

The development of asymmetrical serial verb constructions in an Australian mixed language

FELICITY MEAKINS

Abstract

Gurindji Kriol is a mixed language spoken in northern Australia. It is derived from Gurindji, a Pama-Nyungan language, and Kriol, an English-lexifier creole language. Despite these clear sources, Gurindji Kriol contains grammatical systems which are not found in Gurindji or Kriol, for example asymmetrical serial verb constructions. The origin of these constructions is unclear given that Kriol only contains a very limited set of serial verb constructions and they are not found in Gurindji. The development of asymmetrical serial verb constructions is examined and it is suggested that they are a product of the more restricted Kriol serial verb construction developing and expanding under the influence of the Gurindji complex verb. The formation of this construction was a part of the more general genesis of the mixed language which was derived from code-switching.

Keywords: Australian languages, code-switching, complex predicates, Gurindji, Gurindji Kriol, Kriol, language contact, mixed languages, serial verbs, syntax

1. Introduction

To date the study of mixed languages has concentrated on the broad issues of their classification, the mechanisms of mixing, and the contribution of various social factors to their genesis (Matras & Bakker (eds.) 2003, Bakker & Mous (eds.) 1994, Thomason (ed.) 1997). Many of these studies discuss the more general origin of structural and lexical splits in mixed languages; less work has focussed on the development of more specific linguistic features in mixed systems. The general assumption is always that, though mixed languages combine the subsystems of two distinct and identifiable source languages, the subsystems in the mixed language behave as they would do in

Linguistic Typology 14 (2010), 1-38 DOI 10.1515/LITY.2010.001

1430-0532/2010/014-01 ©Walter de Gruyter

their source languages. Some exceptions include comparisons of Sri Lanka Malay tense/aspect/mood and case systems with its source languages (Slomanson 2006, Smith & Paauw 2006), the emergence of a unique comparative structure in Media Lengua (Muysken 1997: 397), and the shift in the function of the ergative marker in Gurindji Kriol and Light Warlpiri as a result of contact with Kriol/English word order (Meakins 2009, Meakins & O'Shannessy to appear).

In this article I examine the development of asymmetrical serial verb constructions in one mixed language, Gurindji Kriol (Australia). Gurindji Kriol combines the structure and lexicon of Gurindji, a Pama-Nyungan language (McConvell 1996), with that of Kriol, an English-lexified creole language (Sandefur 1979, Munro 2005). Nonetheless Gurindji Kriol does not merely replicate features from these languages. It uses the forms from Gurindji and Kriol to create a unique language system. One place this uniqueness can be demonstrated is in the use of serial verb constructions, as shown in (1).

```
(1)
                    garra putim makin
                                            yardta.
      a.
                                            yard-ta.
                    garra put-im makin
           3sg.sbj pot put-tr lie.down yard-loc
           'He will lay him down in the yard.' (CR: FM054.B: Narrative)<sup>2</sup>
                    bin teikim jarrpip najan
                                                  kapukungkuma
      b.
                    bin teik-im jarrpip najan
                                                  kapuku-ngku-ma
                                         another sister-ERG-DIS
           3sg.sbj pst take-tr lift
           nganta.
           nganta.
           DOUBT
           'The other sister carried him.' (CE: FM045.D: Narrative)
           thribala malyju dei
                                     gon warlakap
                                                       jurlakayu.
           thribala malyju dei
                                     gon warlakap
                                                       jurlaka-yu
           three
                    boy
                             3PL.SBJ go look.around bird-DAT
           'The three boys, they go looking around for birds.' (AC: FM011.A:
           Narrative)
```

These constructions consist of an auxiliary verb, a verb from a grammatically restricted set, and a second verb from a large open class. The auxiliary provides the clause with tense/aspect/mood (TAM) information, the second verb contributes additional aspectual, valency, or deictic information, and most

^{1.} In all examples, Gurindji elements are italicised and Kriol elements are given in plain font.

^{2.} All examples are referenced in this style (Speaker Initials: Recording Reference: Genre, e.g., narrative, conversation, description, or picture-match elicitation). Picture-match elicitation was elicitation performed by Gurindji research assistants using picture-prompt games. A number of narratives were told to the "Frog, where are you?" book (Mayer 1969 [1994]) which is well known from many other studies. These examples are referenced as "Frog story".

of the lexical semantics of the verb sequence is carried by the open class verb (Section 3.2). In addition to their role in this verb chain, the second verb and the open class verb may also occur as independent predicates. Aikhenvald (2006: 21) calls sequences of verbs with these properties "asymmetrical" serial verb constructions, as will be discussed in Section 3.

The origin of these constructions in Gurindji Kriol is not straightforward. Although Kriol provides the grammatical frame for the verb phrase (as defined by the use of Kriol auxiliaries such as the TAM markers garra in (1a) and bin in (1b)), this type of construction is restricted in Kriol. As will be shown in Section 4.2, asymmetrical serial verb constructions in Kriol are limited to causative and motion constructions such as the type shown in (1c). The Gurindji Kriol construction is also not directly derived from Gurindji. Gurindji does not exhibit serial verbs; however, two-part verbs are in evidence. Gurindji contains a complex verb consisting of a semantically-bleached verb which provides TAM information and a coverb which carries the main lexical semantics of the complex (Section 4.3). These complex verbs are crucially different from Gurindji Kriol serial verb constructions in one respect. Although the inflected verb in Gurindji can occur independently of the coverb, the coverb cannot act as an independent predicate. This contrasts with Gurindji Kriol asymmetrical serial verb constructions where both verbs can appear in monoverbal constructions as independent predicates. This difference is interesting given that many of the Gurindji coverbs have been absorbed into Gurindji Kriol and have gained the status of independent predicates in doing so.

In this article, I suggest that asymmetrical serial verb constructions in Gurindji Kriol are a product of the more restricted Kriol serial verb construction developing and expanding under the influence of the Gurindji complex verb. The formation of this construction was a part of the more general genesis of the mixed language. Gurindji Kriol is only 30 years old and code-switching between Gurindji and Kriol was the communicative norm for the Gurindji in the 1970s (McConvell 1985, 1988). McConvell & Meakins (2005) argue that these linguistic practices played a significant role in the emergence of the mixed language, and it is in the code-switching patterns that the emergence of the asymmetrical verb construction can be seen. As is discussed in McConvell & Meakins 2005, Kriol provided the verbal frame for the code-switching and ultimately the mixed language, and, in this respect, initially contributed the very restricted asymmetrical serial verb construction. Within this verbal frame, Gurindji coverbs and Kriol verbs were treated as congruent categories, resulting in the wholesale adoption of Gurindji coverbs in the Kriol verbal frame. With them came many of the combinatory and functional properties associated with the Gurindji complex verb which enriched the restricted Kriol serial verb construction. Thus in the last part of this article, I discuss the patterns of verb use within Gurindji-Kriol code-switching in the 1970s and demonstrate that

this code-switching resulted in contact between the two languages' verb systems and ultimately the formation of the asymmetrical serial verb construction (Section 4.4).

The Gurindji Kriol data are drawn from my corpus of 80 hours of recordings of peer and child-directed conversation, free and picture-prompt narrative (e.g., Frog stories), and picture-match elicitation games. The Gurindji examples come from my corpus of 23 hours of procedural and narrative texts. Kriol data are drawn from some of my few recordings of the Kriol variety spoken west of Katherine (see Map 1), Sandefur's (1979) Kriol grammar and Munro's (2005) thesis which are based on Roper River Kriol, a variety found east of Katherine, Disbray's (2008) thesis on Wumpurrarni English (the Kriol variety spoken in Tennant Creek), and Denise Angelo's Kriol recordings from Katherine. Finally the Gurindji-Kriol code-switching data from the 1970s were collected by Patrick McConvell and present-day examples come from my own corpus.

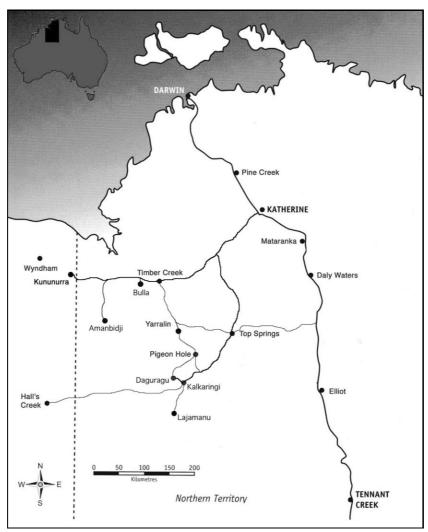
2. An overview of the origins and structure of Gurindji Kriol

Gurindji Kriol is a mixed language which is spoken by Gurindji people who live in Kalkaringi and Daguragu³ in northern Australia, as shown in Map 1. This community is located within the traditional lands of the Gurindji. Gurindji Kriol is now also spoken by Bilinarra and Ngarinyman people in two neighbouring communities to the north, Pigeon Hole and Yarralin.

This area is called the Victoria River District and largely consists of black soil plains which made it attractive cattle country for the European colonists. Cattle stations were set up from the late 1800s onwards. As in the rest of Australia, colonisation was detrimental to Aboriginal people in the Victoria River District. Many people died from introduced diseases and many others died in skirmishes with the Europeans (Rose 1991, Wavehill 2000). The remaining Aboriginal people were rounded up and put to work on cattle stations in slavelike conditions. By the 1960s discontent was running high amongst the Aboriginal workers, and in 1966 the Gurindji went on strike. Yet what started as an industrial dispute transformed into a struggle to regain control of their traditional lands, and in 1975 they became the first group of Aboriginal people in Australia to make a successful land claim (Hardy 1968, Hokari 2000).

The lingua franca of the cattle stations was a pidginised English. Codeswitching was the norm, particularly switching between varieties of Gurindji and this contact English variety (McConvell 1988), and it is likely that code-

^{3.} When I refer to Kalkaringi in the rest of the article, I include Daguragu which is a settlement 8 km away. These communities were set up separately historically, but they operate as a single entity in terms of kin relations and administration.



Map 1. Kalkaringi and surrounding area

switching provided the linguistic conditions for the formation of the mixed language (McConvell & Meakins 2005, McConvell 2008, Meakins 2007). Further to the north, many other Aboriginal people in similar situations ceased speaking their traditional languages and shifted to cattle station pidgin, which, as it stabilised, was called Kriol. Interestingly the Gurindji did not completely shift to Kriol, instead maintaining a substantial component of Gurindji through a

mixed language. It is likely that identity factors played a strong role in the partial maintenance of Gurindji. The retention of Gurindji features in the mixed language occurred in parallel to the land rights movement, and both can be considered expressions of the persistence of a Gurindji identity (Meakins 2008b). Nowadays all Gurindji people under the age of 35 speak Gurindji Kriol as their first language, with only older people continuing to speak Gurindji (Meakins 2008a: 293).

Gurindji Kriol is a V-N mixed language (Bakker 2003: 122). V-N mixed languages exhibit a split between noun and verb systems. Michif is the most well-known of these, with Cree responsible for the verbal system and French for the NP; additionally all verbs are derived from Cree, and most nouns from French (Bakker 1997). Further afield in the Bering Strait, Copper Island (Mednyj) Aleut also displays a V-N split with Aleut contributing nominal morphology including case marking, other inflectional morphology, and derivational morphology and Russian providing finite verb inflection. Nouns and verbs are also not restricted to the language of inflection in this mixed language (Golovko 1994, 1996; Thomason 1997). In the case of Gurindji Kriol, Kriol contributes much of the verbal grammar including tense and mood auxiliaries, and transitive, aspect, and derivational morphemes. Gurindji supplies most of the NP structure including case and derivational morphology. Gurindji Kriol differs from Michif in that nouns and verbs come from both languages. For example, though Gurindji provides the nominal structure, nouns are also derived from Kriol. Light Warlpiri is another recently identified V-N mixed language which is spoken close to Kalkaringi in Lajamanu (see Map 1). It is an admixture of Warlpiri and a contact variety of English and bears a strong structural resemblance to Gurindji Kriol (O'Shannessy 2005, Meakins & O'Shannessy forthcoming). These types of mixed languages are quite rare. Most mixed languages combine a significant proportion of the lexicon from one language with the grammar of another (Bakker 2003: 125). For example Media Lengua has relexified Quechuan stems with Spanish words while maintaining Quechuan morphosyntax (Muysken 1981).

