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Edited by
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Figure 1: Languages of Australia discussed in the volume (Brenda Thornley 2015)

Figure 2: Languages of northern Australia discussed in the volume (Brenda Thornley 2015)

Nicholas Evans

1 As intimate as it gets? Paradigm borrowing in Marrku and its implications for the emergence of mixed languages[1]

Abstract: Marrku, now close to extinct, is the language of Croker Island in the Northern Territory. Existing classifications of Australian languages have assigned Marrku to the same family as Iwaidja, Mawng and Amurdak in what is most commonly known as the Iwaidjan family (Schmidt 1919, O'Grady et al. 1966, Evans 2000, Dixon 2002). In fact the level of shared cognacy between Marrku and other languages of this putative family is quite low, so that what has appeared to be the best evidence for genetic relatedness comes from what appear to be shared patterns of prefixal morphology. Though Marrku verbs in particular have highly irregular morphological paradigms, with a large number of quite distinct patterns according to the lexical item involved, some show significant paradigmatic resemblances to verbs in Iwaidja or Mawng.

Recent work on Marrku has allowed us to extend the analysis of Marrku grammar, by enlisting the aid of two 'last hearers' (Joy Williams and Khaki Marrala) to transcribe and translate hitherto unanalysed recordings made in the 1960s. Though our understanding is still fragmentary, it appears increasingly likely that Marrku is less close to the other Iwaidjan languages than was previously believed. Rather, there appears to have been borrowing of entire paradigms of at least two inflected verbs from other Iwaidjan languages. (Though it is unclear whether such extreme cases of paradigm borrowing reflect code-mixing in a language death situation, or resulted from more 'normal' areal influence facilitated by the fact that most verbs had their own distinct paradigms anyway.)

In this paper I will re-evaluate the genetic position of Marrku, focussing on the very distinctive morphological structure of the Marrku verb and why it suggests that at least two verb paradigms have been borrowed wholesale – as well as the prefixal paradigm of reflexive pronouns. A reconsideration of the evidence, I will argue, points to Marrku being a family-level isolate, rather than

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a member of the Iwaidjan family – though belonging, at a deeper level, to the Australian phylum. At the same time, Marrku may be considered as an incipient mixed language of older vintage than more recently identified mixed languages such as Gurindji Kriol and Light Warlpiri.

1 Introduction

> Von aussen gesehen, bot uns eine Sprache nicht das Bild einer abgeschlossenen Einheit dar; nun zeigt sie sich auch ihrem innern Bau nach nicht als eine solche, sondern als eine Zusammensetzung aus Tatsachen, die zwar miteinander in mehr oder minder festem Verband stehen, aber doch nicht in unlösbarem – sonst wäre ja Mischung unmöglich.[2] (Schuchardt 1928: 195)

> The transfer of entire inflectional paradigms has long been regarded as the last challenge to morphological borrowability (Gardani, Arkadiev & Amiridze 2014:11)

The existence of mixed languages in Australia has been shown by a spate of recent publications (Charola 2002; McConvell 2008; Meakins 2010, 2011, 2012; Meakins and O'Shannessy 2010; O'Shannessy 2012, 2013), as well as Meakins (this volume) and O'Shannessy (this volume). In each case, these derive from a combination of a traditional language (Gurindji and Warlpiri respectively) with a creolised form of English.

So far, however, we have no reported examples of mixed languages forming by the interaction of two traditional Australian languages. In this chapter I discuss the case of Marrku, which appears to have borrowed a number of complex verb and nominal paradigms from neighbouring languages (Iwaidja, Ilgar/Garig) to which it is at best distantly related.

Unfortunately the limited nature of our documentation of Marrku, and the fact that it is no longer spoken,[3] places limits on what we can say about its analysis. Nonetheless, we have enough data to identify the sorts of wholesale mixing of complex morphology which characterise such well-known mixed languages as Michif (Bakker 1997) and Mednyj Aleut (Thomason 1997). While I will not be going so far as to characterise Marrku as a mixed language, the

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2 "Seen from outside, language does not present us with the image of an enclosed unit; nor does it so appear according to its inner construction, but rather as a collection of facts, which stand in more or less tight connection to each other, though not indissolubly connected – otherwise mixture would be impossible." (Translation NE)

3 For details see Evans (2001), Evans et al. (2006) and Evans (2009); since the situation described in those publications a key "last hearer", Joy Williams Malwagag, has passed away, leaving only Khaki Marrala as an extremely frail last hearer and partial speaker.

wholesale borrowing of complete paradigms resembles what Seifart (2012: 498) has said about Resígaro, as constituting "an intermediate case, a 'missing link' between borrowing and language mixing that may eventually help to bridge the perceived gap between 'normal' contact-induced changes and mixed languages".

