

### 3 Structural features of the verb

This chapter applies the Transfer Constraints approach (see §1.4) to structural features of verb constructions in the substrate languages of Roper Kriol, which will confirm whether or not transfer of shared core features has taken place at an earlier stage of development.

As described in chapters 1 and 2, Alawa and Marra, the Marran languages, and Ngalakgan and Nunggubuyu, the Gunwinyguan languages, are the four substrate languages which are expected to have had the most input into Roper Kriol development. They are all nonPN, non-configurational and agglutinative languages. It will be recalled from §1.1.2, that being non-configurational means that word order is generally not fixed in these languages. Furthermore, as Evans (2004:18) says: ‘... over most of the non-Pama-Nyungan area ... the verb is the most complex part of speech morphology’. Verb constructions can include numerous affixes and incorporated elements apart from the verb root itself. Such constructions, which can range from a form with five or more elements constituting a whole sentence to simply a modified root, are referred to as verb complexes.

Lexemes outside of the verb complex do not follow fixed word order rules, whereas morpheme positions within the verb constructions are fixed. As noted in chapter 1, Mufwene (1986) has pointed out that where substrate languages are agglutinative, it is not expected that affixes as such will be transferred to the contact languages, which are generally isolating languages. There is the possibility, however, that the function of each morpheme in a verb complex could be transferred to free morphemes in the contact language. Furthermore, the constructions involving these free morphemes, or lexemes, may be influenced by the position of the bound morpheme in relation to the stem, such that they may occur in a similar position in relation to the verb. It is proposed here that structural transfer, whereby word order is fixed in relation to the stem or verb, is most probable with features found in these tightly bound verb complexes (or for nominal complexes see chapter 4).

Verb constructions in the two language families display numerous variations in verbal morphology so it is not possible here to describe all the features that exist. One fundamental difference between the two language families is that Gunwinyguan languages incorporate other stems, such as nominals, within the verb complex resulting in polysynthetic constructions. The Marran languages show no evidence of this. Some core features of the verb complex are, however, common to all the languages and hence are shared features (see §1.4 for definitions of these types of features). In Australian linguistics templates are used to describe the order of morphemes in complex word classes, such as verb complexes, in terms of morpheme position classes, and this tool is also employed here.

The shared core features of the substrate language verb complexes are; coverbs (CV), pronominal prefixes (ProP), reciprocal/reflexive (RCP/RFX) markers and tense mood aspect (TMA) suffixes. In the substrate languages, as in many Australian languages, there are two word classes corresponding to the category 'verb'. One word class is closed, and consists of around 30 *finite roots*, which inflect for tense, mood, and aspect. The other word class, called the 'coverb' class, is open, consisting of forms that do not inflect directly and which carry the main semantic weight of the verb. Most verbs in the substrate languages consist of both a coverb and an inflected finite root (see e.g. Baker and Harvey 2003:9). Pronominal prefixes are forms that indicate the arguments of the verb. The RCP/RFX markers are used to indicate that the action of the verb is reciprocated between multiple participants (RCP), or for a single participant, that the participant is both subject and object of the event (RFX). The two functions are usually represented by the same form in Australian Indigenous languages, which is why they are presented together in the template. These features are presented in the templates below.

**Verb templates of substrate languages**

Marran	(CV)-ProP-root(-RCP/RFX)-TMA
Gunwinyguan	ProP-(CV-)root(-RCP/RFX)-TMA

The 'simple verb' construction in the substrate languages is a verb root, inflected for TMA that takes a pronominal prefix such as that in (1a) (see below). This word

constitutes the argument and verb of a sentence, which are obligatory constituents, or core features, of a verb complex.

- (1) a. **nga-rlini**  
**1sg-GO:PST**  
*I went.* (Marran-Marra, Heath 1981a:177)
- b. **jadba-wirri-rlini**  
**chop.down.CV-3du/3sg-GO:PST**  
*They (dual) chopped it down..* (Marran-Marra, Heath 1981a:270)

A ‘coverb’ construction sees a coverb attached to such a structure as shown in (1b), although coverbs cannot occur independently because they are dependent on finite roots that encode TMA. While many finite roots can occur independently, some are now bound forms that can only appear in conjunction with coverbs. The coverb feature is shared among all the substrate languages. Similarly, all substrate languages indicate TMA through the use of suffixes added to the finite verb root form, as shown in (2) and (3) below.

- (2) wan.gan nga-rlugu                      werneju-nya-an-**ja-rranya**  
alone    1sg-poor.fellow    bad.CV-1du.ex-root-**RCP-PST**  
*Poor me, we two (a married couple) have spoilt/ruined each other.*  
(Marran-Alawa, Sharpe 1972:153)
- (3) yirri-watj-bim-bu-**tji-na**  
1pl.ex-each-white.ochre.CV-root-**RCP-FUT**  
*We’ll each ochre up/We’ll paint each other up.* (Gunwinyguan-Ngalakgan, Merlan 1983:132)

These examples also show the use of the reciprocal in each language family, which is also a shared feature. An example of the use of a reflexive suffix is provided in (4).

- (4) rang-wu-anyi-**rlana**  
hit.CV-3sg-root:PST-**RFX**  
*He hit himself.* (Marra, Heath 1981a:205)

The templates provided above show that the two language families differ in their verb complex construction as to the position of the coverb, which either precedes or follows the pronominal prefix. Examples (2) and (4) above show the Marran construction, where the coverb precedes the pronominal prefix and example (3) shows the Gunwinyguan construction, where the coverb follows the pronominal prefix.

Using the template as a preliminary tool has helped identify those features within the verb complex that warrant a more detailed comparative analysis, which starts in §3.1 with TMA marking, followed in §3.2 with reciprocal/reflexive marking, §3.3 with pronominal prefixes and finally, §3.4 with coverb constructions. In each section the feature in question will be described using examples from the substrate languages. The reinforcement principle of frequency will be used in order to form predictions of the feature specifications, in terms of structure and possibly function, that could be expected to have been retained in the creole, if transfer had taken place. A presentation of corresponding features in Kriol will follow, in order to show whether the predictions are correct or not. Next, the availability constraints and other explanations, such as semantic transparency, are examined so as to determine whether substrate transfer was indeed possible, which will explain the prediction findings. A discussion of the chapter's results will be found in §3.5.

### 3.1 TMA marking

#### 3.1.1 In the substrate<sup>17</sup>

All the substrate languages can mark TMA through the use of finite verb root modification, whether this involves a coverb, as in (5), or not, as in (6).

- (5) a. dad-gu-**ji**  
           tie.CV-3sg/3sg-**DO:PP**  
           *He tied it up.*
- b. dad-gu-**jujunyi**  
           tie.CV-3sg/3sg-**DO:PC**  
           *He was tying it up.* (Marra, Heath 1981a:180)
- (6) a. nga-**winya**  
           1sg-**go:FUT**  
           *I will go.*
- b. nga-**jinya**

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<sup>17</sup> This discussion will be primarily concerned with structural characteristics of TMA; for an analysis of the semantic range of categories of TMA see §5.2.

1sg-go:POT  
*I can go.* (Alawa, Sharpe 1972:87)

Where coverbs are involved, the root verb generally carries no other semantic input other than the TMA content, while the coverb provides the semantic component. The core feature for marking TMA, however, is through the addition of suffixes to a verb root, as shown above in examples (2) and (3). Examples (7) and (8) provide two additional examples of such TMA suffixes.

- (7) gu-jandah Ø-marninyh-mi-tji-ny  
 NC-stick 3sg-make-AUX-RCP-PP  
*He made himself into a stick.* (Ngalakgan, Merlan 1983:104-105)

- (8) ngu-mu-gol-ye-nga weh-gah  
 1sg-NC-put/CV-PUT-FUT water-LOC  
*I'll put it in water.* (Ngalakgan, Merlan 1983:100)

The verb root paradigms are, however, most often irregular. It is generally not possible, therefore, to identify one suffix per one TMA category that can be applied to all verb roots across the board. Researchers have nevertheless been able to identify a number of verb conjugation classes, which are often small in membership. Merlan (1983:115-119), for example, identified six verb classes for Ngalakgan, with the membership of each dependent on paradigmatic similarities. The identification of classes once again varies dramatically among the substrate languages.

