, but they merely have *overlapping* reference: the ‘part’ and ‘specific’ are a subset of the ‘whole’ and ‘generic’, respectively. In addition, the apposed nominals can clash in one or more of their morphosyntactic indices of person, number and gender/noun class: in the Mayali example in (51), the part and the whole differ in noun class (*bamurru* belonging to the unprefix class V and *gun-godj* to class IV). The same clashing of features is illustrated here for Enindhilyakwa:

- (53) a. *Ak-arrkujeeyi-na-manja menba akwa akarrnga ...*
 IRR.12a-be.painful-NP2-LOC VEG.eyes and NEUT.tooth
 ‘If we have sore eyes or a toothache ...’ (GED p.10)
- b. *ngayuwa nvngv-ngarrk-arrkujeeyi-na madha*
 1.PRO 1-ear-be.painful-NP2 VEG.ear
 ‘I’ve got earache’ (= [8a])

The person features of the pronominal prefixes on the verb represent the possessors, which clash with the noun classes of the external body parts. The definition of ‘apposition’ must therefore be stretched a little to accommodate the Australian examples, to also include nominals that do not, strictly speaking, have identical reference, and whose index features may clash. The only requirement is that one constitutes a subset of the other.

One consequence of the oppositional analysis is that we would expect to find examples of the *part* being encoded as the core argument on the verb, as well as of the *whole*. This prediction is borne out, as in (52a-c) versus (52d), for instance. As argued in section 7.2, the choice of whether to select the ‘part’ or the ‘whole’ as a core argument of the verb is semantically motivated, depending on the desired effect. Cross-referencing the part appears to occur if the intended effect of the action denoted by the verb concerns the part only, while the whole is treated as the core argument of the verb if the action denoted by the verb affects the whole person.

7.10.1 ‘External’ possession

Many of the examples presented above are instances of what is called ‘external possession’ or ‘possessor raising’ in the literature. In the ‘external possession construction’ (EPC) “a semantic possessor-possessum relation is expressed by coding the possessor as a core grammatical relation of the verb and in a constituent separate from that which contains the possessum” (Payne & Barshi 1999: 3). This is illustrated for Enindhilyakwa in (54), repeated from above.

- (54) *ngayuwa nvngv-ngarrk-arrkujeeyi-na madha*
 1.PRO 1-ear-be.painful-NP2 VEG.ear
 ‘I’ve got earache’

In this example, the possessor of the body part ‘ear’ is encoded as the subject argument on the verb, while the body part itself occurs external to the verb in direct case, and is also incorporated into the verb.²⁶ The intuition behind the term ‘possessor raising’ is that the subject appears to be ‘raised’ from the possessor position of the body part NP (i.e. [my ear] be.painful > [I] [ear] be.painful).

External possession is a renowned syntactic problem in the literature, because this construction appears to add an argument to the argument frame of the verb (the intransitive verb ‘be painful’ in [54] now seems to have two arguments). It has been claimed to “belong to the core of the grammatical function changing processes that are allowed by universal grammar” (M. Baker 1988: 11). Many syntactic analyses of the EPC (Payne & Barshi 1999 present an overview) resolve the mismatch between the clausal syntax of the EPC and the argument structure of the lexical verb by assuming that the construction contributes an extra possessor participant to the event denoted by the verb. External possession verbs thus require a different lexical entry, with an increase in valency compared to their ordinary use (see e.g. M. Baker 1988, 1996, 1999 for Mohawk; Schrock 2007 for Swahili; Lødrup 2009 for Norwegian and English; Baker, Horrack, Nordlinger & Sadler 2010 for Wubuy, among many others).

²⁶ The examples in e.g. (52a-c), where the part is encoded as a core argument of the verb, are sometimes labelled ‘internal possession’ in the literature.

At first glance, the one-too-many argument problem appears to exist in the Enindhilyakwa EPC also: the possessor of ‘ear’ in (54) is encoded as the subject of the verb by the pronominal prefix on the verb, but the external body part is in direct case, indicating it is a core argument of the verb as well. However, I proposed in the preceding section that the possessor and the body part are in apposition, which means that they do not belong to different constituents, but are co-heads of the same constituent. A more precise gloss of (54) would thus be ‘I, ear, be.painful’ ([I, ear] be.painful). All that ‘external possession’ does is focus on the affectedness of the possessor; the body part can be treated as the core argument of the verb with equal ease, which shifts the intended effect to the part - as was argued in the previous section. Possession in Enindhilyakwa is therefore not ‘external’, and the term is only suitable as a descriptive label that captures certain semantic facts. External possession does not entail any changes to the verb’s argument structure, and neither does incorporation of the body part noun. Evans (1996) argues for a similar appositional analysis in Mayali, as do many other authors for the part-whole construction in other Australian languages, as was discussed above.^{27,28}

However, the following data are problematic for an appositional analysis. External part nominals do not always appear in direct case in Enindhilyakwa, but they may take an oblique LOC case in the EPC, as illustrated in (55).