In the case of Gurindji Kriol, both languages also contribute small amounts of grammar to the systems where they are not grammatically dominant. For example, the Gurindji progressive suffix is found in the VP, and Kriol determiners are common in the NP. Kriol also provides Gurindji Kriol with an SVO word order, though the word order is more flexible than in Kriol with Gurindji-derived information structure determining word order to some extent. Complex clauses are constructed using both Gurindji and Kriol strategies, e.g., coordinating and relative clauses use Kriol conjunctions and relative pronouns, and subordinate clauses are formed using Gurindji-derived case and inchoative marking (Meakins 2008b). Lexically, 35 % of words in Gurindji Kriol are Kriol-only forms, 28 % Gurindji-only forms, and the remaining 37 % are syn-

onymous forms from both languages which are used interchangeably, depending on a number of sociolinguistic factors including group identification and the age of the addressee. These figures are based on the Swadesh 200-word list (Meakins 2007: 353, Meakins & O'Shannessy 2005: 45).

The following example demonstrates some of these structural and lexical features of Gurindji Kriol. It is from the Frog story and begins as the child climbs on top of the deer. The degree of mixing in Gurindji Kriol can be seen through the distribution of italicised (Gurindji) and non-italicised (Kriol) morphemes.

- (2) a. karu im top laim kankula diyangka. karu im top la=im kankula diyangka child 3sg.sbj be Obl=3sg up deer-loc 'The child is sitting on top of the deer.'
 - im teikim *rarraj* dat karuma nyanuny teik-im rarraj im karu-ma nyanuny 3sg.sbj take-tr run DET child-dis 3sg.dat ngarlakangka an warlaku kanyjurrangka. ngarlaka-ngka an warlaku kanyjurra-ngka head-Loc down-Loc and dog 'The deer took the child running on its head, with the dog below.'
 - dat diyangku i bin jak im na dat diya-ngku i bin jak the deer-erg 3sg.sbj pst make.fall 3sg.obj dis child kanyjurrak, klifnginyima. karu an warlaku warlaku kanyjurra-k, klif-nginyi-ma dog down-ALL, cliff-ABL-DIS 'The deer threw the child and the dog downwards off the cliff.'
 - d. tubala <u>baldan</u> kujarrapparni karu an warlaku
 tubala baldan kujarrap-pa-rni karu an warlaku
 3DU fall pair-EP-ONLY child and dog
 ngawangkirri jirrpu.
 ngawa-ngkirri jirrpu
 water-ALL dive
 'The pair of them, the child and dog <u>fell down</u>, <u>diving</u> into the water.' (LS: FHM144: Frog story)

In this example, the nominal system is derived from Gurindji, including case (e.g., ergative -ngku, locative -ngka, allative -ngkirri, and ablative -nginyi), and the VP structure, including TAM markers (e.g., past tense bin, transitive marker -im), comes from Kriol. Lexically, verbs and nominals come from both languages, e.g., some verbs are derived from Gurindji, rarraj 'run', and some are

from Kriol, *top* 'be' (< *stop*). The source of nominals is also mixed, for, e.g., *karu* 'child' is derived from Gurindji and *diya* 'deer' is from Kriol.

Of interest to this article are two instances of the speaker's use of two verbs to act as a single predicate, for example in (2b) *teikim rarraj* 'take run' and a non-contiguous example in (2d), *baldan jirrpu* 'fall dive'. These constructions are not found in either of Gurindji Kriol's source languages, Kriol (Section 4.2) or Gurindji (Section 4.3). I describe them further in the following section, and discuss their origins in Section 4.4.

3. Asymmetrical serial verb constructions in Gurindji Kriol

3.1. Characterising asymmetrical verb constructions

Serial verb constructions are characterised by two or more verbs acting together as a single predicate and marking a single event (Durie 1997: 290, Aikhenvald 2006: 4, Givón 1991: 137). They are commonly found in West African languages such as Fongbe (Lefebvre 1991), Igbo (Manfredi 1989), and Yoruba (Bambose 1974), Oceanic languages (Crowley 2002), and the Atlantic and Pacific creoles influenced by these languages (Crowley 2002; Mühlhäusler 1985a, b; Verhaar 1995; Sebba 1987; Muysken & Veenstra 1995; Jansen et al. 1978). They are also found in other areas such as South-East Asia, e.g., Mandarin (Butt 2003, Li & Thompson 1981) and Cantonese (Matthews 2006), and in many Austronesian and Papuan languages (Senft (ed.) 2008, Givón 1991).

A subtype of serial verb constructions consists of a verb from a restricted set of verbs which combines with a verb from a relatively large open class category. Sebba (1987: 40) first identified this subtype for Sranan, a creole language spoken in Suriname. Butt (2003) includes these constructions under the umbrella term "complex predicate" but does not distinguish between languages where the closed class verbs can potentially act as independent predicates and those languages where they cannot – a difference which will become crucial to my argument later. Aikhenvald (2006: 21) does make this distinction and identifies a subclass of serial verb constructions which consists of a closed class and open class verb which can also be found in monoverbal clauses. She calls these "asymmetrical", also known as "unbalanced" serial verb constructions (Durie 1997). The serial verb constructions in Gurindji Kriol are of this type. The following sections will discuss the constituents of the Gurindji Kriol asym-

^{4.} Note that although Aikhenvald and others in Aikhenvald & Dixon's 2006 volume on serial verbs give Durie 1997 as the source of the term "unbalanced serial verb constructions", he doesn't actually use the term here, though he discusses them and their components. It is likely that he uses this term in an earlier unpublished paper of 1995 ("Towards a typology of verb serialisation", Seminar in Department of Linguistics, Australian National University).

metrical serial verb construction (Section 3.2), the syntactic properties of these constructions (Section 3.3), and their functions (Section 3.4).

3.2. The constituents of Gurindji Kriol asymmetrical serial verb constructions

There are three potential parts to the Gurindji Kriol asymmetrical serial verb construction. Using terminology from Durie 1997, these constructions consist of an auxiliary verb (indexed 1 in example (3)), a minor verb (indexed 2), and a major verb (indexed 3):

```
(3) i garra<sub>1</sub> putim<sub>2</sub> makin<sub>3</sub> yardta.
i garra put-im makin yard-ta
3sG.SBJ POT put-TR lie.down yard-LOC
'He will lay him down in the yard.' (CR: FM054.B: Narrative)
```

Auxiliary verbs are derived from Kriol. They make up a closed class of twenty verbs with six forms which are reducible to clitics. These clitics attach to subject pronouns. For example in (3) the auxiliary *garra* (potential, < *got to*) can also be reduced to =*rra* and attach to 3sg.sbj *i* (*i=rra*). The auxiliary verbs provide tense, aspect, and mood information, e.g., *bin* (past, < *been*), *til* (durative, < *still*), and *labta* (necessative, < *love to*), as well as negation, e.g., *neba* (< *never*). They can also be used to create passive clauses using the auxiliary *ged* (< *get*). They can be distinguished from minor and major verbs by their inability to act as independent predicates (Meakins 2007: 412 onwards).

Major verbs constitute an open class of verbs. Sebba (1987: 40) also calls these verbs "free" verbs. In Gurindji Kriol they are derived from Gurindji coverbs (see Section 4.2) or Kriol major verbs (Section 4.3). The major verb supplies most of the lexical semantics of the asymmetrical serial verb construction. For example, in (3) *makin* 'lie, sleep' provides information about the resultant position of the unexpressed object. Major verbs are characterised by their ability to occur independent of other verbs. They can also receive aspect marking, e.g., *-karra* (progressive), and Kriol-derived major verbs are often found with adverbial suffixes (which are derived from the particle in English phrasal verbs), e.g., *putimdan* 'put down'.

Minor verbs, also called "fixed verbs" (Sebba 1987: 40) and "light verbs" (Butt 2003), are the verbs which characterise the asymmetrical serial verb constructions, in that they determine their function, as will be shown in Section 3.4. An example of a minor verb is found in (3) where *putim* introduces an unexpressed object argument into the predicate argument structure of the clause (*makin* is otherwise intransitive) and indicates a caused change in locative relation. Minor verbs number fifteen and are given in Table 1. Note that the form of the verb derives from Kriol, however Kriol only contains four of these mi-

Table 1. Gurindji Kriol minor verb forms, functions and combinatory properties

Minor verb	Meaning	Function to indicate	Combines with
baldan	'fall'	change of position	verbs of position and manner
garram	'have'	possessive	verbs of position and manner
gedim	'get'	obtainment	verbs of manner
gon/gu ^a	ʻgoʻ	move/extend along a	dynamic transitive or
		path, decrease valency	intransitive verbs
holdim	'hold'	possession	verbs of position and manner
kam ^a	'come'	towards deictic centre	dynamic transitive or
			intransitive verbs
kilim	'hit'	impact	verbs of manner of hitting and
		•	position of impact on body
kipgon	'keep on'	duration	dynamic transitive or
10	•		intransitive verbs
kipim	'hold'	possession	verbs of position in relation to
1		1	body
ledim	'let'	permission	unrestricted
meikim ^a	'make'	causation	unrestricted
putim	'put'	causation,	verbs of position and manner
r	1	manipulation,	r
		transitiviser	
teikim	'carry'	accompanied motion	verbs of position in relation to
		accompanied motion	body and manner of motion
tok	'talk'	verbalising	verbs of manner of talking
top ^b	'be'	continuous action	intransitive verbs

a. Also occurs in Kriol asymmetrical serial verb constructions.

nor verbs. The remaining forms are derived from Kriol major verbs, as will be shown in Section 4.2.

Minor verbs can be distinguished from auxiliaries because they can be used as independent predicates as well as in asymmetrical serial verb constructions. It can be argued that they shift verb class when they operate independently and become major verbs. (4) gives an example of the use of *putim* as a major verb. In contrast, auxiliaries cannot be used on their own.

(4) koldringk *kirri jintakungku* putim tebul*la*.
koldringk *kirri jintaku-ngku* put-im tebul-*la*soft.drink woman one-ERG put-TR table-Loc
'One woman puts the soft drink on the table.' (MS: FHM033: Picture-match elicitation)

b. Occurs in Kriol asymmetrical serial verb constructions as sidan 'sit' rather than top 'stop'.

Although minor verbs can function as major verbs, they have properties which distinguish them from the more general category of major verb. Morphologically, minor verbs are only inflected for transitive marking which is largely lexicalised (see Section 4.4). Minor verbs are not found with other verb morphology such as aspect suffixes *-bat*, *-karra* (progressive) or adverbial suffixes. Minor verbs can also be differentiated from major verbs by their semantics and functionality. When these verbs operate as minor verbs they retain some of the meaning of their major verb counterparts, however, as minor verbs, they are employed for their aspectual, motion, and valency-changing properties. These functions will be discussed in Section 3.4.