All substrate languages also employ reduplication on the verb as a structural process to mark progressive action. Heath, for example, describes reduplication in both Nunggubuyu (1984:341) and Marra (1981a:181) as marking repetition or prolongation that is compatible with the progressive aspect. Reduplication can be partial, as in (9) or complete as in (10). While this feature does not occur on the template it is a feature shared by all the substrate languages and is a structural feature of the TMA system and so warrants mention here.

- (9) ni-ja-janda-ngu-duma-na  
 3sg-rdp-back.CV-LIG-BE.BLACK-PRS  
*It (crow) has black on its back.* (Nunggubuyu, Heath 1984:341)
- (10) wara-maya-maya  
 MDP-rdp-sing  
*to be singing (or calling names of country) over and over* (Nunggubuyu, Heath 1984:342)

Finally, in Alawa alone there is another TMA suffix that differs from the conventional inflectional series. This is the habitual (HAB) suffix *-gay*, which Sharpe (1972:78) regards as a ‘supplementary tense affix’ and which can be placed on the end of a verb already modified for TMA and possibly only in Past tense, as shown in (11) and (12).

- (11)    *guy-yil-any-a-gay*  
           *hunt-3pl-do:PST-HAB*  
           *They used to hunt.*    (Alawa, Sharpe 1972:78)
- (12)    *nyag-jil-abarla-na-gay*  
           *spear.CV-3pl/3pl-root-PST-HAB*  
           *They used to spear them.*    (Alawa, Sharpe 1972:78)

There were no other suffixes with a predictable and consistent form such as this detected in the other substrate languages.

### 3.1.2 Reinforcement Principle and predictions

As described in §1.4, the reinforcement principle is frequency. It is expected that many features were transferred to the expanding NT Pidgin but that during levelling those features that were in use the most would have had the greatest chance of being reinforced and retained in the emerging creole. Alternatively, those transferred features that were not common and in use the least, would most likely have been lost during levelling. As noted in chapter 1 and above, Mufwene (1986) has argued that even where the substrate languages are agglutinative, contact languages are generally isolating. For this reason predictions will describe a feature’s position in relation to the verb, rather than as an affix to a stem. Considering the discussion in §3.1.1, we can therefore make the following predictions, where E stands for expected and NE for not expected:

#### Predictions based on TMA marking

- E FEATURE 1: Series of postverbal TMA markers
- E FEATURE 2: Reduplication to indicate a progressive activity
- NE FEATURE 1: Postverbal Habitual marker
- NE FEATURE 2: Verb root modification to indicate TMA

A series of postverbal TMA markers is expected to have been retained in the creole if transfer had taken place because it is the core TMA marking strategy in all the substrate languages. Reduplication is also expected to have been retained during levelling because reduplication, which indicates a progressive activity, is a shared verb feature among all the substrate languages, which would encourage its retention during levelling if transfer previously took place. The postverbal Habitual marker is not expected to have been retained during levelling, if indeed it did transfer, because it occurs in only one substrate language. Finally, as described above, verb root modification is not a core feature of the substrate languages' strategies for marking TMA; it is therefore, not expected to have been retained in the creole if transfer had been possible.

### 3.1.3 TMA in Kriol

Unlike the substrate languages, Kriol employs forms that precede the verb root to mark TMA. There is a tense marker and a range of aspect markers, as exemplified in (13) where *bin* marks past tense (PST) and *oldei* marks continuous aspect (CONT).

- (13)    main        mami    **bin**     **oldei**    gemp    langa    gemp  
          POSS     mother **PST**   **CONT**   live/stay G/L   camp  
          *My mum stayed (slept) at camp.*                    (A058)

There are also a range of modal markers, such as obligatory (OBL) *garra* in (14) and potential (POT) *mait* in (15).

- (14)    mela        **garra**    weit-na        bla        olgamen  
          1pl.ex    **OBL**    wait-EM       P/P        respected.lady  
          *We have to wait for the old lady.*                    (D016)

- (15)    im        **mait**    gaman        en        ran-im-wei    en        it        yunmi  
          3sg     **POT**    come        CONJ    run-TM-DIR    CONJ    eat        1du.in  
          *It might come and run this way and eat us (you and me).* (C249)

The progressive aspect (PROG) differs from the rest in that it is marked by a suffix, as shown in (16). It can occur in present or past tense but no examples have been found in future. Example sentence (17) also shows how the progressive can occur with a reduplicated verb (reduplication is discussed below).

- (16)    dei            bin        stat        len-im-**bat**                    mi  
           3pl           PST       INC       teach-TM-**PROG**            1sg  
           *They started teaching me.*        (A059)
- (17)    ai            bin        stat        werk-na            baba,    ai        bin        werk-na  
           1sg           PST       INC       work-EM           sister    1sg       PST       work-EM
- olawei-na                    ai        bin        **werk-werk-bat**  
           all.the.way-EM            1sg       PST       **work-rdp-PROG**

*I started to work (then), sister, I worked all the time (then), I was working (and working/for a long time).* (D007)

Reduplication is a process in Kriol that can indicate repetition or prolongation of the activity, or in other words, serves as another means of expressing progressive aspect, usually without the *-bat* suffix, as in (18).

- (18)    ai            bin        stat        gu-wei-na            **jinik-iwei-jinikiwei**        yuno  
           1sg           PST       INC       go-DIR-EM           **sneak-DIR-rdp**            you.know
- gu werk        naja-bleis-najableis  
           go work        another-place-rdp

*I started to go away now, sneaking away again and again, you know, to go working at other places.* (A075)

Further research is required on this feature but I would suggest that reduplication may predominantly be used by older Kriol speakers, such as the consultants for this thesis (see §1.2.2), while younger speakers employ the suffix. The use of them together, as in example (17), may belie the fact that they are in a state of change, with reduplication giving way to the suffix.

As expected, therefore, there is no verb root modification to indicate TMA in Kriol (NE Feature 2), and reduplication is used to indicate a progressive activity (E Feature 2). While the series of postverbal TMA markers were expected to be found, they were not, as Kriol makes use of preverbal TMA markers. Alternatively, while the postverbal Habitual marker was not expected to be found, there is in fact a Progressive verb suffix in Kriol, which may be related. The availability constraints may provide explanations for these findings.



### 3.1.4 Availability Constraints and other explanations

E Feature 1 – series of postverbal TMA markers – is not found in Kriol. Here we may turn to the notion of semantic transparency as discussed in chapter 1. In §3.1.1 the postverbal TMA markers in the substrate languages were described as highly irregular, in that there are no readily identifiable relationships between form and TMA category (see e.g. Baker and Harvey 2003 for a further discussion of the unproductive nature of the TMA suffixation in these languages). In other words, there is no semantic transparency for any TMA category of this sort. It is therefore suggested here that this may have obstructed transfer of the feature in the first place.

Furthermore, transfer could also have been impeded by the availability constraints. Firstly, English employs two forms of TMA marking. There are a limited set of suffixes, one of which is shown in the sentences below. There are also, and more commonly, preverbal periphrastic markers in use, which are also shown in the following sentences.

*I jumped high.*  
*I will jump high.*  
*I might jump high.*  
*I jump and jump.*

While there are congruent constructions that involve postverbal TMA marking, it is questionable whether suffixes, such as ‘-ed’ are perceptually salient, being segmental or monosyllabic and unstressed in speech. The fact that there is no semantic transparency in the relationship between form and function of postverbal TMA markers in the substrate languages may have hampered transfer. The lack of salient postverbal TMA markers in English, or other postverbal morphemes that could have been interpreted as TMA markers, then constrained the feature from transfer altogether. It could therefore not have been retained at levelling.

E Feature 2 – reduplication to indicate a progressive activity – was found to have been retained in Kriol. In attempting to consider whether transfer had previously occurred the

availability constraints would normally be applied, but because this is a feature of process rather than form they cannot be<sup>18</sup>. Regardless, the fact that reduplication is used in Kriol, as expected, suggests that transfer of the feature had previously occurred. As mentioned above this process may be in a state of change and further research, in comparison to the *-bat* suffix, may prove useful.