- (55) a. *ng-abvrranh-dhadha-ngv-ma akba-manja*
 3f/1-bottom-poke-P2-*ma* NEUT.bottom-LOC
 ‘she gave me an injection in my bottom’
 b. *warnvmamalya na-lharrk-baji-jungu-na-ma alhakba-manja*
 3a.people 3a-bones-hit-REFL-NP2-*ma* NEUT.leg-LOC
 ‘people hit themselves on the legs’ (GED p.7)

As usual, these locative-marked body part nominals do not have to be incorporated; in (56), they are realised outside the verb.

- (56) a. *nanga-warda-nga dh-akina angurra mvrirra-manja*
 3f/3f-hit-P2 3f-that strongly VEG.back-LOC
 ‘she hit her hard on the back’ (VL1 p.466)
 b. *yingarna ngvn-anga ayarrkv-manja*
 MASC.snake MASC/1-bite.P2 NEUT.hand
 ‘the snake bit my finger’ (anin2_dl_au_001)

²⁷ External possession in these languages differs from the EPC in a language such as Mohawk, where body part incorporation indexes a change in argument structure, allowing the possessor to assume a primary case role. Here, body part incorporation is taken as a formal marker of external possession (Mithun 1984a, 1996).

²⁸ Nordlinger & Sadler (2008) and Sadler & Nordlinger (2009) provide a formal account of apposed nominals in Australian languages, in the framework of Lexical Functional Grammar (LFG). The appositional structure is captured in their analysis by allowing the nominals to be members of a set.

In both sets of examples, the possessor of the body part is treated as the main argument of the verb, and the body part is in LOC case, regardless of whether it is incorporated or not. The examples in (56) are rather unremarkable, because the locative-marked possessum indicates the more specific place of which the predicate is true. In a situation of bodily contact, the contact is established with the whole body and with the body part (as Haspelmath 1999: 121 argues for English examples such as the glosses in [56]). However, the Enindhilyakwa situation is more complex, because the locative-marked body part can also be incorporated, as in (55), indicating it is a core argument of the verb.

These examples thus pose a problem for the incorporable grammatical functions (how can an incorporated body part correspond to an oblique external nominal?), and for the appositional analysis proposed above (how can the oblique body part have the same grammatical function as the possessor, which is a core argument of the verb?).

Baker, Horrack, Nordlinger & Sadler (2010) (henceforth BHNS) discuss similar data in Wubuy, where the body part can be incorporated and simultaneously be expressed outside the verb in oblique LOC case, as in the following example.

(57) *ngaya nga-rlaan-barrlhiyn yii-rlaan-duj*
 1SG 1SG-knee-sore.REFL.PP MASC.OBL-knee-LOC
 ‘I have sore knee(s)/I am sore in the knees/my knee(s) is/are sore.’ Wubuy (BHNS ex. 6)

BHNS propose that the incorporated body part is an oblique. In their analysis, the Wubuy EPC requires a lexical rule that increases the valency of the verb by the addition of a possessor argument, while the body part becomes an oblique argument.

Despite the similarity of the Wubuy and Enindhilyakwa data, there are reasons to believe that a change in argument structure is not a plausible analysis for Enindhilyakwa. First of all, the EPC is very different from genuine valency-changing operations such as the benefactive applicative and the causative (valency-increasing), or the reflexive and reciprocal (valency-decreasing). These operations are registered by overt affixes on the verb, which is not the case for the EPC. And secondly, external body parts only appear in LOC case for a *certain type* of transitive verb: namely verbs of bodily contact, such as ‘hit’, ‘rub’, ‘grab’, ‘pull’, and so on. This is roughly the same class of verbs that behaves differently in the EPC in Mohawk²⁹ (M. Baker 1999: 307). Verbs of bodily contact are also the class of verbs that occurs in the EPC in English (e.g. *I slapped him on the cheek*, but not *#I washed him on the cheek*) (Levin 1993). For these verbs, affecting the part of someone counts as affecting the person as a whole. In other words, if you hit/rub/grab my leg, you

²⁹ In Mohawk, body part incorporation is a requirement for external possession (see fn27), except for verbs of physical contact. These have an unincorporated paraphrase where the external body part nominal appears in LOC case (which is thus structurally similar to the Enindhilyakwa examples in [56]).

also hit/rub/grab me, whereas if you wash/see/like my leg, you do not necessarily wash/see/like me. This may explain why the possessor role of these verbs can be treated as the direct object argument in some languages (e.g. English), and why these verbs behave differently in the EPC in others (e.g. Enindhilyakwa, Mohawk).