3.3. Properties of Gurindji Kriol asymmetrical serial verb constructions

Asymmetrical serial verb constructions in Gurindji Kriol share a number of properties with serial verb constructions in other languages. Most generally, the verbs act together as a single predicate (Durie 1997: 290, Aikhenvald 2006: 5, Givón 1991: 137). In this respect they are often able to be translated by a single verb in non-serialising languages such as English. For example, in (1b) teikim jarrpip 'take pick up' can be translated as carry. Related to their status as a single predicate, another property of these constructions is that they do not contain any overt marker of coordination, subordination, or syntactic dependency (Aikhenvald 2006: 6, Durie 1997: 291, Givón 1990: 19, Muysken & Veenstra 1995: 290, Sebba 1987: 39, Crowley 2002: 17). For example, constructions like (5a) contrast with subordinate clauses such as that found in (5b) in their lack of grammatical marking. The subordinate structure is marked with a dative marker.

- (5) a. tubala bin weik-im-ap im teikim im tarukap nganta. tubala bin weik-im-ap im teik-im im tarukap nganta 2DU PST wake-TR-up 3sG take-TR 3sG bathe DOUBT 'The two of them woke her up and took her bathing.'

 (SS: FHM053: Narrative)
 - b. ma ged-ap na wil teikim yu tarukapku.
 ma ged-ap na wi-l teik-im yu tarukap-ku
 DIS get-up DIS 1PL.SBJ-FUT take-TR 2SG bathe-DAT
 'Come on, get up, we'll take you to bathe.' (CR: FHM079: Narrative)

Similarly these serial constructions can be contrasted with coordinate clauses. (6a) is an example of a serial verb construction which uses *putim* to transitivise *partaj* 'climb', which is an intransitive verb in Gurindji Kriol. The use of a conjunction *an* 'and' creates an entirely different meaning. (6b) marks two events: (i) putting something in the car and then (ii) getting into the car. In this re-

spect these sentences are not equivalent and (6a) cannot just be considered a coordinate structure which optionally marks coordination.⁵

- (6) a. dei <u>bin</u> <u>putim</u> im motika*ngka partaj*.
 dei <u>bin</u> put-im im motika*-ngka partaj*3PL.SBJ PST put-TR 3SG.SBJ car-LOC climb

 'They <u>put it up</u> in the car.' (CE: FHM014: Picture-match elicitation)
 - b. puwangka na yu garra putim an partaj.

 puwa-ngka na yu garra put-im an partaj

 car-Loc Foc 2sg Pot put-tr and climb

 'You have to put it in the car and climb in yourself.' (AR: FM047.A:

 Conversation)

Another property of serial verb constructions is the ability of the verbs to function independent of each other as well-formed predicates (Aikhenvald 2006: 37, Sebba 1987: 39). This property distinguishes serial verb constructions from Butt's (2003) complex predicates where this category includes serialising languages such as Mandarin and Urdu as well as other languages with complex verbs where one verb is unable to occur independent of the other verb such as complex verbs in Jaminjung (Australian). This distinction will be discussed further in Section 4.3. In Gurindji Kriol both the minor verb and major verb may occur as independent predicates. Compare the verb chain *bin putim makin* 'lay it down' from (1a) with *bin makin* in (7a) and *bin putim* in (7b):

(7) a. nyila karu i bin makin.
nyila karu i bin makin
that child 3sg.sbj pst lie.down
'That kid was asleep.' (TJ: FHM140: Frog story)
b. i bin putim im nganta.
i bin put-im im nganta
3sg.sbj pst put-tr 3sg.obj doubt
'He put it down, I reckon.' (SE: FM045.B: Conversation)

Another feature of serial verb constructions is that their elements may be non-contiguous, i.e., they allow other constituents to occur between components. For example, in Ewe (Ghana), the object can occur between the verbs (Ameke 2006: 130). A similar pattern may be observed for Gurindji Kriol. The auxiliary and minor verbs are contiguous, but the minor verb and major verb

^{5.} Note that Crowley (2002: 220) gives this argument for many serial verb constructions in Pacific pidgin and creole languages, suggesting that they can be analysed as reduced coordinate clauses, with the coordinator optional. In Gurindji Kriol, however, clear differences in meaning result from the use or non-use of a coordinator.

may be non-contiguous. For example, an object (nominal or pronoun) or adjunct may intervene between the minor and major verb, as shown in (8a). The major verb may also be fronted in order to place the activity indicated by the verb in focus, as is shown in (8b).

- (8) a. dei <u>bin</u> <u>putim</u> im motika*ngka* <u>partaj</u>.
 dei <u>bin</u> put-im im motika*ngka* <u>partaj</u>.

 3PL.SBJ PST put-TR 3SG.SBJ car-Loc climb

 'They <u>put it up</u> in the car.' (CE: FHM014: Picture-match elicitation)
 - b. karrap ngawa dats al Yaringkuma, wampal im top. karrap ngawa dats al Yari-ngku-ma, wampal im top look water that's all Yari-ERG-DIS quiet 3sG CONT 'Yari is just staring at the water. She is being quiet.'
 (LE: FM07_a034: Description)

Although serial verb constructions in Gurindji Kriol may be non-contiguous they still fall under the same intonation contour as in monoverbal clauses, which has been posited as another property of such constructions (Aikhenvald 2006: 7, Givón 1990).⁶ For example, in (9a) *putim* 'put' and *partaj* 'climb' are separated by a nominal but occur within the same intonational phrase. This example is contrasted with (9b) where a pause occurs before the addition of the major verb *jarrpip* 'lift up'. These types of afterthought constructions which involve either major verbs or nominals are common in Gurindji Kriol and are used to add additional information to the previous clause. I do not treat examples such as (9b) as serial verb constructions, however, because the verbs do not occur in the same intonation contour.

- (9) a. dei <u>bin</u> <u>putim</u> im motika*ngka* <u>partaj</u>.
 dei <u>bin</u> put-im im motika-*ngka* partaj

 3PL.SBJ PST put-TR 3SG.SBJ car-LOC climb

 'They <u>put it up</u> in the car.' (CE: FHM014: Picture-match elicitation)
 - b. karu-ngku imin teikim warlaku, jarrpip, ... karu-ngku im=in teik-im warlaku, jarrpip, ... child-ERG 3SG=PST take-TR dog lift.up 'The child took the dog, carried him.' (LE: FM07_a004: Narrative)

Verbs within serial verb constructions in Gurindji Kriol also share the same tense, aspect, mood, and polarity value, which has been observed as another general property of these constructions (Aikhenvald 2006: 8, Durie 1997: 291).

^{6.} But see Crowley 2002: 17 for some arguments against this criterion.

Based on Twi (Ghana), Stewart (1963) also suggests that the verbs in serial verb constructions share their arguments, a claim which is reflected in other discussions of serial verbs (Aikhenvald 2006: 12, Muysken & Veenstra 1995: 297). Thus there is only one subject and one object in transitive clauses. These properties are also found in Gurindji Kriol as demonstrated in (9a). In this example, the tense marker *bin* has scope over both *putim* 'put' and *partaj* 'climb'. The two verbs, *putim* and *partaj*, also individually share the subject but not the object, i.e., *putim* is transitive and *partaj* is intransitive; together they make a bivalent clause.

These properties of the Gurindji Kriol verb chains – two verbs acting as a single predicate, no overt marker of syntactic dependency, independence of the verbs, same intonational properties as a monoclause, shared TAM and polarity value, and at least one shared argument – are all features of serial verb constructions. The asymmetry of these constructions in Gurindji Kriol comes from the use of the minor verb which is derived from a closed class of verbs. The function of these verbs and therefore the asymmetrical serial verb construction as a whole is discussed in the following section.

3.4. Functions of asymmetrical serial verb constructions in Gurindji Kriol

Asymmetrical serial verb constructions in Gurindji Kriol have a number of different functions which relate to the use of different minor verbs. Minor verbs can be used to (i) change the aspectual properties of a clause, (ii) change the transitivity of the clause, (iii) give information about path and direction of actions, and more generally (iv) modify the semantics of the major verb. Interestingly these functions are similar to those of Gurindji complex verbs, which are nonetheless different constructions, as will be discussed in Section 4.3. They are discussed in the following sections for Gurindji Kriol.

- 3.4.1. Change of aspectual properties of the clause. First minor verbs often express aspectual meanings. For example, as a major verb, *kipgon* 'keep going' refers to continuing motion along a path, as in (10a) where a child is walking to a café. As a minor verb it marks dynamic verbs indicating the continuation or duration of an event. For example in (10b) the hearer is directed to continue collecting small branches off a bush medicine plant through the use of *kipgon*.
- (10) a. dat karu i bin kipgon cafékirri nganta.
 dat karu i bin kipgon café-kirri nganta

 DET kid 3sg.sbj PST keep.going café-ALL DOUBT
 'The kid keeps walking to the cafe.'

 (TA: FHM101: Picture-match elicitation)

b. yeah kipgon kirtkarra kuya na bo ting, yeah kipgon kirt-karra kuya na bo ting, FOC DAT.PREP thing yeah DUR break-PROG thus пдаријиуи. ngapuju-yu father's.mother-DAT 'Yeah keep breaking off more like that for your grandmother.' (JV: FHM055: Narrative)

Another example of a minor verb which changes aspect is *top* (continuative, *< stop*). This verb is an existential verb ('to be') when it acts as a major verb, as in (11a). As a minor verb it is used with intransitive verbs to express the continuation of the event. These verbs cannot take the *-bat* or *-karra* progressive suffixes which are found on punctual or dynamic verbs. Thus the serial verb construction performs a similar function of indicating continuing action. The use of existential verbs to indicate continuous aspect in asymmetrical serial verb constructions has also been observed in Khwe (Kilian-Hatz 2006), Kalam (Pawley 1993), Dumo (Ingram 2006), and Tetun Dili (Hajek 2006). They are also common in Pacific pidgin and creole languages, for example Bislama, Solomons Pijin (Crowley 2002), and Tok Pisin (Mühlhäusler 1985a, b; Verhaar 1995). An example from Gurindji Kriol is given in (11b).

- (11) a. dat warlaku bin top laim ngarlakangka karungka.
 dat warlaku bin top la=im ngarlaka-ngka karu-ngka

 DET dog PST be OBL=3SG head-LOC child-LOC
 'The dog was on the kid's head.' (VB: FHM141: Frog story)
 - b. an warlaku bin top kutij nyantuwarinyj.
 an warlaku bin top kutij nyantu-warinyj
 and dog PST CONT stand 3sG-ALONE
 'And the dog was standing by himself.' (CE: FHM014: Picture-match elicitation)

This construction may have derived from Kriol originally, though in Kriol the verb *sidan* 'sit' is used and it is less restricted in the major verbs it can combine with (see Section 4.2).

3.4.2. *Modification of argument structure*. Minor verbs can also be used to change the transitivity of the clause. Durie (1997: 308) observes that serialisation is a common mechanism crosslinguistically for adding arguments to an

Continuous aspect can also be marked on intransitive stative verbs through reduplication. If a verb has already been reduplicated, top is not used.

argument structure. A number of verbs are commonly used to these ends including 'give', 'make', and 'put' (see, for example, Yoruba (Bambose 1974), Tetun Dili (Hajek 2006: 245), and Kristang (Baxter 1988: 214)). In Gurindji Kriol, minor verbs can either increase or decrease the valency of the verb. For example *makin* 'lie, sleep' is the major verb in both (1a) and (12a). In (12a) *makin* occurs on its own as an intransitive verb. In (1a) *putim* is used to introduce an object into the clause: *putim makin* 'lay it down'. Similarly *meikim* can be used to increase the transitivity of a clause if it combines with an intransitive verb. In (12b), the use of *meikim* in combination with *wukarra*⁸ 'scared' creates a causative construction by introducing an agent argument *nyila-ngku ngakparn-tu* 'that frog'.