Nonetheless, Seifart (2012: 473) signals a criterion which is only met by a subset of the Marrku material to be considered here: "Derivational and inflectional morphemes are considered as e1ectively borrowed only when they are used on at least some native stems, i.e. when their use is not restricted to equally borrowed stems." Now it might be expected that a first stage in the borrowing of inflectional systems would be 'trojan horse borrowings' (Meakins 2011), in the form of borrowed words that host the relevant paradigms, with the extension to native stems being a later process. In that sense, we need to be on the lookout for both phenomena if we are to understand the full sequence of steps accompanying the borrowing of inflectional systems.[4]

In my view, we therefore need to include both situations in our purview, and it is helpful to have terms to distinguish them. For the case where borrowed paradigmatic material is confined to loanword hosts I will employ the terms 'hosted inflectional borrowing' (or 'hosted paradigmatic borrowing' when dealing with paradigms), while for situations where the borrowed material has been extended to native hosts I will use the term 'recombinant inflectional borrowing' (or 'recombinant paradigmatic borrowing').[5] As we shall see, both types of borrowing are found in Marrku: hosted paradigmatic borrowing in the case of a couple of verbs, and recombinant paradigmatic borrowing in the case of pronominal prefixes on reflexive pronouns.

The recognition that a portion of Marrku's paradigmatic morphology – at least two verb paradigms and the prefixal paradigm of reflexive pronouns – is borrowed rather than inherited leads us to re-evaluate its claimed genetic position within the Iwaidjan family (as proposed in Evans 2000). A reconsideration of the

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4 This point was already made by Weinreich (1968: 31): "Thus the plural ending *-im* in Yiddish *pójerim* 'peasants,' *doktórjim* 'doctors' is only ultimately, but not directly, of Hebrew origin; it is rather an analogical extension of the *-im*-plural from such Yiddish couples as *min–mínim* 'sort', *gíber–gibójrim* 'strong man', etc., etc. – free morphemes borrowed in pairs from Hebrew."

5 Two deviations between my terminology and those used elsewhere in the literature should be noted here. First, some others (e.g. Gardani 2008) only regard morphology as borrowed once it has appeared on native material (i.e. my recombinant borrowing), so my use of the term is broader (and motivated by the fact that I regard Gardani's terminology as unduly restrictive). Secondly, my terms 'hosted inflectional borrowing' and 'recombinant inflectional borrowing' correspond to the opposition 'oikoclitic' vs 'xenoclitic' in Elšík & Matras (2006: 324); I do not use these terms because of the potential for the 'clitic' component to be misleading in metalinguistic terminology. See also the discussion in Kossmann (2010) on 'parallel system borrowing'.
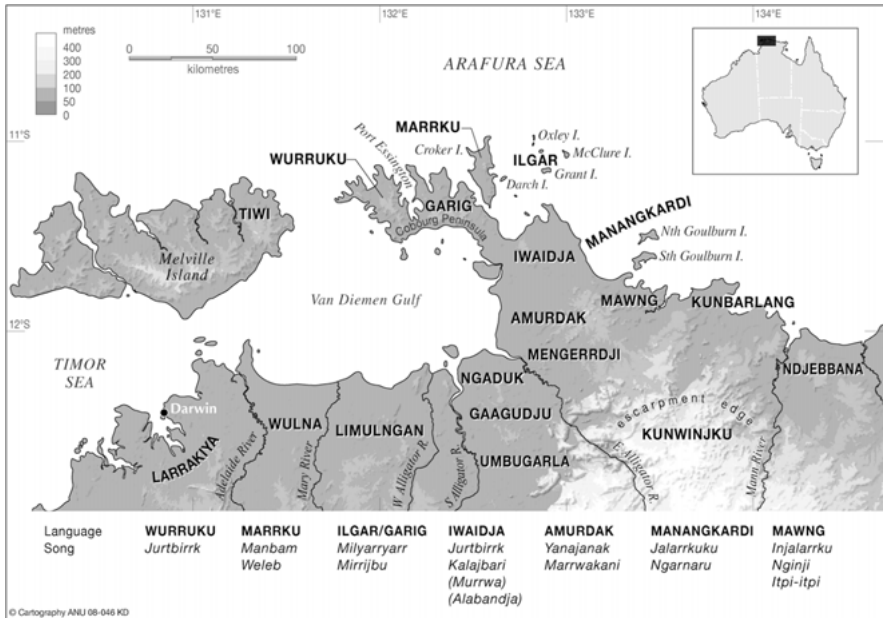
Figure 1: Languages of the Cobourg Peninsula region