As will be shown in more detail in Chapter 8, verbs of body contact also show anomalous behaviour outside the EPC in Enindhilyakwa. They have a very strong tendency towards marking their direct object argument with LOC case:

- (58) a. *nungkuwa yi-ngaja-ma ngayuwa-manja*
 2.PRO 2/1-hit.NP1-*ma* 1.PRO-LOC
 ‘you are hitting me’ (VL1 p.400)
- b. *wurr-akina wurrajija nenv-rndarrka enuwa-manja*
 COLL-that COLL.bird COLL/3m-grab.P1 3m.PRO-LOC
 ‘the bird grabbed him’ (VL1 p.488)
- c. *narrv-ma-lyungkwe-nv-ma mamvngba-manja...*
 3a-VEG-rub-P2-*ma* VEG.hair-LOC
 ‘they [women] used to rub (their) hair (with the seed pods of *dhvngadhilyenjvrrka*
 ‘FEM.white cloud tree’, to make it long)’ (GED p.25)

The nominals that are marked with LOC case are also identified on the verb as core arguments of the verb. This suggests that LOC case functions as a grammatical case here, which exceptionally marks the direct object argument. Differential object marking of ‘hit’ verbs is common cross-linguistically (Tsunoda 1981, 1985), reflecting a different encoding of goal (contact on place) and effect (hurting someone). In Enindhilyakwa, the direct object argument in the EPC is also differentially marked with grammatical LOC case for these verbs. Therefore it is not an oblique, and the appositional analysis still holds.

If the appositional analysis involving differential object marking is correct, we would expect to find instances where the body part and the possessor are both marked with LOC case, as they have the same grammatical function. This prediction is borne out:

- (59) a. *nanga-lyang-barra arvngkv-manja akinv-mvrra dhukururrku-manja*
 FEM/FEM-head-hit.P1 NEUT.head-LOC NEUT.that-INSTR FEM.brolga-LOC
 ‘[Emu] hit Brolga on the head with that [stick(NEUT)]’ (VL1 p.310)
- b. *nenv-ngaja-ma n-akina envngu-wilyarrv-manja nikbv-manja n-ibina*
 3m/3m-hit.P2-*ma* 3m-that NEUT.ALP-middle-LOC 3m.Pheasant-LOC 3m-that
 ‘he [Seagull] hit Pheasant in the middle of the back...’ (VL1 p. 361)

The possessor nominal and the body part nominal are inflected for the same case feature, indicating that they represent the same (core) argument. Nonetheless, such examples are very rare. One possible explanation for this scarcity is that when nominals that belong to the same constituent are adjacent, only one needs to receive case. Only when they are discontinuous do all receive case (section 8.9). Combined with the fact that expression of core arguments by

independent nominals is comparatively rare, this could account for the scarcity of discontinuous nominals inflected for the same case suffix.

BHNS discuss a second, morphologically distinct, type of EPC in Wubuy, in which the external part nominal is not marked with LOC case but takes double noun class prefixation: a ‘relative’ noun class prefix, plus a noun class prefix that agrees with that of the whole. As usual, the object verb agreement shows noun class agreement with the whole:

- (60) *niini-ma-yirr-mangi* *mana-wuluru* *mana-ma-manjarr-gadhuwa*
 1DUMASC-VEG-foilage-get.PC VEG.TOP-acacia.sp VEG.TOP-VEG.REL-leaves-new
 ‘we two got new *wuluru* leaves’ Wubuy (BHNS 2010 ex. 4)

Although nouns in ‘relative’ noun class form do not take an oblique case suffix, BHNS also regard these forms as obliques since they cannot control verb agreement. This supports their analysis of the Wubuy EPC as involving an increase in valency by adding the possessor argument, demoting the part to an oblique.

‘Part’ nouns can also take double noun class prefixation in Enindhilyakwa. Such nouns can take an inalienable possession (INALP) derivational prefix *m-* (section 3.4.5.1), which allows it to agree in noun class with the ‘whole’. Such derivation is common for parts of plants and trees, as in (61a,b), and occasionally humans, as in (61c). As in Wubuy, the whole is treated as the main argument of the verb.