- (12) a. dat warlaku makin kanyjurra tringka.
 dat warlaku makin kanyjurra tri-ngka
 the dog lie.down down tree-Loc
 'The dog lies under the tree.' (MC: FHM004: Picture-match elicitation)
 - b. nyilangku ngakparntu i bin meikim wukarra nyila-ngku ngakparn-tu i bin meik-im wukarra that-ERG frog-ERG 3SG.SBJ PST make-TR scared dumaj. dumaj because 'Because that frog made him scared.' (RS: FM08_a084: Frog story)

Minor verbs can also be used to decrease valency. For example in (13a) *gon* 'go' is used to indicate motion along a path, however it also decreases the valency of a major verb *jarrpip* 'pick up', such that the object appears as a proprietive-marked adjunct. Similarly the downward motion minor verb *baldan* 'fall' detransitivises *pangkily* 'hit on head' in (13b).

(13) a. Lisa im gon jarrpip Kaynejawung.
Lisa im gon jarrpip Kayne-jawung
Lisa 3sG go pick.up Kayne-PROP
'Lisa is walking with Kayne in her arms.' (RS: FM08_a081: Description)

^{8.} Alternatively the transitive counterpart of wukarra, braitinim 'frighten' can be used.

```
b. ... binij i bin baldan pangkily.
... binij i bin baldan pangkily
... suddenly 3sg.sbj pst fall hit.head
'... suddenly he fell on his head (fell and hit his head)' (SS: FHM100: Narrative)
```

- 3.4.3. Motion serial verb constructions. The verbs gon 'go', baldan 'fall', and additionally kam 'come' and teikim 'take' are also used in asymmetrical serial verb constructions to mark a path, in the case of gon 'move along a path' and baldan 'move down', or provide information about directionality, e.g., kam 'towards deictic centre'. Finally, accompanied motion is indicated by teikim 'take'. As minor verbs, they combine with major verbs of manner which stays close to their meaning as major verbs, e.g., in (13a) and in (14) where partaj 'climb' provides information about the manner of the path event.
- (14) dat karu im gon partaj karntingka.
 dat karu im gon partaj karnti-ngka

 DET kid 3sG go climb tree-Loc

 'The kid climbs up the tree.' (RS: FHM149: Frog story)

This minor verb also has a more general meaning of extending the path of an event such as in (15).

(15) jirribala *malyju* dei <u>gon warlakap</u> jurlakayu.
jirribala *malyju* dei <u>gon warlakap</u> jurlaka-yu
three boy 3PL.SBJ go look.around bird-DAT
'The three boys, they <u>go around looking</u> for birds.' (ER: FM011.A:
Narrative)

The accompanied motion minor verb *teikim* 'take' combines with verbs which give information about the position of the carried object in relation to the agent's body and the manner of carrying. In (16) *teikim* combines with *lajap* 'do something on shoulders' to give more information about how a child is being carried.

(16) kirringku im teikim <u>lajap</u> karu nyanuny.
kirri-ngku im teik-im <u>lajap</u> karu nyanuny
woman-ERG 3SG take-TR on.shoulders child 3SG.DAT
'The woman <u>carries</u> her kid <u>on her shoulders</u>.' (RR: FHM064: Picture-match elicitation)

These motion serial verb constructions are found in Kriol in a restricted form. It is likely that the use of *gon* and *kam* as minor verbs in asymmetri-

cal serial verb constructions is derived from Kriol, as will be shown in Section 4.2. In fact these types of motion serial verb constructions are very common crosslinguistically. For example they are found in West African languages such as Yoruba (Bambose 1974: 28) to Papuan languages such as Kalam (Lane 1991: 74). They are also very common in Pacific pidgin and creole languages. For example Crowley (2002: 220) observes them in Bislama and Tok Pisin. Similar constructions are also found in Broken, the creole language of the Torres Strait Islands (Shnukal 1988). They are also found in Bislama, Tok Pisin, and Solomons Pijin as postposed verbs coupled with the predicative marker i (optional in Tok Pisin and Solomons Pijin), e.g., i kam, i go (Mühlhäusler 1985b: 391, Verhaar 1995: 97).

- 3.4.4. *Modification of the semantics of the major verb.* The final type of minor verb adds to the semantics of the asymmetrical serial verb construction. Aikhenvald (2006: 23) calls these "secondary concept serialisation". For example in Gurindji Kriol the minor verb *ledim* creates a permissive construction. It combines with any other major verb to add this meaning to the complex.
- dat krokodail bin led-im dem na tarukap.

 dat krokodail bin led-im dem na tarukap

 DET crocodile PST let-TR 3PL.OBJ FOC bathe

 'The crocodile let them bathe.' (SS: FM045: Narrative)

Three minor verbs add a possessive meaning to asymmetrical serial verb constructions. These are *garram* 'have' and *kipim* 'hold', shown in (18a) and (18b) respectively, and *holdim* 'hold'. They overlap semantically and combine with verbs of position, however *kipim* is more specific only combining with verbs of position in relation to body.

- (18) a. jintaku kirringku im garram karu ngarlakangka jintaku kirri-ngku im garram karu ngarlaka-ngka one woman-ERG 3SG has child head-LOC lajap. lajap on.shoulders

 'One woman has a child on her shoulders around her head.' (LS: FHM143: Picture-match elicitation)
 - b. an *nyawa marluka* im <u>kipim</u> *karu <u>lajap</u>.*an *nyawa marluka* im kip-im *karu lajap*and this old.man 3sG keep child on.shoulders
 'And this old man <u>holds</u> his kid <u>on his shoulders</u>.' (CR: FHM076: Picture-match elicitation)

The last minor verb in this group, *kilim* 'hit', can only combine with major verbs which encode manner of hitting, the implement used, or the position of impact on the body. (19) gives an example of the latter.

(19) karungku kilim marluka pangkily kunguluk.
karu-ngku kil-im marluka pangkily kungulu-k
child-ERG hit-TR old.man hit.on.head bleed-INCHO
'The child hits the old man on the head and makes him bleed.'
(FHM136: TJ22yr: Picture-match elicitation)

It is not clear what the combination of *kilim* and *pangkily* adds to the clause given that both can be used independently. Indeed it is clear that *pangkily* adds information to *kilim* about the position of impact on the body, however *pangkily* is found just as commonly on its own, as shown in (20), which justifies its classification as a major verb rather than an adverb. What the semantic difference between *pangkily* and *kilim pangkily* is is not clear. Nor is it obvious whether any pragmatic force is added in the use of the minor verb.

(20) an dat *marluka kurrupartungku pangkily* im. an dat *marluka kurrupartu-ngku pangkily* im and DET old.man boomerang-ERG hit.on.head 3sG 'And the boomerang hit the old man on the head.' (TA: FHM101: Picture-match elicitation)

4. Origins of the asymmetrical serial verb construction

4.1. The question

The previous sections have discussed the form and function of asymmetrical serial verb constructions in Gurindji Kriol. At various points throughout this discussion, I have observed that this construction is not clearly derived from either of Gurindji Kriol's source languages. Indeed serial verb constructions are unusual in Australian languages (but see Kayardild, Gurr-goni, Yankunytjatjara, and Ngan'gityemerri for some exceptions: Evans 1995, Green 1995, Reid 1990, Goddard 1985, respectively) and are not present areally in other languages of the Victoria River District, e.g., Ngarinyman, Bilinarra, Warlpiri, or Jaminjung. Serial verb constructions are only present in Pacific creole languages in a restricted manner, e.g., go and come asymmetrical constructions (Crowley 2002; Mühlhäusler 1985a, b; Verhaar 1995). In fact the restricted nature of serial verb constructions is one of the features which distinguishes Pacific creoles from Atlantic creoles where serial verb constructions are common and largely attributed to their African substrates. Kriol itself also only has a restricted set of serial verb constructions, again motion constructions and also causative constructions.

Given the restricted nature of serial verb constructions in Kriol and the lack of this construction in Gurindji and related Australian languages, the question arises "How did the asymmetrical serial verb construction develop in Gurindji Kriol?" I argue that asymmetrical serial verb constructions in Gurindji Kriol are a product of the more restricted Kriol serial verb construction developing and expanding under the influence of the Gurindji complex verb. In the following sections I will discuss these verb constructions in Kriol (Section 4.2) and Gurindji (Section 4.3). In Section 4.4 I discuss Gurindji-Kriol code-switching and the mechanisms whereby the Kriol and Gurindji verb systems came into contact and the Kriol system remodelled itself on the Gurindji complex verb system.

4.2. Serial verbs in Kriol

Munro (2005) and Sandefur (1979) describe the Kriol VP as consisting of one or more auxiliary verbs and a major verb. The auxiliary verb provides tense, aspect, and mood information, with the major verb providing the semantic content of the verb phrase. The major verb also provides information about the argument structure of the clause. For example, transitive marking is marked on transitive verbs. This simple verb structure is basically mirrored in Gurindji Kriol, as was shown in Section 3.2.

No account of Kriol verb serialisation has been given in the literature; however, a closer examination of Kriol reveals a small number of minor verbs which can be used in asymmetrical serial verb constructions. For example, go is used to indicate the path of the action which is encoded by the following verb. In (21) the action of collecting soft drink bottles does not occur in the one place as indicated by the minor verb go.

```
(21)
        dei
                bin luk
                                    koldringk flotin
                                                           ebriweya
                           ola
        dei
                                    koldringk flot-in
                bin luk
                           ola
                                                           ebriweya
        3PL.SBJ
                PST look DET.PL cold-drink float-PROG everywhere
        dei
                go ged-im-bat.
        dei
                go gedimbat
        3PL.SBJ
        go get-TR-PROG
        'They saw soft drink (bottles) floating everywhere and they went about
        collecting them.' (Angelo texts: BR: Binjari: 1998)
```

Kriol also allows the encoding of continuative aspect by the use of *jidan* 'sit'. This verb derives from the English word *sit* and is used as a copular verb 'be' or as a posture verb 'sit' when it is used as a major verb rather than a minor verb. Like Gurindji Kriol, it combines with intransitive verbs of manner and position, as shown in (22a), however, unlike Gurindji Kriol, it also combines with transitive verbs, for example (22b).

- (22) a. thei bin jidan lainap na, bobaga.

 thei bin jidan lain-ap na, bobaga

 3PL.SBJ PST CONT line-up FOC, poor.things

 '(All) in a line they were, poor things.' (Angelo texts: BR: Binjari: 1998)
 - b. dei bin jidan dringkimbat deya.
 dei bin jidan dringk-im-bat deya
 3PL.SBJ PST CONT drink-TR-PROG there
 'They were there drinking.' (Angelo texts: BR: Binjari: 1998)

Kriol also contains a causative construction which consists of the minor verb *meikim* 'make' and a major verb. For example in (23) *meikim* combines with two verbs of posture *sidan* 'sit' and *leidan* 'lie'. In this sentence, a non-indigenous person is described for his ability to make a horse sit and lie down.