evidence, I will argue, points to Marrku being a family-level isolate, rather than a member of the Iwaidjan family – though belonging, at a deeper level, to the Australian phylum.

2 Marrku and the Iwaidjan languages

Marrku (also sometimes spelled Marrgu; ISO 639-3 mhg) was traditionally spoken on Croker Island in the Northern Territory of Australia. There are no fluent speakers left, though a couple of surviving people remember small amounts of the language. In addition to written material collected by Capell (1963) or one of his research assistants (mostly word-lists and questionnaire-type elicitations), some recordings were made in the 1960s by Heather Hinch (a missionary linguist who knew Mawng and was based on Goulburn Island) and Bernhard Schebeck (a linguist primarily working on Yolngu). These latter sources included some textual material recorded from a number of speakers (Alf Brown, Jumbo Jambululu, Dickie Malwagu and Hazel Mamiyarr), which I was able to transcribe in 2003–2005 with the assistance of the late Joy Williams, daughter of Hazel

Mamiyarr. I was also able to record a limited amount of material during the 1990s from two senior men, Mick Yarmirr and Charlie Wardaga, both of whom spoke some Marrku (though not fluently). In the 1960s, when Hinch and Schebeck made their recordings, there appear to have been perhaps six Marrku speakers still alive; we know for certain that some of them spoke other languages (e.g. that Alf Brown also spoke Garig) and it is likely from typical language portfolios of senior Croker Islanders that they would in general have spoken Ilgar/Garig (two very closely related variants, with Garig spoken around Port Essington and Ilgar on the small islands to the east of Croker, such as Grant Island and New Year Island), Iwaidja and possibly Kunwinjku in addition to Marrku.

Most existing classifications of Marrku and its neighbours place Marrku, along with the Popham Bay language Wurruku, in a group with Iwaidja, Garig/ Ilgar, Mawng (aka Maung) and Amurdak (essentially the same in Schmidt 1919; O'Grady et al. 1966; Walsh 1981; Dixon 2002[6]; Evans 2000, 2003b). There is perhaps 20% shared vocabulary between Marrku and Iwaidja, though it is difficult to assess how much is loaned, and the figure drops to less than 5% for verbs. The family tree proposed in Evans (2000) is given below.
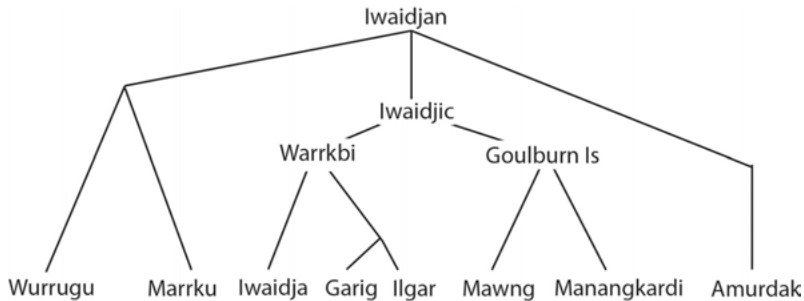
Figure 2: Proposed relations between languages of the Iwaidjan family (Evans 2000)

The earlier classifications (Schmidt 1919; O'Grady et al. 1966) predominantly drew on the not insignificant overall proportion of shared vocabulary (without giving extra weighting to the evidence from the number of cognate verbs, which would have pulled the figures down). The main evidence drawn upon in Evans (2000) came from certain paradigmatic similarities in the reflexive pronoun and some inflected verbs, predicated on the assumption that these would not have

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6 Though Dixon (2002: 668) expresses skepticism about the evidence for including Marrku, Amurdak and the Popham Bay language), pointing out that the evidence for including them in this family is minimal.

been borrowed. However, analytic further work on Marrku since then, including a more systematic approach to its verb paradigms (see Evans, Malwagag, and Marrala 2006), makes a paradigm-borrowing scenario more likely, as I will argue below.