- (61) a. *narrv-ma-ma-ngv-ma* *ma-m-amarda*
 3a-VEG-take-P2-*ma* VEG-INALP-NEUT.leaves
 ‘they took the leaves of these trees [*mabalba* ‘VEG.peanut tree’]’ (GED p.15)
- b. *warnvmamalya* *narrv-nga-rrvngka-manja* *dh-adhv-m+awalyuwa* ...
 3a.people 3a-FEM-see.P2-LOC FEM-f-INALP+flower
 ‘when people saw this bush [*dhvrvra* ‘FEM.holly leaved pea flower’] flower...’ (GED p.7)
- c. *nanga-lhuku-lhukwa-mvrrkaju-wa* *dh-adhv-m-alhvka-lhangwiyu...wa*
 3m/3f-RDP-tracks-follow-P2 3f-f-INALP-foot-ABL.PRG...XTD
yingv-lhvkarri-lyvmadha
 3f-tracks-disappear.P1
 ‘he kept following her tracks until they disappeared’ (‘Search’ z47-8)

This type of EPC could pose a problem for the appositional analysis proposed here: since the parts cannot control verb agreement, they could be seen as obliques (as advocated by BHNS for Wubuy). If the parts are obliques, they cannot have the same grammatical function as their wholes, which would rule out an appositional structure.

However, I propose an alternative view, because the part and the whole in fact *agree* in noun class. The noun *amarda* ‘NEUT.leaves, grass’ in (61a), for example, is inherently of NEUT class, and

‘give’). Some optionally incorporate, as in most examples in the above sections, and some nominals and verbs obligatorily incorporate a body part or generic nominal. The latter are called ‘bound stems’ in the Dictionary and in this thesis, and they include both verbs and adjectives, such as the adverbial adjectives *-lhadha* ‘this side’ and *-warra* ‘other side’; the adjectives *-bvrre* ‘wide’ and *-bvdha* ‘strong’; and the verbs *-bijangi-* ‘jump’ and *-bvrre-* ‘split’. Some examples are given here; others can be found in the dictionary.

- (64) a. *mv-lhvkarrkv-lhadha mamvrukwa*
 VEG-road-this.side VEG.road
 ‘this side of the road’ (Ansec2)
- b. *a-jirr-bvdha diya*
 NEUT-fluid-strong tea(NEUT)
 ‘strong tasting tea’ (WD)
- c. *narr-al-bvrre-na*
 3a/NEUT-long.and.thin-split-NP2
 ‘they part the grass (to walk through)’ (WD)

For those nominals and verbs that optionally incorporate, the question is when this happens. A number of factors determining noun incorporation can be found in the literature. Generally, the function of incorporating nominals is assumed to be backgrounding (e.g. Mithun 1984a). Incorporated nominals may represent old, given or insignificant information. In the case of the incorporation of body parts, focus is on the affectedness of the possessor rather than of the body part. Incorporated nominals put selectional restrictions on the verb, because the external NP must be within the class of objects delineated by the incorporated nominal root (Rosen 1989).

In BGW, incorporation is clearly the unmarked choice for body parts (Evans 1996). Incorporated generics, on the other hand, typically carry given information, so they are frequently encountered both incorporated and external to the verb. Generic nominals typically progress from external to incorporated status through a discourse (ibid p.97)

Dixon (2002: 58-9) points out that in some Australian languages generics often are the primary means of reference. A speaker of an Australian language will typically use just a generic term, its specific reference being clear from context and/or shared knowledge of speaker and addressee. Specific nouns are only employed when communicatively necessary.

In Enindhilyakwa, incorporation does not appear to involve backgrounding. Incorporated nominals do not necessarily carry old and given information, and in my data nominals do not typically progress from external to incorporated status through a discourse. Instead, incorporated nominals very often co-occur with their corresponding free forms, as in (52)-(55) and many other examples above. If the function of incorporation were backgrounding, or representing old information, the appearance of the external forms in these examples would make no sense. These examples also show that specific nouns are not just employed out of communicative necessity.