(23)wan munanga bin jeya brabli jematbala meikim wan munanga bin jeya brabli jemat-bala meik-im one whitefella PST there really intelligent-NOM make-TR sidan detlot hos saidwei meikim leidan sidan detlot meik-im lei-dan said-wei DET.PL horse make-TR lie-down side-way 'One whitefella was there, (he was) a very intelligent person – he made the horses sit down and made them lie down side ways.' (Munro 2005: 97)

Thus Kriol contains a small set of serial verb constructions which can alter the aspect meaning of a clause, add path information, and create a causative construction. In these constructions there is an overlap with Gurindji Kriol. Nonetheless there are some significant differences between Kriol and Gurindji Kriol asymmetrical serial verb constructions. First, Kriol minor verbs do not seem to be restricted with respect to the verb they combine with in the same way as Gurindji Kriol verbs. For example, as a minor verb which marks continuative aspect, *jidan* can combine with any Kriol major verb, however in Gurindji Kriol it is only found with intransitive verbs (see Section 3.4.1). Secondly, Kriol does not contain the same number of minor verbs as Gurindji Kriol. Instead Kriol uses other parts of the grammar to mark particular functions. For example, Kriol does not change the transitivity of the clause using minor verbs such as *putim* and *go*, as was shown for Gurindji Kriol. In Kriol, the transitive marker can create transitive verbs from intransitive verbs, see (24).

```
yu
                 siddan
(24)
                                luk.
       a.
                           iya
            yu sid-dan
                          iya
                                luk
            2sg sit-down here look
            'You sit down here look.' (Disbray 2008: PD: SD009: 124)
            sidimap
                      doldol, goan.
            sid-im-ap doldol, go-an
            sit-TR-up doll,
                               go-on
            'Sit the doll up, go on!' (Disbray 2008: PD: SD009: 75)
```

In contrast, the transitive marker is not derivational in Gurindji Kriol, rather it is largely lexicalised,⁹ and the verb *putim* is required to increase the valency of the positional verb:

Thus while the general shape of the asymmetrical serial verb construction is derived from Kriol, it has undergone some changes in its introduction into Gurindji Kriol. The possible set of minor verbs has expanded to make this a more productive structure in Gurindji Kriol. The source of this increased repertoire of verbs and more general productivity is the Gurindji complex verb.

4.3. Gurindji complex verbs

The Gurindji verbal system consists of a complex verb made up of an inflecting verb and a coverb (McConvell 1996). In (26) the complex verb consists of *makin* (coverb) and *karrinyana* (inflecting verb). The complex verb can be a discontinuous constituent, as in this example, but it must occur within the same intonational phrase.

```
(26) karntika <u>karrinyana</u> kajirrima <u>makin.</u>
karnti-ka karrinyana kajirri-ma makin
tree-Loc be.PRS woman-DIS lie.down
'The woman <u>is lying</u> under the tree.' (BW: FM07-a043; Description)
```

Coverbs belong to an open class of verbs which are uninflected (except for progressive marking). They carry the semantic weight of the complex verb, expressing information about posture, direction of gaze, manner of motion,

^{9.} The transitive marker is not derivation in Gurindji Kriol because it does not create transitive verbs from intransitive verbs in the same way it does in Kriol (Eva Schultze-Berndt, personal communication). Further evidence for lexicalisation comes from code-switching which is discussed further in Section 4.4.2.

speech, and cooking, change of state. In this respect they bear some resemblance to adverbs, but in Gurindji coverbs and adverbs are differentiated by their ability to create subordinate classes using case marking.

Gurindji inflecting verbs belong to a closed class of verbs which number around 30. They are semantically bleached forms, encoding basic meanings such as motion and transfer ('go', 'fall', 'take', 'give', 'get'), manipulation ('put', 'throw'), impact ('hit', 'strike', 'bite', 'pierce'), perception ('hear', 'see'), as well as other general meanings, for example 'cook', 'talk', and a copular, 'be'. The main contribution of the inflecting verb to the verb complex is in tense and aspect information (McConvell 1996, Charola 2002). In other Australian languages which contain complex verbs the inflecting verb is also shown to classify complex verbs (McGregor 2002, Schultze-Berndt 2000). Gurindji inflecting verbs function in a similar manner in Gurindji.

Coverbs and inflecting verbs are also distinguished by their ability to act as independent predicates. The inflecting verb is an obligatory part of the Gurindji clause and is commonly found without an accompanying coverb as shown in (27a). On the other hand, coverbs cannot operate as independent predicates. They do not occur independent of an inflecting verb in a main clause. Contrast the independent use of the inflecting verb in (27a) with ungrammaticality of the use of the coverb without an inflecting verb as shown in (27b).

- (27) a. partikiwalija karrinyana janyjaka.

 partiki-walija karrinyana janyja-ka
 nuts-PAUC be.PRS ground-Loc
 'The nuts are (lying) on the ground.' (EO: FM07-a002: Picture-match elicitation)
 - b. *partikiwalija makin janyjaka.

 partiki-walija makin janyja-ka
 nuts-PAUC lie ground-LOC
 'The nuts are lying on the ground.'

This inability of coverbs to act as independent predicates is a crucial difference between Gurindji complex verbs and Gurindji Kriol serial verbs, as will be discussed below. In Gurindji Kriol the very same verbs may occur as main verbs. It must also be observed that there are restricted contexts where they do occur independently in Gurindji. They can occur without an inflecting verb in subordinate clauses and imperative clauses. In subordinate clauses they are marked by case suffixes, e.g., the locative case suffix indicates that the subject of the subordinate clause is the same as the object of the main clause as with *makintawu* in (28).

(28)ngurla nyilama warima yapart yanana yan-ana nyila-ma wari-ma ngu=rla yapart AUX=3DAT sneak.up go-prs that-DIS snake-DIS makintawu kajirri-wu. makin-ta-wu kajirri-wu sleep-LOC-DAT old.woman-DAT 'The snake sneaks up on the old woman who is sleeping.' (VD: FHM146: Picture-match elicitation)

Another relevant feature of Gurindji complex verbs is their combinatory properties. Different combinations of coverbs and inflecting verb can alter the meaning of the verb complex. For example positional verbs such as *kutij* 'stand' and *walyak* 'inside' combine with *karrinyana* 'be' to create a basic locative construction (cf. Levinson & Wilkins 2006: 15). A change in spatial configuration can be indicated by combining the coverb with a different inflecting verb. For example the use of *yuwanana* 'put' expresses the fact that a position such as standing was induced. It also changes the valency of the complex verb, adding an object as shown in (29) (note the use of an ergative marker in (29b) to indicate a transitive clause).

- (29) a. ngurna yuwanana makin na.
 ngu=rna yuwa-nana makin na

 AUX=1sG.sbj put-pst lie.down Dis
 'I lay it (the coolamon) down.' (VD: FM07-a050: Description)
 b. Nanaguluma kutij na yuwani nyilama
 Nanagu-lu-ma kutij na yuwani nyila-ma
 - Nanagu-lu-ma kutij na yuwa-ni nyila-ma Nanagu-erg-dis stand foc put-pst that-dis

kawarlama.

kawarla-ma

coolamon-DIS

'Nanagu <u>stood</u> that coolamon <u>up.</u>' (SH: FM08_a093: Description; this example is from Bilinarra which is closely related to Gurindji.

The combinatory properties of complex verbs has been discussed extensively for a neighbouring language, Jaminjung (Schultze-Berndt 2000: 421 onwards). Complex verbs are an areal feature of languages in the Victoria River District in general, and much of Schultze-Berndt's analysis for Jaminjung complex verbs applies to directly to Gurindji.

Given this discussion of Gurindji complex verbs, it would be easy to draw many parallels with the Gurindji Kriol asymmetrical serial verb construction. At first glance, these two complex predicates appear to share a common complex predicate structure, as demonstrated in (30). In particular, it is clear that the Gurindji Kriol major verb *kutij* 'stand' is derived from the Gurindji coverb.

```
(30) a. Gurindji
```

```
ngurna <u>yuwani</u> karnti <u>kutij.</u>
ngu=rna yuwa-ni karnti kutij
AUX=1SG.SBJ put-PST log stand
```

'I stood the log up.'

b. Gurindji Kriol

```
ai bin <u>putim</u> karnti <u>kutij.</u>
ai bin put-im karnti <u>kutij</u>
1sg.sbj pst put-tr log stand
```

'I stood the log up.'

Further, a number of the properties of the Gurindji complex verb are reflected in the asymmetrical serial verb construction in Gurindji Kriol. First, both complex predicates consist of an open class of verbs (the Gurindji coverb or the Gurindji Kriol major verb) which combines with a closed class (the Gurindji inflecting verb or the Gurindji Kriol minor verb) in very specific constructions which mark a single event. Secondly, both elements of the verb complex are contained within one intonation phrase. The verb chain may be interrupted by another constituent. Thirdly, there is a distinction between verb chaining and explicitly marked subordination, and finally there are functional similarities between the Gurindji inflecting verb and the Gurindji Kriol minor verb, e.g., valency changing operations. All of these similaries point to an analysis of the Gurindji Kriol verb chain as a relexified Gurindji complex verb (Charola 2002), however I argue that this is not the case.

The first part of the argument lies in the fact that Gurindji complex verbs are not serial verb constructions. Schultze-Berndt (2000: 548-549) discusses this issue for Jaminjung complex verbs. She observes that the main difference between Jaminjung complex verbs and serial verbs is that in serial verb constructions the individual verbs may occur as independent predicates. This is also the case in Gurindji. As was demonstrated above in (27b), whereas inflecting verbs can also occur on their own, coverbs cannot occur independent of inflecting verbs in main clauses. This property of the Gurindji complex verb contrasts with Gurindji Kriol serial verbs. In the case of Gurindji Kriol, both the minor verb and the major verb may occur independent of each other. Most telling is the behaviour of Gurindji Kriol major verbs. Many of the major verbs are derived from the class of Gurindji coverbs, as was shown in (30). Yet where Gurindji coverbs require an accompanying inflecting verb, Gurindji Kriol major verbs may occur with or without the minor verb. Contrast (31a) which contains makin 'lie down' in a complex predicate with (31b) where makin occurs on its own and (31c) where the minor verb *putim* 'put' occurs as a major verb.

```
(31)
                    garra putim makin
                                           yardta.
           i
                    garra put-im makin
                                           yard-ta
            3sg.sbj pot put-tr lie.down yard-loc
            'He will lay him down in the yard.' (CR: FM054.B: Narrative)
            nyila karu i
                                bin makin.
            nyila karu i
                                bin makin
            that child 3sg.sbj pst lie.down
            'That kid was lying down.' (TJ: FHM140: Frog story)
       c.
                    bin putim im
                                         nganta.
                    bin put-im im
                                         nganta
            3sg.sbj pst put-tr 3sg.obj doubt
            'He put it (down), I reckon.' (SE: FM045.B: Conversation)
```

In this respect, the verb chaining found in Gurindji Kriol cannot be analysed a case of the relexification of the Gurindji complex verb. Nonetheless a great deal of Gurindji influence is clear. Most obviously a large portion (36%) of Gurindji Kriol major verbs are derived from Gurindji coverbs. Another point of similarity can be found between the closed class of Gurindji inflecting verbs and Gurindji Kriol minor verbs. Although the forms and some of the constructions, such as the motion and causative serial verb constructions, are derived from Kriol, Gurindji Kriol contains many more minor verbs, including *kilim* 'hit', *teikim* 'take', *kipim* 'hold', *tok* 'talk', and *putim* 'put', which reflect the basic meanings encoded in Gurindji inflecting verbs. As the following section will demonstrate, these resemblances are not an accident. I argue that the Gurindji Kriol asymmetrical verb construction expanded a structure which was already present but restricted in Kriol under the influence of the Gurindji complex verb.

4.4. Verb contact and congruence through code-switching

Given that the asymmetrical serial verb construction in Gurindji Kriol is not directly derived from either Gurindji or Kriol, though strong resemblances can be observed, the question then becomes "Where does this complex predicate find its origins?" Gurindji Kriol finds its origins in code-switching, and I argue that it is in the patterns of code-switching, particularly the behaviour of Gurindji and Kriol verbs, that the development of the asymmetrical serial verb construction can be found. The following sections use evidence from code-switching to suggest the mechanisms by which the asymmetrical serial verb construction emerged.