3 "Typical" Marrku verb paradigms

Though all the above languages are head-marking languages with considerable verb morphology, there are significant differences between Marrku and the other Iwaidjan languages when it comes to the forms, ordering and semantics of its verbal affixes.[7] The basic structure of the Marrku verb, close to maximally expanded,[8] is illustrated in (1); (2–4) give simpler and more typical examples. Forms with no overt marker of tense, e.g. (2), are construed as present, and those with no overt marker of number are construed as singular. Note that, in the practical Marrku orthography used here, *h* = /ɰ/ (only between two vowels), *ng* = /ŋ/, *nh* = /n̪/, *ny* = /ɲ/, *r* = /ɻ/, *rn* = /ɳ/, *rr* = /r/, *rt* = /ɖ/, *th* = /t̪/.

(1) Tense   Subject   Aspect   Plural   Stem
  ma-   *nga-*   *wu-*   *lk-*   *ayi*
  past   1st person   durative   plural   be, sit
  mangawulkayi 'We used to stay, used to live'

(2) Subject   Stem
  nga-   *layi*
  1st person   be, sit
  ngalayi 'I am, I remain'

(3) Tense   Subject   Stem
  ma-   *nga-*   *layi*
  past   1st person   be, sit
  mangalayi 'I was living'

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7 In my comparisons I focus on Ilgar/Garig and Iwaidja, the languages which are geographically nearest and most likely to have formed part of Marrku speakers' language portfolio. For information on Amurdak see Mailhammer (2009) and references therein, and on Mawng see Capell & Hinch (1970) and Singer (2011, 2015).
8 Some Marrku verbs have an overt tense suffix, e.g. past tense *-yi* in (5); in this example the final *yi* is part of the stem, as shown by its recurrence in the present form in (2).

(4) Tense   Subject   Aspect   Stem
    ma-   *nga-*   *wu-*   *layi*
    past   1st person durative be, sit
    mangawulayi 'I used to stay, used to live'

A first wrinkle to the above structure comes from the fact that some verbs have suppletive roots. For example, 'come, arrive' has the past root *-urtyi* and the non-past root *jahan* (5):

(5) Tense   Subject   Plural Stem Tense
    ma-   Ø   *lk-*   *urt*   *-yi*
    past   3rd person plural arrive past
    malkurtyi 'they arrived, they came'   (cf *mangurtyi* 'I arrived')

(6) Subject Prefix   Stem+Tense
    nga-   *jahan*
    1st person   arrive:NPst
    ngajahan 'I come, arrive'   (cf. *kirrijahan* 'I will arrive')

A second wrinkle is the presence of certain subject prefix suppletions, in that different verbs select quite different forms for the same person/number combinations across the future vs non-future contrast (7).

(7) a. **ku***thirri*   **kirri***thirri*
         'I went'   'I will go'

    b. **nga***jahan*   **kirri***jahan*
         'I came'   'I will come'

    c. **nga***lawuthi* ~ **th***awuthi* **kirri***lawuthi*
         'I talked'   'I will talk'

It is possible that some of this may result from portmanteaux for subject + direction: a possible analysis is that *ku-* means '1sg present, away' and *nga-* '1sg present, towards/neutral'. A comparable phenomenon is also found in Iwaidja and Ilgar, e.g. Ilgar *ja-* '1sgSubj:away' vs *nya-* '1sgSubj:towards'. We certainly have some third person prefixes which show this contrast (8–10), but do not have clinching examples with the 1st singular, and note that neither the 'towards/neutral' vowel /a/ nor the 'away' vowel /*i(yi)*/ from (8–10) appear in the examples in (7).