In the case of NE Feature 1, while there is no postverbal Habitual marker in Kriol, this substrate feature may have influenced the development of the Progressive suffix in Kriol. The *-bat* suffix in Kriol is most likely based on the perceptually salient form, ‘about’, as it may occur following an appropriate verb, as the following sentences show.

*I was jumping about all over the place.*  
*They are talking about someone.*  
*The horse is running about the yard.*

The word ‘about’ has two syllables and carries stress, which would have made it salient enough to be noticed and its use in contexts such as those above shows how it could have been interpreted as a Progressive marker. It is thought that it contracted to ‘abat’ and eventually *-bat*. However, this does not explain why a suffix is found to express Progressive and not Habitual. (Kriol employs the preverbal marker, *yusdu*, for this function.) It could be that contact language speakers were more aware of the structural space that required filling, as a unique verb final suffix, rather than the function of the suffix. Contributing to this is the fact that the Alawa Habitual suffix is notably predictable and regular in form, unlike all other TMA markers. More research is, however, required on this topic.

Finally, as already mentioned, NE Feature 2 – verb root modification to indicate TMA – is not found in Kriol, as expected. It is possible that the loss of this feature during levelling may be due to the fact that it is not a core feature, and therefore its use would have been low in frequency. Alternatively, and more likely, the feature was obstructed from transfer due to a lack of semantic transparency. Once again, there is no possibility

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<sup>18</sup> There is also another tradition in linguistics that treats reduplication as underspecified affixes.

of matching a distinct form to a specific function of each TMA category with verb root modification. As such transfer could not take place.

## 3.2 Reciprocal/Reflexive

### 3.2.1 In the substrate

The reciprocal/reflexive markers are features shared by all of the substrate languages and are also a core feature among nonPN languages in general. In the case of the Roper River substrate languages three of the four languages – Ngalakgan, Alawa and Marra – use the same form to express reciprocal and reflexive. Ngalakgan, Nunggubuyu and Alawa use verb root derivation for this function that takes its own paradigm of TMA inflection (Heath 1981a:205). In Ngalakgan this is *-tji-*, in Alawa *-njV-*, and in Nunggubuyu both *-nyji-* (RCP) and *-i-* (RFX). Generally, these formations are productive, which makes them different to other TMA inflections. The example in (19) from Alawa, for example, shows that the verb root *-njV-* becomes *-nja-* to indicate past, which also takes the past continuous suffix, *-rranya*. This same form would become *-nji* to express present tense.

- (19) wan.gan    nga-rlugu    werneju    nya-a-**nja**-rranya  
 alone    1sg-poor fellow    bad    1du.ex-root-**RCP:PST**-PC  
*Poor me. We two have spoilt/ruined each other (ourselves).* (Alawa, Sharpe 1972:153)

As just noted, Nunggubuyu, is the only language that distinguishes between reflexive and reciprocal functions by separate derivational verb root forms. Example (20) shows the use of the reciprocal *-nyji-* which takes past tense marking, and example (21) shows the reflexive *-i-*, which also takes past tense marking.

- (20) wini-jurrjurgga-**nyji**-iny  
 3du-push-**RCP-PST**  
*They (two) shoved each other.* (Nunggubuyu, Heath 1980b:41)
- (21) ni-barumi-**ny**-bugij  
 3sg-coil.up:**RFX-PST**-only  
*He coiled himself up.* (Nunggubuyu, Heath 1980b:152)

Marra is different from the other languages in that it marks the reciprocal/reflexive with a fixed suffix, *-rlana*, which follows the TMA marked root verb. As shown in (22), the one form can therefore be used for either reflexive or reciprocal meaning and does not vary for tense.

- (22) a. rang-wu-anyi-**rlana**  
           hit.CV-3sg-root:PST-**RFX**  
           *He hit himself.* (Marra, Heath 1981a:205)
- b. rang-bala-nyi-**rlana**  
           hit.CV-3pl/3pl-root:PST-**RCP**  
           *They hit each other/They fought/They hit themselves.* (Marra, Heath 1981a:205)

Dixon (1980:433) notes that in Australian Indigenous languages that use the same form to mark reflexive and reciprocal, the difference may depend on the number of the participants. When used with a singular participant, the meaning is most likely to be reflexive, on the other hand, when used with non-singular participants, the meaning is most likely reciprocal. This is not always strictly the case as example (23) shows, although it should be noted that extra morphology, such as the prefix *watj* ‘each’ is required to form a reflexive meaning here with non-singular participants. Further research is required on this topic.

- (23) yirri-**watj**-bim-bu-tji-na  
           lex.pl-**each**-white.ochre.CV-root-**RFX**-FUT  
           *We’ll each ochre up.* (Ngalakgan, Merlan 1983:132)

Alawa clearly separates the roles of the reflexive and reciprocal based on number. When there are non-singular participants of a verb the derivational inflected root, *-ɲjV*, will be used and can have reflexive or reciprocal meaning (Sharpe 2001:xxxv-xxxvi). When participants of a verb are singular, however, the ‘singular reflexive prefixes’ occur on the verb with a reflexive meaning (see also Sharpe 1972:89).

### 3.2.2 Reinforcement Principle and predictions

Findings from §3.1, descriptions in §3.2.1 and the reinforcement principle of frequency can all be used to make predictions as to what features could be expected to have been

retained or lost during levelling. Firstly, the discussion in §3.2.1 shows that all the substrate languages mark both reciprocal and reflexive as postverbal markers following the finite verb root that carries TMA information. It was found in §3.1, however, that there is no evidence of postverbal TMA markers in Kriol, with the possible exception of the *-bat* suffix. Therefore, even though the discussion in §3.2.1 shows that in Marra the reciprocal/reflexive follows the TMA markers, in the three other languages the inverse is true; no prediction is required either way because we have established that there is no postverbal TMA marking in any case in Kriol in §3.1. Secondly, three of the four substrate languages – Ngalakgan, Marra and Alawa – express reciprocal and reflexive with the same form and this requires an Expected feature prediction. While Ngalakgan and Alawa reciprocal/reflexive markers involve verb root derivation, Marra uses a non-inflecting suffix. It was found in §3.1, however, that there is no verb root derivation in the Kriol TMA system. It is expected, therefore, that it is the postverbal position of the feature that is relevant rather than the construction type. Only one language, Nunggubuyu, distinguishes between reciprocal and reflexive with two different forms for each meaning, which therefore requires a Not Expected feature prediction. Thirdly, Alawa uses a series of prefixes in each person to mark reflexive on the verb and is the only language to use such a system, which again requires a Not Expected feature prediction. In terms of frequency, therefore, it seems only the following predictions can reasonably be made:

**Predictions based on Reciprocal/Reflexive marking**

- E FEATURE 3: Reciprocal and reflexive marking with the same postverbal form
- NE FEATURE 3: Different forms to express reciprocal and reflexive
- NE FEATURE 4: Preverbal marker to indicate reflexive for singular participants

It is expected, therefore, that if transfer had previously taken place, reciprocal and reflexive marking with the same postverbal form would be retained during levelling, because this is a high frequency feature in the substrate languages. It is not expected, however, that two different forms to express reciprocal and reflexive would be retained in the preceding pidgin during levelling, because this is a low frequency feature. Similarly,

participants would be retained during levelling, as it is found in only one substrate language.

### 3.2.3 Reciprocal/Reflexive in Kriol

There is a reciprocal pronoun in Kriol, *gija*, which is shown in examples (24)-(26).

- (24)    olabat       gula–gula       **gija**       jeya  
              3pl       fight–rdp       **RCP**       there  
              They are fighting (together/each other) there.       (C03:1T10)
- (25)    minbala    bin       dok–dok       **gija**    en       minbala bin  
              1du.ex    PST    talk–rdp       **RCP**    CONJ    1du.ex    PST
- gut–binji       **gija**  
              good–stomach       **RCP**
- We two were talking to each other and we (made each other feel) felt happy (good).*  
              (C03:1T10)
- (26)    dubala       baba       **gija**  
              2du       sibling    **RCP**  
              They (two) are sisters (to each other/together)       (Sandefur 1979:94)

The reciprocal pronoun appears to be used exclusively with non-singular participants and directly follows predicates in all cases in my data. Sandefur (1979:94) provides an example of the reciprocal pronoun on a relationship term, provided in (26), making it dyadic.