4.4.1. *The behaviour of verbs in Gurindji-Kriol code-switching*. McConvell (1985, 1988) observed that code-switching between Kriol and Gurindji was the dominant language practice of Gurindji people in the 1970s, and McConvell

& Meakins (2005) argue that Gurindji Kriol found its origins in this code-switching. In this respect the verb structures of Gurindji and Kriol came into contact through code-switching. Gurindji-Kriol code-switching from the 1970s bears strong similarities with Gurindji Kriol, the mixed language. ¹⁰ Today code-switching between Gurindji and Kriol continues among older Gurindji people (Meakins 2008a: 288). The form that this code-switching takes appears to be the same as the mixing practices of the 1970s. Therefore present-day code-switching data can be used to supplement data from the 1970s to support the following argument about the development of the Gurindji Kriol asymmetrical serial verb construction.

The code-switching from the 1970s and the present day uses both Gurindji and Kriol as the grammatical frame of switching, i.e., the matrix language. Here I identify the matrix language on the basis of verb inflection (cf. Muysken 2000, Treffers-Daller 1994, Klavans 1985, Matras 2009). The language which provides the verb inflection is identified as the matrix language. In the case of Gurindji this is the inflecting verb, and in the case of Kriol these are the free TAM markers. Code-switching occurs when elements from the other language inserts into the matrix language. Regardless of whether the matrix language is Gurindji or Kriol, commonly inserted elements include nominals (arguments and locative complements), tag questions, discourse markers, and verbs (Meakins 2007: 154). Of interest here is the behaviour of verbs within the code-switching. Where Gurindji is the matrix language, Kriol major verbs (complete with transitive marking) are found inserted into the position of the Gurindji coverb. In (32), the Kriol verb *katim* is used in place of the Gurindji coverb *kataj*.

```
(32) niyan katim parrayi ngapu.
niyan kat-im pa-rra-yi ngapu
flesh cut-TR hit-IMP-1sG.OBJ father
'Cut the meat for me father.' (1970s code-switching)
```

(33) shows this congruence between the Gurindji coverb and Kriol major verb even more clearly. In the first clause the speaker uses the Gurindji coverb *kirlkak* 'clean' and then repeats the clause using the Kriol equivalent, *klinim*.¹¹

^{10.} See Meakins (2007: 51 onwards) for why Gurindji Kriol is a mixed language not code-switching. Arguments include the consistency of the language system, the presence of child language learners, differences in the function and distribution of Gurindji, and Kriol-derived elements in the mixed language compared with the source languages.

^{11.} This pattern is common for code-switching found in the Victoria River District where the traditional languages exhibit a coverb-inflecting verb complex. For example, similar patterns of code-switching have been observed for Jaminjung and Kriol (Schultze-Berndt 2007).

(33)kirlkak ngurnalu kuyangku ... kuyangku manana, kirlkak ngu-rnalu man-ana, kuya-ngku kuya-ngku na clean AUX-1PL.EX do-PRS thus-ERG thus-ERG DIS ngurnalu manana klinim. ngu-rnalu man-ana klin-im AUX-1PL.EX do-PRS clean-TR 'We clean it off like this ... Like this we clean (off the bark).' (Presentday code-switching: VD: FM07_a058)

Conversely, where Kriol provides the grammatical frame for switching then Gurindji coverbs can be found inserted in the Kriol major verb slot. For example, in (34a) Kriol provides the verb inflection *garra* (potential) but instead of using the Kriol verb *bogi* 'bathe', the Gurindji equivalent *tarukap* is inserted instead. (34b) consists of two clauses where Kriol is the matrix language. In the first clause the Kriol major verb *meikim* 'make' is used and in the second clause the Gurindji coverb *pirrkap* is inserted. ¹² This sentence again demonstrates congruence between the major verb and coverb categories from Kriol and Gurindji respectively.

(34)wi garra tarukap na. wi garra tarukap na bathe 3sg.sbj pot FOC 'We'll go and wash off now.' (1970s code-switching) meikim warlu, faya wi maiti wi pirrkap maiti wi meik-im warlu, faya wi pirrkap might 1PL.SBJ make-TR fire fire 1PL.SBJ make jeya. jeya there 'Then we might make a fire, a fire we make there.' (Present-day code-switching: VD: FM07_a01_1c)

Two observations regarding the development of the asymmetrical serial verb construction in Gurindji Kriol emerge from an examination of these patterns of code-switching. First, the use of Kriol as the matrix language rather than Gurindji was more dominant in the 1970s. McConvell & Meakins (2005: 19) show that 60 % of mixed utterances used Kriol as the matrix language. Later Kriol became the basis of the VP in the mixed language with Gurindji verbal inflection never found. The use of the Kriol VP in Gurindji Kriol probably

^{12.} Interestingly, the language of the objects also changes. Repetition, particularly using different languages is a common discourse strategy for Gurindji speakers. This is used, partly in child-directed speech as a maintenance strategy, but also among adults.

brought with it the few asymmetrical serial verb constructions that exist in Kriol, i.e., using *be*, *go*, *come*, and *make* verbs.

The second point to be made is that, though Kriol was the more dominant language of the VP, the Kriol VP was still in intimate contact with the Gurindji complex verb structure as a result of the code-switching. Indeed the Kriol and Gurindji verb systems remain in contact given continuing code-switching practices. The ability of Kriol major verbs to insert into a Gurindji coverb slot and vice versa indicates that speakers treat these verbs as syntactically congruent and functionally equivalent categories of verbs. As will be shown in the next section, this recognition of equivalence was an important step in the formation of asymmetrical serial verb constructions in Gurindji Kriol.

4.4.2. The results of typological congruence between Gurindji and Kriol verbs. Typological congruence between Gurindji coverbs and Kriol main verbs had a number of results which directly affected the formation of the Gurindji Kriol asymmetrical serial verb construction – (i) the wholesale adoption of Gurindji coverbs, (ii) the parallel adoption of some combinatory properties Gurindji complex verbs, (iii) an expansion of the closed class of Kriol minor verbs, and (iv) some individual effects on the development of other minor verbs such as the lexicalisation of the Kriol transitive marker -im. These points are discussed below.

The first effect of the congruence between Gurindji coverbs and Kriol main verbs was the adoption of Gurindji coverbs into the Gurindji Kriol class of major verbs. Gurindji coverbs were recognised as equivalent to Kriol major verbs as demonstrated by the ease with which Gurindji coverbs are inserted into the Kriol major verb slot in code-switching where Kriol is the matrix language. As the code-switching stabilised into the present-day mixed language with Kriol forming the language of the VP, the Gurindji coverbs became a permanent part of the Gurindji Kriol major verb repertoire. Indeed, as was discussed in Section 4.3, 36 % of all Gurindji Kriol major verbs are derived from Gurindji coverbs.

One effect of adopting Gurindji coverbs was the independence of these coverbs in Gurindji Kriol. Where they require an accompanying inflecting verb in Gurindji, Gurindji-derived coverbs operate as independent predicates in Gurindji Kriol. The coverb, once it was adopted into Gurindji Kriol without accompanying inflecting verbs, brought with it the properties of the most frequently used Gurindji complex verb. As was discussed in Section 4.3, the function of the inflecting verb is crucial to the Gurindji verb complex. It not only provides TAM information but co-constructs meaning with the coverb. Given that Gurindji-derived coverbs in Gurindji Kriol are independent, they are solely responsible for meaning construction in non-serialising construct

tions. This meaning derives from the most common Gurindji verb complex it participates in. For example, the coverb *jarrpip* in Gurindji most frequently combines with *manana* 'do, get' to produce the meaning 'lift'. It also combines with other inflecting verbs as demonstrated in (35):

(35) Gurindji

jarrpip manana 'lift up something' (most frequent)
jarrpip karrwanana 'hold something in arms'
jarrpip yanana 'go along with something
held'

The coverb *jarrpip* is also now used in Gurindji Kriol as a major verb. When *jarrpip* is used on its own, it has the general meaning of 'lift'. This meaning is the most frequent meaning of *jarrpip* in Gurindji which was encoded by the two part verb *jarrpip manana*. Yet the other meanings were not lost. Gurindji Kriol uses minor verbs in serial verb constructions to express the meanings expressed by other less frequent coverb-inflecting verb combinations found in Gurindji. For example, in Gurindji Kriol *jarrpip* combines with *kipim* 'hold something in arms' and with *gon* 'go along with something held' in much the same manner as Gurindji.

(36) Gurindji Kriol

jarrpip 'lift up something' (default)
kipim jarrpip 'hold something in arms'
gon jarrpip 'go along with something
held'

Thus the effect of borrowing Gurindji coverbs was to encourage the mapping of Gurindji event structures which are expressed by different combinations of inflecting verbs and coverbs.

This adoption of Gurindji coverbs and their combinatory properties had the follow-on effect of increasing the closed class of minor verbs essential to the Gurindji Kriol asymmetrical serial verb construction. The two-part verb structure of Gurindji supported the expansion of the minor verbs using Kriol equivalents of Gurindji inflecting verbs, for example, *kipim* 'hold' and *gu* 'go', as well as others found in other constructions such as *kilim* 'hit', *gedim* 'get', and *tok* 'talk'. Thus, although a Gurindji coverb such as *lajap* may appear as an independent verb, as shown in (37a), it also maintains its combinatory properties and therefore its ability to augment its meaning. For example, *lajap* 'be on shoulders' combined with *teikim* to indicate accompanied motion, i.e., 'carry on shoulders' (37b). It also combined with *garram* to mean 'has on shoulders' (37c) and *kipim* to mean 'hold on shoulders' (37d).

- (37) a. marlukungku im lajap nyanuny kaku.

 marluku-ngku im lajap nyanuny kaku
 old.man-erg 3sg on.shoulders 3sg.dat grandchild
 'The old man has his grandchild on his shoulders.' (FHM074:
 SS18yr: Picture-match elicitation)
 - b. kirringku im teikim lajap karu nyanuny.
 kirri-ngku im teik-im lajap karu nyanuny
 woman-ERG 3sG take-TR on.shoulders child 3sG.DAT
 'The woman carries his kid on her shoulders.' (RR: FHM064: Picture-match elicitation)
 - c. jintaku kirringku im garram karu ngarlakangka jintaku kirri-ngku im garram karu ngarlaka-ngka one woman-ERG 3sG has child head-LOC lajap. lajap on.shoulders
 'One woman has a child on her shoulders around her head.' (LS: FHM143: Picture-match elicitation)
 - d. an *nyawa marlukangku* im <u>kipim</u> *karu <u>lajap</u>.*an nyawa marluka-ngku im kip-im karu <u>lajap</u>.
 and this old.man-ERG 3sG keep child on.shoulders 'And this old man <u>holds</u> his kid <u>on his shoulders</u>.' (CR: FHM076: Picture-match elicitation)

These two-part verbs in Gurindji Kriol mirror complex verb constructions in Gurindji: *lajap karrinyana* 'sit on shoulders', *lajap kangana* 'carry on shoulders', *lajap karrwanana* 'hold on shoulders'. Thus Gurindji coverbs came into Gurindji Kriol with additional Gurindji baggage of the grammatical kind. Indeed it is probably no accident that most of the major verbs which participate in the asymmetrical serial verb construction are of Gurindji origin.

This expansion of the closed class of Kriol minor verbs began in the code-switching. No examples of Kriol minor verb insertions in the 1970s or present-day code-switching data can be found where Gurindji acts as the matrix language. Examples such as (38) where the Kriol minor verb *kam* 'come' inserts into the Gurindji coverb slot are not present in the available data.