(8) *ma*kaladbany 'it went down, descended, set' vs
     *mi*kaladbany 'it went down, away'[9]

(9) *ma*lkurtyi 'they came, arrived, appeared, turned up (here)' vs
     *miyi*lkurtyi 'they turned up there, they arrived there'

(10) *ma*nangayi 'they got it/him/her' vs
     *mi*nangayi 'they took him away'

4 Comparison of Marrku verb morphology with Iwaidja and Ilgar/Garig

If we turn to Marrku's neighbours, Iwaidja and Ilgar/Garig, we see significant contrasts in how their verb morphology is organised. Note first that Iwaidja and Ilgar/Garig are very close, almost sister dialects. The two most important differences are that

(a) Ilgar/Garig retains the proto-Iwaidjan masculine and feminine gender prefixes, for (some) nouns, (some) adjectives and in verbal agreement (both subject and object), whereas Iwaidja has almost entirely jettisoned them: the only exception is for the 3sg>3sg prefix combinations on verbs, which distinguish masculine from feminine subjects (*ri-* vs *ka-* respectively) as long as the referents are human.

(b) Linked with its jettisoning of ancestral gender prefixes, Iwaidja has generalised an originally obscure fifth gender (the miscellaneous) *aK-*[10], which had the morphophonemic effect of hardening following consonants (semi-vowels and nasals to stops at the same point of articulation) and eventually producing initial mutation in the singular forms and stop-initial singular forms in Iwaidja corresponding to sequences of gender prefix plus stop in Ilgar/Garig: cf. Ilgar/Garig *imawurr* 'his arm', *inymawurr* 'her arm', *amawurr* 'their arms'; Iwaidja *bawurr* 'his/her/its arm', *amawurr* 'their arms', Ilgar/Garig *iwani* 'he sits', *inybani* 'she sits', *awani* 'they sit'; Iwaidja *bani* 'he/she sits', *awani* 'they sit'.

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9 As Iwaidja translations for this pair, Joy Williams offered *bulakuny* 'it descended' (direction neutral) for *makaladbany* and *ijuwulakuny* (direction away) 'it went down / away' for *mikaladbany*.
10 Where K- is a morphophoneme producing hardening in following semi-vowels and nasals (e.g. w > b, ng > k, m > b); the ancestral a, still attested in Mawng, is in Iwaidja only still found if the total prefixed word does not exceed two syllables, e.g. *aK-yu* [3sgS-lie] > *aju* 'it lies', and elsewhere has been lost.

See Evans (1998, 2000) for further details. These changes will be relevant, below, to our deciding which language some loans into Marrku are sourced from. However, in terms of structural comparisons relevant here, all differences between Ilgar/Garig on the one hand and Iwaidja and the other can be reduced to a contrast in their 3sg forms for subject and/or object, including the knock-on effects of the Iwaidja general 3sg morpheme sometimes represented as K-, which produces a hardening of the following consonantal segment.

Looking now more specifically at the differences in morphological organisation, in Iwaidja and Ilgar/Garig there is no tense prefix before subject, no aspect prefix, and no separate plural prefix (instead, there are distinct pronominal prefix forms for singular and plural). Iwaidja and Ilgar/Garig have a future/ potential prefix *-(w)ana-* between subject+direction and verb, which lacks a counterpart in Marrku. Examples (11) and (12) compare the Marrku and Iwaidja/ Ilgar/Garig forms for 'we used to stay/live', and (13) and (14) the corresponding future forms.

Marrku, past imperfective:

(11)	Tense	Subject	Aspect	Plural	Stem
	ma-	*nga*	*wu-*	*lk-*	*ayi*
	past	1st person	imperfective	plural	be, sit

mangawulkayi 'We used to stay, used to live'

Iwaidja, past imperfective:

(12)	Subject + Direction	Tense/Modality	Stem[11]	Tense/Aspect/Mood
	ngad-	ø	*bani*	*-ngan*[12]
	1st person pl. neutral	realis	be, sit	past imperfective

ngadbaningan 'We used to stay, used to live'

Marrku, future:

(13)	Tense + Subject	Stem
	kirri-	*ldayi*
	1st:FUT	be, stay

kirrildayi 'I will be/stay'

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11 With a distinct pattern of partial right-reduplication for duals and iteratives, not illustrated here, and some suppletive dual roots.

12 Strangely, this suffix marks perfective in Mawng with this root. It must be emphasised that the aspectual semantics of Iwaidja remains poorly understood.