Incorporation can occur at the first mention of an item, for both body parts and generics. The following example comes from a story about making fire by rubbing sticks. First it is described how people looked for the right kind of wood, then how they crushed the bark, put a stick on the bark and started rubbing. They continue rubbing, until suddenly smoke appears. There was no prior mention of smoke, but it is represented by the incorporated form *angkarr-* plus the free form *angwarra*:

- (65) *Kembirra mv-lharrk-bvlhalha-ma na-mam+badji-nv-ma biya*
 then VEG-long.and.thin-thin-INSTR 3a-hand+hit-P2-*ma* and
nuw-angkarrk-arjeeyu-manja angwarra...
 NEUT-smoke-rise.P1-LOC NEUT.smoke
 ‘Then they rubbed up and down the thin stick with their hands and when the smoke started rising...’ (GED p.198)

The appearance of smoke represents important and new information here. Since this is (partly) conveyed by an incorporated nominal, the function of incorporation cannot be backgrounding.

Neither is incorporation the unmarked choice for body parts, as it is in BGW. There are probably equally many examples with unincorporated as with incorporated body parts. Incorporation of the body part is not necessary to vacate an argument position for the possessor (as it is in e.g. Mohawk), as it does not affect the argument structure of the verb.

The only function of incorporation appears to be to narrow the range of possible referents of one of the verb’s arguments. Incorporation of a body part delineates which part of the whole the action denoted by the verb applies to, and incorporation of a generic adds the selectional restriction that the external specific nominal must be properly included in the set delineated by the generic. On the face of it, incorporation seems to be redundant, because the same information is frequently conveyed by an external nominal, or, in the case of body parts, by the prefix on the verb. However, incorporated generics can also *add* information, or provide a new perspective, as was illustrated in (20) above, where a number of different generics are used to emphasise different features of *mvnhvnga* ‘VEG.burrawang’ (e.g. hard, soft, flat, and so on). The generics in these examples are not redundant, but they are used to add nuance to the language.

7.12 Summary

Body part nouns play a major role in Enindhilyakwa, permeating its whole morphological and syntactic structure (Leeding 1996: 247). Body parts function in the naming of human parts, they are used to classify inanimate items, and they can refer to parts of objects. Body parts can be incorporated into verbs and adjectives, or they can take a derivational prefix that allows them to agree in noun class with the whole. In both cases they have undergone extensive semantic shifts, broadening their meaning to describe features of inanimate items.

This chapter examined the productive - or at least formerly productive - incorporation of body part nouns into verbs and adjectives. The majority of incorporated body parts are polysemous with a generic reading, and the majority of incorporated nominals are suppletive. This suppletion is due to lexical replacement affecting the free form but not the incorporated form.

There is complete parallelism between incorporated body parts and generics. They are often represented by the same morphemes, they are both in an absolutive relation to their host, they may or may not occur with an external noun, they leave the valency of the verb unaffected, and they are non-referential. One important difference is that in the part-whole construction, it is always the *part* (or subset) that is incorporated, whereas in the generic-specific construction this is always the *generic* (or superset). Another difference is that for the part-whole relation, the pronominal prefix on the host can represent either the part or the whole. The choice between the two is determined by semantics: the participant that is seen as most affected is treated as the core argument of the verb (incorporation of the part nominal is independent of this). For the generic-specific construction, only the external specific nominal can be cross-referenced on the verb. This is because, unlike body parts, generics cannot be realised outside the verb, they only exist as incorporated forms. Therefore, they cannot, by themselves, constitute a core argument.

The part-whole and the generic-specific relations were analysed as appositional structures (as they commonly are in Australian languages). The nominals involved have the same grammatical relation to the verb, they do not stand in a syntactic dependency relation with one another, and either noun can function alone as the head of the NP.

Besides incorporation, which picks out one of two apposed nominals, appositional relations can be expressed by noun class agreement in Enindhilyakwa. Here, the part noun takes a derivational prefix which enables it to agree in noun class with the whole. Noun class agreement could thus be regarded as a third type of morphosyntactic encoding of nominals in apposition, in addition to the two proposed in Evans (1996): case-agreement and noun incorporation. All three types of morphosyntactic encoding occur in Enindhilyakwa (although case-agreement is rare: see next chapter).

Australian-style apposition differs from the traditional notion of apposition, because apposed nominals may not have similar reference, but merely overlap in reference. The only requirement is that the one nominal constitutes a subset of the other. As a result, apposed nominals may clash in their person, number and gender features. An interesting fact about Enindhilyakwa is that apposed nominals are very rarely simply juxtaposed in the syntax. In the majority of cases, the appositional relation is morphologically realised in some way, either by incorporation, or by embedding of the part in a derived nominal. This differs from the more common strategy in Australian languages, which juxtapose apposed nominals as free forms in the syntax.