It was not possible to elicit the use of the reciprocal with singular participants. Instead, there is a reflexive pronoun in Kriol, *mijelp*, which is used with singular participants but not restricted to them, as (27) and (28) show.

- (27)    yu       lafda    waj–im       **mijelp**  
              2sg       NEC    wash–TM       **RFX**  
              *You must wash yourself.*       (Sandefur 1979:92)
- (28)    dubala    bin       lu–im       **mijelp**  
              3du       PST    lose–TM       **RFX**  
              They got lost. (lit. lost themselves)       (Sandefur 1979:92)

Unexpectedly, there are different forms to express reciprocal and reflexive in Kriol. The reciprocal pronoun *gija* and the reflexive pronoun *mijelp* do both occur in the postverbal

position. It is therefore expected that E Feature 3 was previously constrained from transfer to the preceding pidgin. It must also be assumed that there is a reason why NE Feature 3 did transfer to Kriol, even though it was unexpected. NE Feature 4, was also not expected to be found in Kriol and this prediction is proven correct. There are no preverbal markers to indicate reflexive for singular participants in Kriol. It is expected that this feature either didn't transfer to the preceding pidgin or was lost during levelling due to low frequency use. The availability constraints and other explanations may be able to provide reasons for these results.

### 3.2.4 Availability Constraints and other explanations

E Feature 3 – reciprocal and reflexive marking with the same postverbal form – is not found in Kriol. NE Feature 3 – different forms to express reciprocal and reflexive – is found in Kriol, which is not expected. The availability constraints do not appear to provide explanations. First of all there are perceptually salient forms in English to use for the reciprocal and reflexive markers. In the case of the reciprocal, it is suggested that 'together', which has three syllables and can carry stress in a sentence, provided a form. Through a series of phonological changes under influence from substrate phonological patterns, 'together' became 'tegeja' before finally contracting to *-gija*. This form also occurs in congruent constructions, whereby it immediately follows the verb. Consider the following sentences, bearing in mind their possible use in settler speech and fast dialogue.

*We usually go together.*  
*They were fighting together.*  
*You two often sit together.*

With a perceptually salient lexeme with a meaning related to reciprocity and a congruent construction where this form follows the verb, the postverbal reciprocal feature then transferred.

In the case of the reflexive, there is also a perceptually salient, bisyllabic word in English, 'myself', which was most likely pronounced as 'meself' in the non-standard English used

in the pastoral industry, which through substrate phonological pressure became *mijelp*. This form also occurs in congruent constructions, following the verb, such as in the following sentences.

*I entered meself in the race.*  
*I run meself into the ground.*

With a perceptually salient lexeme that has a related meaning to reflexive and a congruent construction where this form follows the verb, the postverbal reflexive feature then transferred to the expanding pidgin. E Feature 3 and NE Feature 3 do not predict the transfer of two different forms for the reciprocal and reflexive functions, yet this is what is found in Kriol. The availability constraints do not explain why they have transferred. It may be a possibility that once again speakers were aware of two functions of the feature, reciprocal and reflexive, and allowed transfer of both, although to different forms. The results of this feature prediction, therefore, remain inconclusive and may require further research.

The reciprocal and reflexive functions are expressed with the same form, however, in Fitzroy Kriol, *jelp* from a further contraction from *mijelp*. During pidgin expansion in that region local substrate languages may have exerted their influence so that different substrate transfer may have been possible. Hudson (1983a:124) describes how Walmajarri, a local substrate language of that region, for example, marks both reciprocal and reflexive functions with the one non-inflecting suffix, *-nyanu*. Further research is required to determine whether the reciprocal and reflexive are expressed through the same form in other Fitzroy Kriol substrate languages, which is expected for this feature characteristic to have transferred to Fitzroy Kriol.

NE Feature 4 – preverbal marker to indicate reflexive for singular participants – is not found in Kriol, as expected. This feature may have been lost during levelling due to its low frequency as it is used in only one language. Alternatively it may have been constrained from transfer due to a lack of congruence in English. All English reflexive pronouns, when they're being used reflexively and not for emphasis, follow the verb rather than precede it, as the following sentences display.



*He gave himself a present.*  
*\*He himself gave a present.*  
*I talk to myself.*  
*\*I myself talk.*

Transfer of this feature may then have been constrained due to a lack of congruence and therefore was not able to be retained during levelling.

### 3.3 Pronominal prefixes

#### 3.3.1 In the substrate

Baker (2002a:51) describes pronominal prefixes in the following way: ‘A defining characteristic of polysynthetic languages is the presence of verb affixes indexing (usually) up to two arguments of a transitive verb, and sometimes three arguments of a trivalent verb’. While the substrate languages may vary in their categorisation of pronominal prefixes, they all have, in the simplest form, those that mark one argument through person/number/noun class on intransitive verbs, as in (29).

- (29) Marran intransitive pronominal prefix  
 barda      **niw**–anj–anji      gayarra  
 later      **1pl.ex**–rdp–sat      there  
*Then, later, we stayed there.* (Marra, Heath 1981a:332)

They most commonly mark the two arguments of a transitive verb through prefixes. Such prefixes can be segmentable and transparent in indicating the two arguments, such as in (30), although they are often derived by a complicated series of phonological rules which are not always transparent, as in (31).

- (30) Gunwinyguan transitive segmentable pronominal prefix  
**yirrirn**–bi–bak–wotj–ma  
**1pl.ex**–**3pl**–always–steal–root  
*They always steal from us.* (Ngalakgan, Baker 2002a:54)
- (31) Marran transitive segmentable pronominal prefix  
 nangga–ya    yija      warlanyan      wardabirr      **nimbirr**–wani  
 NC–that    game    fish      goanna      **1pl.ex/3pl**–gave  
*We gave them the game animals, fish and goanna.* (Marra, Heath 1981a:332)

In their most complex form pronominal prefixes are portmanteaux, whereby the two arguments of a transitive sentence, generally 1st and 2nd person, are not segmentable within the prefix and this is shown in (32).

- (32) Gunwinyguan portmanteau pronominal prefix  
yini–wanyh–bun  
2sg/1sg–NEG–hit:TMA  
*You shouldn't hit me.* (Ngalakgan, Merlan 1983:87)

All these construction types are characteristic of all the substrate languages, as they are of most nonPN languages.

The feature of pronominal prefixes therefore requires that arguments are marked by prefixes on the verb. In the case of intransitive verbs, one argument is marked by a prefix on the verb root and in the case of transitive verbs two arguments are marked by prefixes either separately or as a portmanteau morpheme.

### 3.3.2 Reinforcement Principle and predictions

The prediction to be made in this section is straightforward and presented below.

#### Prediction based on pronominal prefixes

E FEATURE 4: A series of preverbal pronominal forms that indicate arguments of the verb.

It is expected, therefore, that if transfer of this feature previously took place that it would then be retained during levelling of the stabilising pidgin, due to its high frequency among the substrate languages.

### 3.3.3 Pronominal prefixes in Kriol

Kriol does not employ any pronominal prefixes, or any preverbal marker indicating both arguments of the verb. There is only a series of independent pronouns (see chapter 5). These precede the verb when acting as the subject, as in the following intransitive sentence.

- (33)    wal            ai            nomo    gu            jeya  
         well        1sg        NEG    go            there  
         *Well, I didn't go there.*                    (S097)

But the transitive verb construction follows the SVO word order of English, so that the object follows the verb, as the following example shows.

- (34)    ai            bin            deik-im            im  
         1sg           PST           take-TM           3sg  
         *I took him.* (S134)

The prediction in E Feature 4 was therefore not correct. Pronominal preverbal forms that indicate arguments of the verb were either previously constrained from transfer or were not retained during levelling for another reason.

### 3.3.4 Availability Constraints

The availability constraints might provide an explanation why E Feature 4 – a series of preverbal pronominal forms that indicate arguments of the verb – is not found in Kriol. The constraint of perceptual salience requires that there must be a clearly distinguishable morpheme or lexeme in English that displays some similarity in meaning or use to that of the substrate language feature. The argument of an intransitive verb in English precedes it, as it does in Kriol, so we may assume that Kriol follows the superstrate example. Consider these sentences.