Iwaidja/Ilgar/Garig, future:

(14) Subject + Direction   Tense/Modality   Stem
    nga-   *na-*   *wani*
    1st person sg.neutral   future/irrealis   be, sit
    'I will be/stay'

To sum up the differences:

(a) Marrku has an initial tense slot for past marking which Iwaidja lacks
(b) In its subject marking, Marrku separates person from number marking (plural generally *–lk-*) into distinct slots (5, 10), whereas Iwaidja and Ilgar/Garig have pronominal prefixes where the number marking directly follows the person marking (1sg *nga-*, 1nsg *ngarr- ~ ngad-*) or is not related to it at all: 3sg *i-/iny-* (Ilg/Ga), *K-* (Iw), 3pl *a-*; 2sg intrans subject *a(n)ng-*, 2pl intrans subject *kurr-*).
(c) Marrku signals aspect by prefix, between the subject marker and the plural marker or stem, whereas Iwaidja and Ilgar/Garig signal it by suffix after the stem
(d) Iwaidja and Ilgar/Garig have a future/irrealis prefix *–(wa)na*, directly before the verb stem, while Marrku has a fused subject + future prefix, typically portmanteau in form

These do not exhaust the differences between Marrku and the other languages in how they organise their verbs, but will be enough to show how different the systems normally are.

5 Some shared paradigms

We now turn to three verbs in which the normal differences in verb morphology outlined in Section 4 are not observed. Instead, the Marrku forms closely resemble those found in Ilgar/Garig. The relevant verbs are: *yama* 'work'; *miyardma* 'want, like', and *wurdan* 'be from, come from'. For expository purposes I draw all examples from a single text – told by Jumbo Jamburlurlu about working for the missionaries gathering trepang (sea-cucumbers), and transcribed by myself with the assistance of Joy Williams Malwagag.[13] However, there are other exam-

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13 In the examples that follow, JJ are the speakers' initials, followed by a line number in the Elan transcript of the tier, followed by the time code at the beginning of the line. The full Elan transcript and original sound file can be found in the DoBeS archive. The original recording was made by Bernhard Schebeck in 1966 and is archived in AIATSIS as Archive Tape 644, Track B.

ples of these verbs (especially 'want') in the recorded materials, as will be mentioned below.

In presenting these excerpts, over every word I write an abbreviation for the original source language: Iw = Iwaidja, G = Garig/Ilgar, M = Marrku, Mkr = Makassarese, an Austronesian language of Sulawesi from which scores of words were borrowed into languages of the region (Evans 1992). The symbol ≈ indicates that the resemblance of an inflected verb to the indicated language is only approximate, while ≠ indicates that the form is different from the designated language, and < indicates a loan source.

(15) G (≠Iw)   M < Mkr   M   M
      a-miyardma-ng   *tharriba* *many-ma-yi*   *thak*
      1SG.A3SG.o-want-NPST   trepang   PST:1>3-get-PST   all
      'Do you want trepang? I've got it all.'   (JJ 19; 00:01:04)

The line in (15) concludes with the two clearly Marrku words *manymayi thak* 'I've got it all'. *Tharriba* 'trepang', originally from Makassarese *taripaŋ* (Cense 1979) can be regarded as an assimilated loan (sporadic loss of final -ŋ is common – see Walker and Zorc 1981) in a form distinctive to Marrku, since other languages of the region lack interdentals and borrow the form as *darriba* rather than *tharriba* (Evans 1992), or else assimilate the initial to a palatal, as in Mawng *jarripang*. The word *amiyardmang* 'I want it' is distinctive to Garig and Ilgar, but different from the Iwaidja form which would be *abiyardmang*.[14],[15]

The next line of interest, eight seconds further into the text, is:

(16) =Iw/G   =Iw/G<Mkr   M
      iyi,   *nga-na-yama-ng*   *nirti*
      yes   1SG-FUT-work-NPST   you(sg)
      'Yes, I'll work for you.'   (JJ 20; 00:01:12)

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14 This is because the Garig/Ilgar prefix *a-* is underlyingly 1SG.A *a-* plus 3SG.M.O *i-*, with vowel coalescence turning *a+i > a-*, whereas the Iwaidja form is historically *a + K-* where *K-* is the (etymologically) miscellaneous gender, generalised as the regular 3SG absolutive marker in Iwaidja.