(38) *kajirri kam yanana marrungkurra.

kajirri kam yanana marrungkurra
woman come go-PRS house-ALL
'The woman comes to the house.'

Although negative evidence is difficult to interpret, one hypothesis may be that Gurindji code-switchers do not switch Kriol minor verbs with Gurindji

coverbs. Moreover many other Kriol major verb insertions are not found. The Kriol verbs which are not found inserted are ones that are equivalent to Gurindji inflecting verbs rather than coverbs, e.g., *putim* 'put', as shown in (39).

(39) *kajirri-lu ngu-Ø putim yuwanana wumara ngawangka. kajirri-lu ngu-Ø put-im yuwan-ana wumara ngawa-ngka woman-ERG AUX-3SG put-TR put-PRS rock water-LOC 'The woman put a rock in the water.'

The inability to insert Kriol minor verbs and certain Kriol major verbs into the Gurindji coverb slot suggests that speakers do not consider these verb categories congruent. Indeed the Kriol minor verbs are semantically and functionally closer to Gurindji inflecting verbs, e.g., *putim* (Kriol) and *yuwanana* (Gurindji). Thus it may be suggested that the equivalence between some Kriol major verbs and Gurindji inflecting verbs transferred into the development of Gurindji Kriol by supplementing the already present but more restricted class of minor verbs available from Kriol with Kriol forms calqued on Gurindji inflecting verbs. Thus, although the forms are Kriol, the structural influence is from Gurindji. Indeed many of the resultant Gurindji Kriol minor verbs which were not already present in Kriol have equivalents in Gurindji inflecting verbs (Table 2).

Other processes within the code-switching may have had individual effects on the development of other minor verbs which have Gurindji inflecting verb equivalents. For example it may be argued that the development of putim as a minor verb may have been due in part to the lexicalisation of the Kriol transitive marker. The transitive marker in Kriol is derivational in that it creates transitive verbs from intransitive verbs, as shown in (24). In Gurindji Kriol it merely marks verbs of Kriol origin as being transitive. 13 Kriol-derived verbs do not have transitive and intransitive counterparts, as they do in Kriol, and the transitive marker is never found on Gurindji-derived coverbs. In this respect it may be argued that the transitive marker has been reanalyzed as a part of the verb lexeme (Eva Schultze-Berndt, personal communication). Indeed in codeswitching, Gurindji speakers treat the transitive marker as a part of the verb's lexical entry not as an inflectional or derivational marker. The Kriol verb is switched complete with the transitive marker and when the Gurindji coverb switches into a Kriol matrix, it does not acquire the transitive marker. For example in (33) the Kriol verb klinim 'clean' does not lose its transitive marker in the switch. Conversely in (34b) pirrkap 'make' does not acquire a transitive

^{13.} Though it must be noted that its verbs lose their transitive marking in passive clauses. See also Faraclas 2003, Mühlhäusler 1985a, Meyerhoff 1996, Siegel 2004, and Sankoff 1993 for a discussion of the transitive marker in Pacific pidgins and creoles.

Table 2. Origins of Gurindji Kriol minor verbs

Minor verb	Meaning as major verb	Kriol minor verb equivalent	Gurindji inflecting verb equivalent
baldan	'fall'		waninyana ^a
garram, kipim, holdim	'have'		karrwanana
gedim	'get'		manana
gon/gu	ʻgoʻ	go	
kam	'come'	kam	
kilim	'hit'		panana
meikim	'make'	meikim ^b	•
putim	'put'		yuwanana
teikim	'carry'		kangana
top	'be'	jidan	<u> </u>
tok	'talk'	•	marnana

- a. Note that it is not clear whether baldan ('fall') as a minor verb derives from Kriol or Gurindji. Although the form is from Kriol, more data is required to see whether it is used as a minor verb in Kriol. The dilemma is that baldan is not directly equivalent to waninyana in Gurindji. Although this inflecting verb is translated as fall it has a more general meaning of a change in stance or container which is not reflected in the Gurindji Kriol minor verb baldan which just indicates a downwards motion.
- b. Note that there is no Gurindji inflecting verb equivalent of *meikim*. The closest verb *manana* ('do, get') is not used in causative constructions. Gurindji has a dedicated inchoative marker which performs this function. The more general meaning of 'create' is expressed through the Gurindji coverb *pirrkap*.

marker when it inserts into the Kriol verb slot. The lexicalisation of the transitive marker meant that Gurindji Kriol speakers did not have the derivational properties of the transitive marker, that is its valency changing properties, at their disposal. This functional gap may have encouraged speakers to continue using the Gurindji strategy of transitivising intransitive positional verbs using *putim* even when the matrix language of the code-switching was Kriol, i.e., *putim jidan*, not *jidimdan* 'seat', as would be found in Kriol. Note that the minor verb *putim* is not completely grammaticalised into a marker of transitivity and is still restricted to combining with verbs of position.

5. Conclusion

The aim of this article has been to demonstrate that asymmetrical serial verb constructions in Gurindji Kriol are a product of the Kriol serial verb construction developing and expanding under the influence of the Gurindji complex verb. These two complex predicates came into contact through Gurindji-Kriol code-switching. The asymmetrical serial verb construction was available in

Kriol to a limited extent, e.g., in motion constructions with 'go' and 'come', a causative 'make', and aspectual construction with 'sit'. These Kriol constructions acted as bridges to the development of the Gurindji Kriol serial verb constructions with Gurindji contact having number of effects. As a result of codeswitching between Gurindji and Kriol, Kriol major verb and Gurindji coverb were recognised as typological and functionally congruent categories. This resulted in the wholesale adoption of Gurindji coverbs which encode specific meanings such as position, instrument, and manner information. The coverbs came with their combinatory properties and the default meanings of the most frequently used Gurindji complex verb. A follow-on effect was the increase in potential minor verbs derived from Kriol major verbs which display many functional similarities with Gurindji inflecting verbs.

The end result is a structure which bears some resemblance to both Kriol and Gurindji but is unique to Gurindji Kriol. The structure is Kriol, to some degree, but greatly expanded under the influence of the Gurindji complex verb. Moreover major verbs from Kriol have become minor verbs in Gurindji Kriol and have taken on many of the functions of Gurindji inflecting verbs. The presence of such new grammatical systems in mixed languages is not well captured in most typological characterisations. Instead the basic descriptor of structure is FORM, that is the phonological shape of a morpheme or lexeme, or what is said. Most mixed languages are described in this manner, for example, as mixes of the stems from one language and the affixes from other, or as splits between nouns and verbs and their accompanying morphology. Yet these descriptions do not adequately characterise mixed languages. It is in the development of unique grammatical systems and functions that evidence for the development of new autonomous linguistic systems is most compelling.

Received: 30 March 2009 University of Queensland Revised: 11 October 2009 University of Manchester

Correspondence address: School of Language and Comparative Cultural Studies, 3rd Floor, Gordon Greenwood Building, University of Queensland, St Lucia, 4072, Australia; e-mail: f.meakins@uq.edu.au

Acknowledgements: My thanks to Eva Schultze-Berndt, Bill McGregor, Erika Charola, and Claudia Wegener for feedback on an earlier version of this article which was given at the 4th European Workshop on Australian Languages in Manchester in 2008. The data collection was funded by the Aboriginal Child Language (ACLA) project (www.linguistics.unimelb.edu.au/research/projects/ACLA/index.html), the Victoria River District DOBES project (www.mpi.nl/DOBES), and the Hans Rausing Endangered Languages Project (www.hrelp.org/grants/projects/index.php?projid=159). I am indebted to Samantha Smiler Nangala-Nanaku and her family; Ronaleen and Anne-Maree Reynolds Namija, Curley Reynolds Nimarra and their family; Cassandra Algy Nimarra, and Ena, Frances, and Sarah Oscar Nanaku; Cecelia Edwards Nangari; Rosy, Lisa, and Leanne Smiler Nan-

gari; Violet Donald Wadrill Nanaku, Biddy Wavehill Yamawurr Nangala, and Topsy Dodd Nganyial Nangari.

Abbreviations: 1/2/3 1st/2nd/3rd person; ABL ablative; ALL allative; ALONE alone, by oneself; AUX auxiliary; CONT continuative; DAT dative; DET determiner; DIS discourse marker; DOUBT doubtative; DU dual; DUR durative; EP epenthetic syllable; ERG ergative; EX exclusive; FOC focus; FUT future; IMP imperative; INCHO inchoative; LOC locative; N noun; NOM nominaliser; NP noun phrase, OBJ object; OBL obligation; ONLY only, just, right, directly; PAUC paucal (a small group); PL plural; POT potential; PREP preposition; PROG progressive; PROP proprietive (with, having); PRS present; PST past; SBJ subject; SG singular; TR transitive; V verb; VP verb phrase; - morpheme break; = clitic break.

References

- Aikhenvald, Alexandra Y. & R. M. W. Dixon (eds.). 2006. Serial verb constructions: A Cross-linguistic typology. Oxford: Oxford University Press.
- Aikhenvald, Alexandra Y. 2006. Serial verb constructions in typological perspective. In Aikhenvald & Dixon (eds.) 2006, 1–68.
- Ameke, Felix. 2006. Ewe serial verb constructions in their grammatical context. In Aikhenvald & Dixon (eds.) 2006. 124–143.
- Bakker, Peter. 1997. A language of our own: The genesis of Michif, the mixed Cree-French language of the Canadian Métis. New York: Oxford University Press.
- Bakker, Peter. 2003. Mixed languages as autonomous systems. In Yaron Matras & Peter Bakker (eds.), *The mixed language debate: Theoretical and empirical advances*, 107–150. Berlin: Mouton de Gruyter.
- Bakker, Peter & Maarten Mous (eds.). 1994. *Mixed languages: 15 case studies in language intertwining*. Amsterdam: Institute for Functional Research into Language and Language Use (IFOTT).
- Bambose, Ayo. 1974. On serial verbs and verbal status. *Journal of West African Languages* 9. 17–48.
- Baxter, Alan N. 1988. A grammar of Kristang (Malacca Creole Portuguese) (Pacific Linguistics B-95). Canberra: Australian National University.
- Butt, Miriam. 2003. The light verb jungle. In Gülsat Aygen, Claire Bowern & Conor Quinn (eds.), Papers from the Harvard/Dudley House Light Verb Workshop (Harvard Working Papers in Linguistics 9), 1–49. Cambridge, MA: Harvard University.
- Charola, Erika. 2002. The verb phrase structure of Gurindji Kriol. Melbourne: Melbourne University honours thesis.
- Crowley, Terry. 2002. Serial verbs in oceanic: A descriptive typology. Oxford: Oxford University Press.
- Deumert, Ana & Stephanie Durrleman (eds.). 2006. Structure and variation in language contact. Amsterdam: Benjamins.
- Disbray, Samantha. 2008. More than one way to catch a frog: Children's discourse in a language contact setting. Melbourne: University of Melbourne doctoral dissertation.
- Durie, Mark. 1997. Grammatical structures in verb serialisation. In Alex Alsina, Joan Bresnan & Peter Sells (eds.), Complex predicates, 289–354. Stanford, CA: CSLI.
- Evans, Nicholas. 1995. A grammar of Kayardild, with historical-comparative notes on Tangkic. Berlin: Mouton de Gruyter.
- Faraclas, Nicholas. 2003. The -pela suffix in Tok Pisin and the notion of "simplicity" in pidgin and creole languages: What happens to morphology under contact? In Ingo Plag (ed.), *Phonology and morphology of creole languages*, 269–290. Tübingen: Niemeyer.
- Givón, Talmy. 1990. Verb serialization in Tok Pisin and Kalam: A comparative study of temporal packaging. In John W. M. Verhaar (ed.), *Melanesian Pidgin and Tok Pisin*, 19–55. Amsterdam: Benjamins.