*I ran for my life.  
We laughed.*

In the case where pronominal forms realise both arguments of a transitive verb we would require a similar feature in English, whether transparent or portmanteaux. There are, however, no such forms in English that incorporate two arguments. More importantly, nor are there any congruent constructions in English, where both arguments are realised in succession preceding the verb, so that the following sentence is not possible.

*\*You me shouldn't hit*

Therefore, during the actual time of transfer, as there were no perceptually salient forms on which to base preverbal pronominal forms and no congruent constructions in which they could have occurred, transfer was constrained.

### 3.4 Coverb constructions

#### 3.4.1 In the substrate

As previously described in §3.1.1, coverb constructions consist of both a finite verb root and a preceding coverb. The former carries TMA information but is ‘semantically subordinated’ to the coverb, which indicates the basic verbal idea (Heath 1980a:57). Moreover, the combination of coverb and finite verb can alter the semantics and this is shown in (35) and (36). In these examples the same coverb is used with different finite verbs to realise different meanings.

- (35) mululbiri **garr**-arr-mudinyu--nu  
echidna **pierce.CV**-1sg-root:PRS-3sg  
*I pierce/spear the echidna.* (Alawa, Sharpe 1972:144)
- (36) **garr**-arr-ngadan-na ardal-da  
**pierce.CV**-1sg-root:PST-3sg stone.oven-LOC  
*I cooked it in the ground oven.* (Alawa, Sharpe 2001:33)

Also, as previously noted, the two language families employ different coverb constructions. Examples (35) and (36) show the Marran construction, which sees the position of the pronominal prefix between the coverb and finite verb. Example (37), however, shows the Gunwinyguan pattern that sees the pronominal prefix take the word initial position.

- (37)    ngu-werlng-bo                      nginy-yinih-gani-hmolk                      gun-gohje-hgen  
           1sg-mistake.CV-root:PP        1sg/2sg-tell.CV-root:POT-PNEG    NC-that-DAT
- gun.gu-langga-hgan  
           NC-billabong-DAT

*I made a mistake, I didn't tell you about that billabong.* (Ngalakgan, Merlan 1983:154)

### 3.4.2 Reinforcement Principle and predictions

Once again we can make use of findings from previous sections in developing predictions in this section. It was found in §3.3.3, for example, that there are no pronominal prefixes in Kriol. The structural difference between the two language families, based around pronominal prefixes, therefore, has no significance here. The following prediction, can, however, be made based on the reinforcement principle of frequency. Since all the substrate languages have coverbs as a core feature, it would then be expected that this feature would have been retained in the preceding pidgin, and the prediction follows:

#### Predictions based on coverbs

- E FEATURE 5:    A two verb construction in which one carries the semantic weight and is followed by a root verb that carries the TMA information.

### 3.4.3 Auxiliaries in Kriol

Kriol employs a small set of auxiliaries in verb constructions and they are presented in Table 14.

**Table 14:    Kriol Auxiliaries**

Auxiliaries	Description
<i>drai</i>	Attempt
<i>git</i>	Inchoative
<i>gu</i>	Factual
<i>meik</i>	Causative
<i>wandi</i>	Desiderative

However, auxiliaries cannot be regarded as equivalent to coverbs for several reasons. In the first place, Kriol auxiliaries are a small closed class, while coverbs in the substrate are an open class. Kriol auxiliaries realise modal and aspectual meanings, when occurring with a main verb. However, all of the auxiliary verbs in this category can also operate as main verbs independently, which is not a possibility open to either coverbs in the substrate or TMA markers in Kriol. Example (38) shows the use of the inchoative (INCH) auxiliary verb and (39) the same verb form being used as a main verb.

- (38)    olda        hosis    bin        **git**        **wik**  
          DET.PL    horse    PST       **INCH**    **weak**  
          *All the horses became weak/sick. (S323)*
- (39)    wi            bin        oldei    **git-im**        biges    haiding  
          1pl.ex     PST       CONT    **get-TM**        QUANThiding  
          *We always got a big hiding/belting. (C024)*

In addition, these examples, which show how auxiliaries can also occur with tense and aspect markers, therefore cannot be regarded as belonging to the same category. The semantic contribution of auxiliaries to the verb is grammatical rather than lexical. While the desiderative (DSD) auxiliary verb provides some semantic component, the main verb continues to carry the main semantic weight in (40). The same verb form as the desiderative when acting as the main verb also carries the main semantic weight, as in (41).

- (40)    det        mop    gels    bin        **wandi**    **fait**        minbala  
          DET       GRP    girls    PST       **DSD**    **fight**       1du.ex  
          *Those girls (that group of girls) wanted to fight us two (not including you). (C159)*
- (41)    det        olmen                    bin        **wandi**    melabat na        hadsenriba-na  
          DET       respected.man    PST       **want**    1pl.ex    G/L       [place.name]-EM  
          *That old man (elder) wanted us at Hodgson River then. (D037)*

A comparison between (39) and (40) and between (41) and (42), however, indicates that TMA marking precedes the auxiliary, rather than the main verb.

Although it was expected that the coverb construction would be retained in the creole, due to its high frequency among the substrate languages, it has not been. This suggests that the coverb construction may not have been transferred at an earlier stage of pidgin development.

#### **3.4.4 Availability Constraints**

E Feature 5 – a two verb construction in which one carries the semantic weight and is followed by a root verb that carries the TMA information – is not found in Kriol. The availability constraints may provide explanations. As the prediction stands it is not possible to provide perceptually salient forms in English as there are no actual forms predicted to occur. The predicted feature is a construction type, which can be examined in terms of congruence. To this end consider the following sentences.

*I go swimming a lot.*  
*I went swimming.*  
*I will go swimming.*  
*I get tired.*  
*I got tired.*  
*I will get tired.*

Here it can be seen that in English the auxiliary verb takes the TMA marking, while the second verb carries the bulk of the semantic weight in the sentence. This is the reverse of the substrate constructions in which coverbs carrying the semantic weight precede the TMA carrying root verb. There is therefore no congruent construction in the superstrate language for this coverb construction of the substrate languages to transfer to. It appears, therefore, that E Feature 5 may have been constrained due a lack of congruence in English. It could not have been retained during levelling because the feature had not transferred to the expanding pidgin.

### 3.5 Discussion

This chapter opened with a proposal that structural transfer (i.e. the fixed order of constituents of a feature) may only be relevant in the verb (or nominal) complex because morpheme positions are fixed in relation to the root. Features outside these complexes have no fixed word order that could constitute a structure that could be transferred. The findings from §3.1 - §3.4 are summarised in Table 15 below. It was found that only one feature showed signs of expected structural transfer: reduplication. There may be two other cases of structural transfer in the case of the reciprocal marker and the Progressive suffix. While the reciprocal and reflexive take separate forms they do still occur in the postverbal position, as predicted. The Progressive suffix is unique in Kriol as the only TMA suffix, which suggests that it may have also been influenced by the Habitual suffix in Alawa, also unique to that language, although further research is required. The evidence for the proposed structural transfer is, therefore, not strong.

It has been shown that the other predicted features do not occur because their transfer may have been constrained. In this chapter it was found that the transfer of pronominal prefixes was most likely constrained due to a lack of perceptually salient forms and, more importantly, congruent constructions in English. The coverb construction was not transferred, also due to a lack of congruence in English. The lack of TMA suffixes in Kriol may be explained through a lack of semantic transparency. Explanations for the transfer of different forms for the postverbal reciprocal and reflexive markers remain inconclusive. While Table 15 (on the following page) shows that of the nine predictions based on frequency, three are labelled ‘correct’, five ‘incorrect’ and one ‘inconclusive’, when one takes into consideration the availability constraints and other factors such as semantic transparency, the majority of the findings regarding feature transfer in this chapter are accounted for.