15 Capell's materials (1963: 6) give the following forms for 'want': *amiyarra* 'I like (him), *imiyarra* 'he likes (it)', *kunmiyarra* 'I like you', *yanmiyarra* 'you like me' and *nganmiyarra* 'she likes me'. These are very close to the attested Ilgar/Garig forms, except that *inimiyarra* would be expected for 'he likes it' and *nganngamiyarrma* for 'she likes me'; the final *–ng* appears to be variably present, and the phonetic variation between *rd* and *rr* can be hard to hear in Iwaidja and Ilgar/Garig and may not even be significant in Marrku.

Joy Williams translated this line into Iwaidja as *iyi, nganayamang nuyi*: the inter-jection *iyi* is identical across the languages of the Cobourg region (regionally shared affirmative interjections are nothing unusual in Australia), and the two languages employ different second person pronouns as expected. What is of interest in this line is the inflected verb *nganayamang* 'I will work', identical in Iwaidja and Marrku. This is based on the root *yama*, from Makassarese *jáma* 'do, work, handle, touch' or possibly Malay *jamah* 'handle', with lenition of the initial consonant (Evans 1997) and addition of *-ng*, which is stereotypical of Macassan loans (Evans 1992). The 1st singular future prefix *ngana-* is completely regular for intransitive verbs in Iwaidja (and Ilgar/Garig), but is completely different from the normal prefixes in Marrku, so this is a clear case where an inflected verb has been borrowed lock stock and barrel.

The next relevant line is reproduced in (17); Joy Williams translated it into Iwaidja as *jamangu ba darriba*. Here the word *jamangu* has a distinctively Iwaidja form, showing the initial hardening distinguishing Iwaidja from Garig or Ilgar (both of which would have *i-yamangu*); the *-(ng)u* past imperfective suffix is also distinctive to Iwaidja, Garig and Ilgar but not normally found in Marrku. Of the other words, *marrkungurn* is a demonstrative form found only in Marrku, and *tharriba* for 'trepang' has already been discussed.

(17)   =Iw (≠G) <Mkr?   M   M < Mkr
       jamangu   *marrkungurn*   *tharriba*
       3SG:work-PST.IPFV   DEM   trepang
       'He was working there for trepang.'   (JJ 40; 00:02:28)

In (18), a further form of the verb 'to work' is shown. In addition to the other similarities shown above, *kud-bana-* is the normal Iw/G 2PL.FUT form – the Marrku equivalent to this prefix would be *nyirrilka-*. The Marrku word *ngarta* '1SG' follows (this can function as a subject, object or oblique, unlike its Garig/Iwaidja counterparts which distinguish core *ngabi* from oblique *ngartung*), plus *mardal*, a further word shared between Marrku and Iwaidja.

(18)   = Iw/G <Mkr   M   M/Iw
       kud-bana-yama-ng   *ngarta*   *mardal*
       2PL-FUT-work-NPST   1SG   a_while
       'You have to work for me for a while.'   [JJ 11; 00:00:42]

In the next example, the framing clause comprises *iyamany* 'he was working', employs a form identical to Garig/Ilgar form (Iwaidja would have *jamany*), while

the quotative clause is entirely in Marrku, provided one includes the already-mentioned use of the Makassarese loanword *tharriba* 'trepang'. To illustrate the degree of difference, the Iwaidja translation would be: *jamangung, "ruka birukurnaj rukburduka darriba"*

(19) | = G | M | M<Mkr | M | M | M | M<Mkr | M
|---|---|---|---|---|---|---|---|
| *i-yama-ny,* | *"irrya* | *tharriba* | *aku* | *muku* | *ngurn* | *tharriba* | *wanhi"* |
| 3M-work-P | here | trepang | 3:be | there | that | trepang | there |

'(As) he was working, (he said) "Hey, what's this? This is trepang."'
[JJ 21; 00:01:14]

In (20), again, the verb takes a form which is identical to Garig/Ilgar rather than Iwaidja, as indicated by the prefix *a-* (1SG.A>3SG.M.O), where Iwaidja would have *aK*, producing hardening of the following consonant to give *abiyardmany*.