- Givón, Talmy. 1991. Some substantive issues concerning verb serialization: Grammatical and cognitive packaging. In Lefebvre (ed.) 1991, 137–184.
- Goddard, Cliff. 1985. A grammar of Yankunytjatjara. Alice Springs: IAD Press.
- Golovko, Evgeniy V. 1994. Mednyj Aleut or Copper Island Aleut: An Aleut-Russian mixed language. In Bakker & Mous (eds.) 1994, 113–121.
- Golovko, Evgeniy V. 1996. A case of nongenetic development in the Arctic area: The contribution of Aleut and Russian to the formation of Copper Island Aleut. In Ernst Håkon Jahr & Ingvild Broch (eds.), *Language contact in the Arctic: Northern pidgins and contact languages*, 67–77. Berlin: Mouton de Gruyter.
- Green, Rebecca. 1995. A grammar of Gurr-goni. Canberra: Australian National University doctoral dissertation.
- Hajek, John. 2006. Serial verbs in Tetun Dili. In Aikhenvald & Dixon (eds.) 2006, 239-253.
- Hardy, Frank. 1968. The unlucky Australians. Melbourne: Nelson.
- Hokari, Minoru. 2000. From Wattie Creek to Wattie Creek: An oral historical approach to the Gurindji walk-off. *Aboriginal History* 24. 98–116.
- Ingram, Mark. 2006. Serial verb constructions in Dumo. In Aikhenvald & Dixon (eds.) 2006, 202–222.
- Jansen, Bert, Hilda Koopman & Pieter Muysken. 1978. Serial verbs in creole languages. In Pieter Muysken & Norval Smith (eds.), Amsterdam creole studies II, 125–159. Amsterdam: Instituut voor Algemene Taalwetenschap, Universiteit van Amsterdam.
- Kilian-Hatz, Christa. 2006. Serial verb construction in Khwe (Central Khoisan). In Aikhenvald & Dixon (eds.) 2006, 108–123.
- Klavans, Judith. 1985. The syntax of code switching: Spanish and English. In Larry D. King & Catherine A. Maley (eds.), Selected papers from the 13th Linguistic Symposium on Romance Languages, Chapel Hill, N.C., 24–26 March 1983, 213–232. Amsterdam: Benjamins.
- Lane, Jonathan. 1991. Kalam serial verb constructions. Auckland: University of Auckland MA thesis
- Lefebvre, Claire. 1991. 'Take' serial verb constructions in Fon. In Lefebvre (ed.) 1991, 37-78.
- Lefebvre, Claire (ed.). 1991. Serial verbs: Grammatical, comparative and cognitive approaches.

 Amsterdam: Benjamins.
- Levinson, Stephen & David Wilkins. 2006. Background to the study of the language of space. In Stephen C. Levinson & David Wilkins (eds.), *Grammars of space: Explorations in cognitive diversity*, 1–23. Cambridge: Cambridge University Press.
- Li, Charles & Sandra Thompson. 1981. *Mandarin Chinese: A functional reference grammar*. Berkeley, CA: University of California Press.
- Manfredi, Victor. 1989. Igboid. In John Bendor-Samuel (ed.), *The Niger-Congo languages: A classification and description of Africa's largest language family*, 337–358. Lanham, MD: University Press of America.
- Matras, Yaron. 2009. Language contact. Cambridge: Cambridge University Press.
- Matras, Yaron & Peter Bakker (eds.). 2003. *The mixed language debate: Theoretical and empirical advances*. Berlin: Mouton de Gruyter.
- Matthews, Stephen. 2006. On serial verb constructions in Cantonese. In Aikhenvald & Dixon (eds.) 2006. 68–86.
- Mayer, Mercer. 1969. Frog, where are you? New York: Dial Books for Young Readers. Chinese edition: Puffin, 1994.
- McConvell, Patrick. 1985. Domains and codeswitching among bilingual Aborigines. In Michael Clyne (ed.), *Australia, meeting place of languages* (Pacific Linguistics C-92), 95–125. Canberra: Australian National University.
- McConvell, Patrick. 1988. Mix-im-up: Aboriginal codeswitching old and new. In Monica Heller (ed.), *Codeswitching: Anthropological and sociolinguistic perspectives*, 97–124. Berlin: Mouton de Gruyter.

- McConvell, Patrick. 1996. *Gurindji grammar*. Canberra: Australian Institute of Aboriginal and Torres Islander Studies.
- McConvell, Patrick. 2008. Mixed languages as outcomes of code-switching: Recent examples from Australia and their implications. *Journal of Language Contact* 2. 187–212.
- McConvell, Patrick & Felicity Meakins. 2005. Gurindji Kriol: A mixed language emerges from code-switching. *Australian Journal of Linguistics* 25. 9–30.
- McGregor, William. 2002. Verb classification in Australian Languages. Berlin: Mouton de Gruyter. Meakins, Felicity. 2007. Case marking in contact: The development and function of case morphology in Gurindji Kriol, an Australian mixed language. Melbourne: University of Melbourne doctoral dissertation.
- Meakins, Felicity. 2008a. Unravelling languages: Multilingualism and language contact in Kalkaringi. In Jane Simpson & Gillian Wigglesworth (eds.), *Children's language and multilingualism: Indigenous language use at home and school*, 247–264. New York: Continuum.
- Meakins, Felicity. 2008b. Land, language and identity: The socio-political origins of Gurindji Kriol. In Miriam Meyerhoff & Naomi Nagy (eds.), Social lives in language: Sociolinguistics and multilingual speech communities, 69–94. Amsterdam: Benjamins.
- Meakins, Felicity. 2009. The case of the shifty ergative marker: A pragmatic shift in the ergative marker in one Australian mixed language. In Jóhanna Barðdal & Shobhana L. Chelliah (eds.), *The role of semantic, pragmatic, and discourse factors in the development of case*, 59–91. Amsterdam: Benjamins.
- Meakins, Felicity & Carmel O'Shannessy. 2005. Possessing variation: Age and inalienability related variables in the possessive constructions of two Australian mixed languages. *Monash University Linguistics Papers* 4(2). 43–63.
- Meakins, Felicity & Carmel O'Shannessy (to appear). Ordering arguments about: Word order and discourse motivations in the development and use of the ergative marker in two Australian mixed languages. *Lingua*.
- Meyerhoff, Miriam. 1996. Transitive marking in contact Englishes. *Australian Journal of Linguistics* 16. 57–80.
- Mühlhäusler, Peter. 1985a. Inflectional morphology of Tok Pisin. In Wurm & Mühlhäusler (eds.) 1985, 335–340.
- $\label{eq:mullipartial} \mbox{M\"{\sc uhlh\"{\sc auser}}} \mbox{ H\"{\sc uhlh\"{\sc auser}}} \mbox{ Peter. 1985b. Syntax of Tok Pisin. In Wurm \& M\"{\sc uhlh\"{\sc auser}}} \mbox{ M\"{\sc uhlh\"{\sc auser}}} \mbox{ H\'{\sc auser}} \mbox{ H\'{\sc auser}} \mbox{ H\'{\sc auser}} \mbox{ Auser auser} \mbox{ H\'{\sc auser}} \mbox{ H\'{\sc auser}$
- Munro, Jennifer. 2005. Substrate language influence in Kriol: The application of transfer constraints to language contact in northern Australia. Armidale, NSW: University of New England doctoral dissertation.
- Muysken, Pieter. 1981. Halfway between Quechua and Spanish: The case for relexification. In Arnold Highfield & Albert Valdman (eds.), *Historicity and variation in creole studies*, 52–78. Ann Arbor, MI: Karoma.
- Muysken, Pieter. 1997. Media Lengua. In Thomason (ed.) 1997, 365-426.
- Muysken, Pieter. 2000. Bilingual speech: A typology of code-mixing. Cambridge: Cambridge University Press.
- Muysken, Pieter & Tonjes Veenstra. 1995. Serial verbs. In Jacques Arends, Pieter Muysken & Norval Smith (eds.), *Pidgins and creoles: An introduction*, 289–302. Amsterdam: Benjamins.
- O'Shannessy, Carmel. 2005. Light Warlpiri: A new language. *Australian Journal of Linguistics* 25. 31–57.
- Pawley, Andrew. 1993. A language which defies description by ordinary means. In William A. Foley (ed.), *The role of theory in language description*, 87–130. Berlin: Mouton de Gruyter.
- Reid, Nick. 1990. Ngan'gityemerri: A language of the Daly river region, Northern Territory of Australia. Canberra: Australian National University doctoral dissertation.
- Rose, Deborah Bird. 1991. *Hidden histories: Black stories from Victoria River Downs, Humbert River and Wavehill Stations*. Canberra: Aboriginal Studies Press.

- Sandefur, John. 1979. An Australian creole in the Northern Territory: A description of Ngukurr-Bamyili dialects (Part 1) (Work Papers of SIL-AAB B-3). Darwin: Summer Institute of Linguistics.
- Sankoff, Gillian. 1993. Focus in Tok Pisin. In Francis Byrne & Donald Winford (eds.), *Focus and grammatical relations in creole languages*, 117–140. Amsterdam: Benjamins.
- Schultze-Berndt, Eva. 2000. Simple and complex verbs in Jaminjung: A study of event categorisation in an Australian language (MPI Series in Psycholinguistics 14). Wageningen: Ponsen & Looijen.
- Schultze-Berndt, Eva. 2007. Recent grammatical borrowing into an Australian Aboriginal language: The case of Jaminjung and Kriol. In Yaron Matras & Jeanette Sakel (eds.), *Grammatical borrowing in cross-linguistic perspective*, 363–386. Berlin: Mouton de Gruyter.
- Sebba, Mark. 1987. The syntax of serial verbs. Amsterdam: Benjamins.
- Senft, Gunter (ed.). 2008. Serial verb constructions in Austronesian and Papuan languages (Pacific Linguistics 594). Canberra: Australian National University.
- Shnukal, Anna. 1988. Broken: An introduction to the creole language of Torres Strait (Pacific Linguistics C-107). Canberra: Australian National University.
- Siegel, Jeff. 2004. Morphological simplicity in Pidgins and Creoles. *Journal of Pidgin and Creole Languages* 19. 139–162.
- Slomanson, Peter. 2006. Sri Lankan Malay morphosyntax: Lankan or Malay. In Deumert & Durrleman (eds.) 2006, 135–158.
- Smith, Ian & Scott Paauw. 2006. Sri Lanka Malay: Creole or convert. In Deumert & Durrleman (eds.) 2006, 159–182.
- Stewart, John M. 1963. Some restrictions on objects in Twi. *Journal of African Languages* 2. 145–149.
- Thomason, Sarah Grey. 1997. Mednyj Aleut. In Thomason (ed.) 1997, 449-468.
- Thomason, Sarah Grey (ed.). 1997. Contact languages: A wider perspective. Amsterdam: Benjamins.
- Treffers-Daller, Jeanine. 1994. Mixing two languages: French-Dutch contact in a comparative perspective. Berlin: Mouton de Gruyter.
- Verhaar, John. 1995. Towards a reference grammar of Tok Pisin: An experiment in corpus linguistics. Honolulu: University of Hawai'i Press.
- Wavehill, Ronnie Jangala. 2000. *Nyawuyinangkulu larrpa kujilirli yuwanani ngumpit-ma karti-yarlu*. Translated by Erika Charola. Katherine: Diwurruwurru-jaru Aboriginal Corporation.
- Wurm, Stephen & Peter Mühlhäusler. 1985. *Handbook of Tok Pisin (New Guinea Pidgin)* (Pacific Linguistics C-70). Canberra: Australian National University.