**Table 15: Summary of Chapter 3 findings**

<b>Predictions</b>	<b>Findings in Kriol</b>
E Feature 1: Series of postverbal TMA markers	Prediction incorrect. This feature is not found in Kriol. Constraints apply.
E Feature 2: Reduplication to indicate a progressive activity	Prediction correct Reduplication is used to indicate intensity, repetition or prolongation.
E Feature 3: Reciprocal and reflexive marking with the same postverbal form	Prediction incorrect. This feature is not found in Kriol. Inconclusive explanations.
E Feature 4: A series of preverbal pronominal forms that indicate arguments of the verb	Prediction incorrect This feature is not found in Kriol. Constraints apply.
E Feature 5: A two verb construction in which one carries the semantic weight and is followed by a root verb that carries the TMA information.	Prediction incorrect This feature is not found in Kriol. Constraints apply.
NE FEATURE 1: Postverbal Habitual marker	Inconclusive There is a Progressive suffix in Kriol that may have been influenced by this feature.
NE FEATURE 2: Verb root modification to indicate TMA	Prediction correct. This feature is not found in Kriol, as expected
NE FEATURE 3: Different forms to express reciprocal and reflexive	Prediction incorrect. There are different forms to express reciprocal and reflexive in Kriol. Inconclusive explanations
NE FEATURE 4: Preverbal marker to indicate reflexive for singular participants.	Prediction correct. Kriol has no preverbal reflexive marking, as expected.

## 4 Structural features of the nominal

This chapter investigates the possible substrate influence in the nominal complex of Roper Kriol nominal constructions by using the Transfer Constraints approach (see §1.4). Substrate languages treat nouns, adjectives and demonstratives in a similar manner and so each is subsumed under the term nominal (e.g. Dixon 1980; Koch 2000). In this chapter, however, we will concentrate on the marking of nouns; adjectives and demonstratives will be dealt with in chapter 6. While nominal constructions in the substrate languages are not as morphologically complicated as the verb complex, they still employ affixes in fixed morpheme positions in relation to the nominal root. While it was proposed in chapter 3 that structural transfer of morphological features like affixes may be likely in terms of function and position relating to the head, there was only one case of structural transfer found. The same approach is, however, still useful in this chapter because the lack of expected features continues to provide significant findings, particularly in testing the explanatory scope of the Transfer Constraints approach in general. Once again we can use a template structure to describe shared core features (see §1.4) within nominal constructions found in the substrate languages. In this case both families share the same core features, which are also shared by most nonPN languages. Noun class (NC) marking classifies the nominal in terms of gender, number and animacy. Case marking provides information regarding the nominal, such as its grammatical relations and semantic roles within the sentence. The template is followed by examples.

### Nominal template of the substrate languages

Marran and Gunwinyguan: NC–stem–CASE

- (42)    gumu-ngunu-ngun                    **mu-ngorro**            **nu-wanarr-yih**  
         3sg/NC-rdp-eat:PRES            **NC:MU-flower** **NC:m-rock.possum-ERG**  
         *Rock possums eat flowers.*            (Gunwinyguan - Ngalakgan, Merlan 1983:41)
- (43)    nga-rlini                    **na-walba-yani**  
         1sg-go:PST                    **NC:m.sg-river-ABL**  
         *I went from the river.*                    (Marran – Marra, Heath 1984:85)

There are numerous other nominal complex features in the substrate languages but those included in this template are those that are shared core features. Heath (1981a:72) notes, for example, in relation to Marra that noun class marking is obligatory in all circumstances, except the following three: where first and second person pronominal prefixes are used, when the pergressive case is used and when the neuter noun class is applicable. Noun class prefixes are discussed in §4.1. Case marking is also obligatory for indicating semantic roles. This feature is also commonly used to express grammatical relations, which are cross referenced by the pronominal prefixes on the verb (see §3.3). The case suffix system is discussed in §4.2. A discussion of the findings of the chapter is presented in §4.3

## 4.1 Noun class marking

### 4.1.1 In the substrate

Noun class is marked on nominals as a prefix in all the substrate languages under discussion. Nouns in the substrate languages are exhaustively classified into one of several classes (between 3-6 depending on the language), which are marked both on the noun and on other word classes, such as demonstratives, in agreement with it, as in example (45). However, nouns referring to humans and some other higher animates can also show noun class alternations (between masculine and feminine) to indicate biological sex, as in (44) and (45), as well as number (singular, dual and plural) as shown in (45). Nouns referring to inanimate or lower animates take other ‘neutral’ noun class marking, as in (46) with the GU noun class prefix.

- (44)    nganjini-ja wird      jang-an-na      na-muban      ngadu    **an-girriya**  
           why-GEN get        2sg-root:TMA-it 3sg-say:TMA    3sg:f    **NC:f-woman**
- niba  
 3sg:m

*“Why did you take it?” He said to the woman (his wife). (Alawa, Sharpe 1972:153)*

- (45)    w-anji                      luny-gu-janyi-rlana                      **ga-na**  
          3sg-sit:TMA                      coil.up-3sg-root:TMA-RFX                      **NC:m.sg-DEF**
- nangga-yimarr**                      **garrimarla**                      jigi-bala<sup>19</sup>                      ganagu    gunja    jigi-bala  
          **NC:msg-DEM**                      **taipan**                      dangerous-NOM    NEG    harmless dangerous-NOM
- ngamiyuganji                      warrnggu                      jurl-ulgu-ganji                      **wul-gariyi.**  
          [place name]                      until                      swallow-3sg/3pl-root:TMA                      **NC:pl-man**
- ga-yarra  
          NC-there

*That dangerous taipan coiled itself up. It was not harmless, it was dangerous. It stopped at Ngamiyuganji. Then it swallowed the people there* (Marra in Heath 1981a:359)

- (46)    Ø-bolk-miyiny                      bonyi                      **gun.gu-weh**  
          3sg-emerge-PC                      now                      **NC.GU-water**  
          *Now the water came out.*                      (Ngalakgan in Merlan 1983:41)

More importantly, however, we can also see that there are alternate forms of the noun class markers. Three of the four substrate languages – Marra, Nunggubuyu and Ngalakgan – all have long and short form noun class markers. Example (45) shows a long form noun class marker, *ga-na* in Marra and example (46) shows a Ngalakgan long form, *gun.gu-*. The long form noun class markers of Marra are called ‘articles’ by Heath (1981a:68), although, the description provided there is only partial. They must precede another nominal element and are far more common in texts than demonstratives (Heath 1981a:68). These ‘articles’ do not prefix to the nominal element they are modifying, but rather Heath (1981a) analyses them as stand alone words that precede an obligatory nominal. Although the articles cannot occur independently of the nominal they precede, they apparently have greater prosodic independence than the noun class prefixes of Nunggubuyu and Ngalakgan. Furthermore, their resemblance in form, and possibly function, to the long form noun class markers in both Ngalakgan and Nunggubuyu suggests they are most likely realising the same underlying feature.

It will help, therefore, to describe the long form noun class markers in Ngalakgan and Nunggubuyu. Earlier research suggested that there was a relationship between noun class marking and case marking that accounted for the distribution of long and short forms of

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<sup>19</sup> Kriol loanword

noun class markers (Heath 1984:164; Merlan 1983:37). Recent research, by Baker (2002a) however, extends this analysis to argue that the noun class allomorphy that exists in Ngalakgan is not conditioned regularly by case function, but seems instead to be conditioned by information status ('old' vs 'new' information) and the scope of indefiniteness operators. Noun class forms alternate according to a distinction between 'topic' and 'focus'. Lyons (1999:228) defines these terms as follows: 'The topic is ... characterized by what is given....' [and in contrast] '...what is not presupposed [as already known, in the sentence] is in focus' (Lyons 1999:228). The long noun class marker (DEF) indicates the topic or what has already been mentioned in discourse. The short noun class form (or zero) marks the focus, or that information which cannot be presupposed to be known. Consider the following example from Ngalakgan provided by Baker (2004) in this light. In (47a), the reference to ringtailed possum is topical, because it had just been mentioned, and here is realised with a long noun class prefix. In (47b), the reference to rock ringtailed possum is new and contrastive, and so it lacks a noun class prefix.

- (47) a.        jandah-gah        gu-yongon,        **nu-gu-dugurlah**  
                  tree-LOC        3sg-lie:TMA,        **NC:m-DEF-common.ringtail.possum**  
                  *'it lives in trees, the (common) ringtailed possum.'*
- b.        **wanarr,**                    mirh-gah        gu-yongon  
                  **rock.ringtail.possum**        cave-LOC        3sg-lie:TMA  
                  *'[but] the rock ringtailed possum lives in caves,'*

Perhaps more significantly, in citation nouns never receive noun class prefixes in Nunggubuyu, and in Ngalakgan, if they do receive a prefix then it's always the short form. Nouns only receive long form prefixes if they are both definite and are not in focus, such as the utterance final example above in (47a). Baker (2004) suggests that the long form noun class markers in Nunggubuyu function in the same or similar ways, and I suggest that those in Marra (formerly referred to as 'articles') are also realising a similar function.

The Gunwinyguan substrate languages also commonly use definite noun class markers on personal and place names, in other words proper nouns, as (48) and (49) show respectively.

- (48) **ju-gu-maygidi-yih**                      ju-gajah                      ju-welenge  
**NC:f-DEF-[personal name]-CASE**    NC-dog                      NC-female
- gun.gu-ngey-ngoji    Ø-gahwarr-miny  
 NC-name-hers              3sg/3sg-chase-root:PP  
*Maygidi the dog, the female (one) - that's her name - (she) chased it.* (Ngalakgan, Merlan 1983:83)
- (49) **gun-gu-rono,**                      nu-gunhbirri                      mambali  
**NC:GU-DEF-[place name]**    NC-that                      [semimoiety term]  
*Rono is of the Mambali. (lit. 'Rono, that's Mambali semimoiety')* (Ngalakgan, Baker PC 25/7/03)

Marra also uses the regular noun class marking on personal names, although no examples are provided (Heath 1981a:92-93). Further research is required on these topics in Marra and Alawa.

#### 4.1.2 Reinforcement Principle and predictions

The reinforcement principle of frequency suggests that those previously transferred features that are shared core features of the substrate languages will be used most commonly in the developing contact language, thereby giving them the greatest chance of being retained during levelling. Just as in chapter 3, while the substrate language features are described in terms of affix position, comparative searches in either Kriol or English are not limited to affixes, but rather the position of comparable morphemes in relation to the head of the phrase. In this case, noun class markers are prefixes to the nominal, in which case the comparative searches will concentrate on pronominal markers that function like noun class markers. Based on the previous discussion on noun class marking in the substrate languages we can, therefore, make the following predictions.

##### Predictions based on noun class marking

- E FEATURE 6:    Prenominal markers that classify nouns according to grammatical gender and number as well as providing distinctions in discourse status.
- E FEATURE 7:    Prenominal markers used for definite or topical nouns also used for personal and place names.

It is expected, therefore, that if transfer to the preceding pidgin was not constrained, a prenominal feature with the following characteristics may have been retained in levelling due to high frequency use. This feature may classify nouns in terms of grammatical gender and number, as well as distinguishing the discourse status of nouns as either ‘topic’ or ‘focus’ (E Feature 6). Secondly, these prenominal markers that mark definiteness or ‘topic’ may be applied to proper nouns (E Feature 7).

### 4.1.3 Determiners in Kriol

Kriol employs determiners, which are presented in Table 16.

**Table 16: Kriol determiners**

	<b>Singular</b>	<b>Plural</b>
<b>Focus</b>	dis	dismop
<b>Topic</b>	det	detlot

Determiners (DET) in Kriol precede the nominal. They do not distinguish gender but they do mark number, distinguishing Singular and Plural as shown in the following example.

- (50)    en            mi            en            **det**            **olmen-na**            blanga            dorin  
           TPC            1sg            CONJ        **DET**        **old/respected.man-EM**    P/P            [personal name]
- fatha            bondow            mindubala            stent-ap            en            deik-im  
           father            [personal name]    1du.ex            stand-DIR            CONJ        take-TM
- detlot**            **hos**            gu            la            fomail  
           **DET:pl**        **horse**            go            G/L            [place name]

*And me and the/that respected man, who is Doreen's father, Ponto, we two (not you) stood up and took the/those horses to Four Mile. (A090)*

This feature is used extensively in the texts on all types of nominals. Determiners are used, for example, on proper nouns, as in (51) on personal names and (52) on place names.

- (51)    den            main            mami            en            dedi            bin            stat            werk            la            det  
           then            POSS            mummy        CONJ        daddy            PST            INC            work            G/L            DET

olmen-na		det	munanga-na	<b>det</b>	<b>ol-joigonawei</b>
old/respected.man-EM		DET	munanga-EM	<b>DET</b>	<b>RSP-[personal name]</b>

*Then, my mummy and daddy started to work with the/that (respected) man, the/that munanga (whitefella) now, [the/that] (Mr) George Conway.* (A022)

- |      |       |             |       |        |           |       |        |            |     |
|------|-------|-------------|-------|--------|-----------|-------|--------|------------|-----|
| (52) | det   | flat        | woda  | bin    | ran-ing   | en    | eberri | jildren    | bin |
|      | DET   | flood       | water | PST    | run-PROG  | CONJ  | QUANT  | children   | PST |
|      | oldei | gu bougi la | wan   | lil    | bilabong  | jeya  | la     | <b>det</b> |     |
|      | CONT  | go swim G/L | one   | little | billabong | there | G/L    | <b>DET</b> |     |

**mishengoj**  
**[place name]**

*The floodwater was running and all the children always went for a swim at a small billabong, there at [the/that] Mission Gorge.* (C110)

It appears that the function of determiners is to indicate topic, as they mark that which has already been mentioned in the discourse or narrative as in (53).

- |      |            |              |         |     |       |      |        |     |      |
|------|------------|--------------|---------|-----|-------|------|--------|-----|------|
| (53) | dei        | bin          | meik-im | bik | faiya | en   | wi     | bin | luk  |
|      | 3pl        | PST          | make-TM | big | fire  | CONJ | 1pl.in | PST | look |
|      | <b>det</b> | <b>faiya</b> |         |     |       |      |        |     |      |
|      | <b>DET</b> | <b>fire</b>  |         |     |       |      |        |     |      |

*They made a big fire and we watched that fire.* (C143)

In this case the determiner is used to suggest that the ‘fire’ being referred to the second time is that which was previously mentioned. Another example of such use follows in (54). In this example, the use of the determiner on ‘my group of grandfathers’ indicates that these people have already been mentioned, which in turn shows that this refers to the two respected old men, *Modigiya* and *Stenli*.

- |      |        |                     |      |               |              |                    |                     |
|------|--------|---------------------|------|---------------|--------------|--------------------|---------------------|
| (54) | wi     | bin                 | stei | la            | lemen        | andil              | ol-modigiya         |
|      | 1pl.ex | PST                 | stay | G/L           | [place name] | until              | RSP-[personal.name] |
|      | en     | ol-stenli           |      | <b>detlot</b> | <b>main</b>  | <b>grenfatha</b>   | <b>mop</b>          |
|      | CONJ   | RSP-[personal.name] |      | <b>DET:pl</b> | <b>POSS</b>  | <b>grandfather</b> | <b>GRP</b>          |
|      | abija  | mop,                | dei  | bin           | gu           | la                 | natwut              |
|      | FF/FFZ | GRP                 | 3pl  | PST           | go           | G/L                | [place name]        |

*We stayed at Limmen (Bight) until (the respected man) Mordici and (the respected man) Stanley, who are my grandfathers, my father’s father’s, until they went to Nutwood (Downs).* (C031)



The other major discourse status is ‘focus’, normally associated with referents, which have not been mentioned in the narrative before. Focus is realised in two ways, either where the noun takes no determiner, or where it takes the determiner, *dis/dismop*, as on ‘two boys’ in example (55), which indicates that they have not been previously mentioned. This example shows that the use of the plural form is optional. Furthermore, the determiners, *dis/dismop*, are not as commonly found in texts as *det/detlot*.

(55)	wal	mela	bin	gu	jeya-na	en	dis	du	boi
	TPC	1pl.ex	PST	go	there-EM	CONJ	DET	two	boy
	bin								
	PST	dal-im	im						
		tell-TM	3sg						

*Well we went there now and (these) two boys told him.* (A143)

In summary, it has been found that Kriol displays a prenominal feature that marks nouns, including proper nouns, for number and discourse status. It can be said, therefore, that E Feature 6 and E Feature 7 are found in Kriol. However, the equivalent feature in Kriol, the determiners, do not indicate grammatical gender on nouns. This aspect of E Feature 6 is therefore not found in Kriol.

#### 4.1.4 Availability Constraints and other explanations

E Feature 6 – prenominal markers that classify nouns according to grammatical gender and number as well as providing distinctions in discourse status – is partially found in Kriol. Firstly, there are perceptually salient features in English on which the Kriol determiners are based. The non-singular determiners – *det* and *dis*, are based on the English demonstratives, ‘that’ and ‘this’, and the plural forms, *dismop* and *detlot*, are based on ‘this mob’ and ‘that lot’. Secondly, these English features also occur in congruent constructions, whereby they precede the noun they are modifying. Consider the following sentences.

*Do you want this book or that book?*  
*That movie was great.*  
*Where is that lot of no hoppers?*  
*This mob’s horses are ready.*

With no constraints apparent, transfer of the feature is expected to have taken place to the preceding pidgin. Due to its high frequency use it was then retained during levelling.

One function is not, however, found in Kriol; grammatical gender. Simplification may provide reasons for the loss of this function, while in this case the availability constraints cannot. Simplification was discussed in §1.4 as a process whereby features with more than one function may be reduced to carrying out one function. As will be further discussed in §5.1, it has been shown that contact languages regularly lose gender in the pronominal system through simplification (see e.g. Romaine1988). In this case noun class markers are expected to carry out two classification functions; marking number and grammatical gender. As such, simplification of the feature may have occurred, reducing the functional load of the pronominal markers to mark number only. The fact that the perceptually salient English demonstratives also mark for number but not gender may have reinforced this feature characteristic. As there were no other constraints on transfer, the feature transferred to the preceding pidgin with only one classificatory feature intact.

Finally, E Feature 7 – pronominal markers used for definite or topical nouns also used for personal and place names – is found in Kriol with determiners performing this role. As just discussed the determiners take the perceptually salient forms of the demonstratives in English. In terms of congruent constructions there are some instances, in English, when demonstratives can occur before proper nouns. In terms of marking discourse status, English uses articles to mark definiteness, but they are not normally used in conjunction with personal names or place names. Consider the following sentences in this way.

*\*We went to that Boonooboonoo.*

*John was talking to that Hazel Black.*

*They came to this town of Stanthorpe.*

*\*They came to the/a Stanthorpe.*

*\*She visited the/a Shirley on the weekend.*

As there were no constraints in place, transfer was once again able to occur to the preceding pidgin. Due to the high frequency use of the feature among the substrate languages, it was retained during levelling.

## 4.2 Case marking

### 4.2.1 In the substrate

The other feature from the substrate nominal complex is case suffix marking. The substrate languages differ in the mapping between the formal case categories and the semantic roles they realise and an expanded discussion of them will be found in §5.3. Case marking in all the languages marks both grammatical relations, such as ergative (ERG), as shown in (56), and semantic roles, such as instrument (INST) also in (56) and location (LOC), such as in (57).

- (56) **lilmi-rri**    **yang-ga-ngadan-na**    **da**    **girribu**    **barragarl-da**  
**man-ERG**    **hit.CV-3sg/3sg-do-TMA**    **CONJ**    **kangaroo**    **spear-INST**  
*The man killed the kangaroo with a spear.*    (Alawa, Sharpe 1972:62)
- (57) **wa:-rirra-ngi**    **a:-ban-duj**  
**3pl/3pl-dry-PST**    **NC-ground-LOC**  
*They dried them on the ground.*    (Nunggubuyu, Heath 1980b:23)

All the substrate languages mark case in the postnominal position, as suffixes. Many cases exhibit allomorphic variation.

### 4.2.2 Reinforcement Principle and predictions

The use of case suffixes in the nominal complex is a shared core feature of the substrate languages. The following prediction can therefore be made.

### Prediction based on case marking

E FEATURE 8: Postnominal indicators of grammatical relations and/or semantic roles.

It is predicted that if availability constraints allowed for transfer to the contact language then this feature would be retained in the emerging creole.

### 4.2.3 Prepositions in Kriol

There is no postnominal case marking in Kriol. Instead semantic roles, such as goal/location (G/L) and instrumental/accompaniment (I/A), are marked by prepositions that precede the noun complex as shown in (58) - (60).

- (58) wal ai bin bon la natwut  
TPC 1sg PST born G/L [place name]  
*Well, I was born at Nutwood.* (C001)
- (59) mela bin oldei gu hant garra gliyou  
1pl.ex PST CONT go hunt I/A [personal name]  
*We always hunted with Cleo.* (D015)
- (60) det medel hasben bin hit-im garra shabul-spiya maitbi  
DET [personal name] husband PST hit-TM I/A shovel-spear POSS  
*Myrtle's [lit. 'the Myrtle'] husband hit her with a shovel spear, perhaps/maybe.* (C028)

Grammatical relations are expressed through other means in Kriol, such as word order.

### 4.2.4 Availability Constraints

E Feature 8 – postnominal indicators of grammatical relations and/or semantic roles – is not found in Kriol. The availability constraints may provide an explanation for this. There are no perceptually salient postnominal forms in English that could be interpreted

as being case markers. Rather, the semantic roles that are marked by case suffixes in the substrate languages are marked by prepositions in English, as in the following sentences:

*She came back from London.*

*We were walking along the creek bed.*

As there were no congruent constructions to the postnominal case markers of the substrate languages, Kriol adopted this English construction of prenominal prepositions to indicate semantic roles. In terms of grammatical relations, Kriol again follows the English strategy of using word order – i.e., the agent noun phrase occurring before the verb and the patient after. Transfer of this feature was therefore constrained during the expansion of NT Pidgin and was therefore not available for retention during levelling.

### **4.3 Discussion**

In this chapter we saw that there are two core features of the nominal complex in the substrate languages: noun class marking and case marking. In §4.1 I argued that the following characteristics of the substrate languages' noun class marking feature transferred to the preceding pidgin: indication of number; the prenominal position; distinguishing discourse status of nouns; and their use with proper nouns. Due to the high frequency status of these features they were retained during levelling. Evidence of such features in Kriol are that the prenominal determiners that indicate number are used on proper nouns and distinguish discourse status of topic and focus of nouns. The only other function of the noun class markers, marking grammatical gender, may have been lost due to simplification before transfer could take place. The substrate languages' postnominal case marking feature was discussed in §4.2, which showed that the construction has not been transferred to the preceding pidgin, and is ultimately not found in Kriol. It was suggested that this is most likely due to the fact that there is no congruent construction in English with a similar function, and therefore transfer was constrained. A summary of these results is provided in Table 17.

In terms of the issue of structural transfer one of the two features discussed in this chapter may have shown signs of structural transfer, namely the position of the determiners in Kriol. Yet the position of these determiners may also have been influenced by the position of the English demonstratives on which they were based. What appears to allow one to understand that this may in fact be structural transfer is the discussion of semantic features in combination with the structural features. This is similar to the analysis of the reciprocal marker and the Progressive aspect marker in chapter 3. The case markers, on the other hand, are only discussed in terms of structural transfer and show no sign of such transfer. The same applies to the discussion of TMA markers and pronominal prefixes in chapter 3. All three of these features include a range of semantic categories, which require a more focussed analysis of their systems, which follows in chapter 5.

**Table 17: Summary of Chapter 4 findings**

<b>Predictions</b>	<b>Findings in Kriol</b>
E Feature 6: Prenominal markers that classify nouns according to grammatical gender and number, as well as providing distinctions in discourse status.	Prediction correct Prenominal determiners in Kriol mark nouns for number and discourse status. The function of grammatical gender did not transfer possibly due to simplification.
E Feature 7: Prenominal markers used for definite or topical nouns also used for personal and place names.	Prediction correct. Kriol determiners are used on proper nouns, as there were no constraints on transfer.
E Feature 8: Postnominal indicators of grammatical relations and/or semantic roles	Prediction incorrect. Prenominal prepositions used in Kriol to mark semantic roles and grammatical relations marked through word order. Constraints apply.