(20) | = G | M<Mkr |
|---|---|
| *a-miyardma-ny* | *tharriba* |
| 1SG>3SG-want-P | trepang |

'I wanted trepang.'   [JJ 64; 00:03:35]

Finally, in (21), we see a different element from Garig/Ilgar/Iwaidja being employed: the inflected preposition *a-wurdan* 'they-be.from', in a clause which otherwise contains distinctively Marrku elements. The 3PL *a-* prefix is not the standard form in Marrku, which would use *mana-* or *malk-*, but is common to Iwaidja, Ilgar, Garig and Mawng

(21) | M | M | =Iw/G | =Iw/G |
|---|---|---|---|
| *kiyak-wuyi* | *irrya* | *a-wurdan* | *Milingimbi,* *iyi* |
| person-PL | here | 3PL-be.from | Milingimbi yes |

'The people here are from Milingimbi.'   [JJ 144; 00:07:27]
[Iw *translation arrarrkbi kani awurdan Milingimbi*, iyi]

As these examples have shown, the Jamburlurlu text contains at least two verbs, 'work' and 'want', plus an inflecting preposition, 'be from', which exhibit inflectional morphology identical or similar to forms found in Garig/Ilgar and Iwaidja. In some cases the forms are equivalent to all of these varieties (16, 18, 21), in one case (17) it is identical to Iwaidja only, while in others (15, 19, 20) it is identical to Garig/Ilgar only.

6 Hosted paradigm borrowing or code-mixing?

Do the phenomena alluded to above constitute hosted paradigm borrowing or code-mixing?[16] Five relevant considerations favour a borrowing analysis.

(a) *speaker rulings*. The unfortunate circumstances of language loss mean that I can only draw on the rulings of one speaker, Joy Williams, whose dominant language was Iwaidja but could understand Marrku thanks to hearing it during her childhood from her Marrku-speaking mother. When I asked her about a word like *kudbanayamang* in (18), and whether she thought the speaker was mixing in Iwaidja or Garig, she simply replied: "that's Marrku, that's how you say it". This is despite the fact that, as a fluent Iwaidja speaker, she was fully aware of the existence of *kudbanayamang* as a Iwaidja word, and indeed offered it as part of her translation of that line, namely *kudbanayamang ngartung mardan.*

Also relevant is the fact that, in the given text, JJ himself sometimes self-corrects words he evidently perceives as loanwords, e.g. after using the word *boyla* for 'cauldron for boiling trepang' he follows up with *kawa, ngurn boyla balanda, ngarta manga, maban, kawa* '[I mean] *kawa*, that [word] boiler is English, I say *kawa*'. (The fact that *kawa* itself originates from Makassarese *kawa* 'cauldron, kettle', does not disqualify it from counting as a local word.) At no point does he make any such correction to the use of any of the words discussed above, something one might expect if he was code-mixing.

(b) *prosodic integration*. Throughout the text there is no pause or rhythmic resetting between the relevant verbs and other material – they are fully pro-sodically integrated.

(c) *more than one source*. The fact that words come from more than one Iwaidjan language – sometimes clearly Garig, sometimes Iwaidja, sometimes not deter-minable which of these – is less compatible with a code-switching analysis (though not totally, since the speaker could be code-switching between three languages). It is interesting, though, that the verb *miyardmang* 'want' is always either identical to Garig (and different to Iwaidja) or else uses forms

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16 Our reasoning is hampered here by the lack of information about JJ's language portfolio. Clearly, if he did not know both Iwaidja and Marrku, the case for borrowing is clear (cf Muysken 2000). Unfortunately we do not know the answer, but it is likely he spoke Iwaidja as well as Marrku from circumstantial evidence. namely the fact that all long-term indigenous residents of Croker Island I met who were still alive from the early 1990s knew Iwaidja in addition to other languages.

that are not appropriate combinations for the transitivity of the verb. Capell's notes on this verb (see footnote 14) also only ever contain either Garig-identical forms, or forms not found in any of the comparator languages.

(d) *consistency*. The use of the relevant forms is completely consistent – whenever the meanings 'work' or 'want' need to be expressed, they are expressed by an appropriately inflected form of *yamang* or *miyardmang*. In other words, there are no alternatives to using these forms, and their use is lexically predictable. With the expression meaning 'come from', which is expressed by the Garig/Ilgar/Iwaidja term *wurdan* in the text above, we don't have enough occurrences to make clear generalisations. Conversely, very few nouns that are identical to Garig/Ilgar or Iwaidja appear in the Jamburlurlu text, and those that do (such as *wubuny* for 'canoe' and *balanda* for 'European, white person') are words found right across western Arnhem Land, so can't be considered clear cases of code-mixing, as opposed to using loaned regional vocabulary.

(e) *no run-ons* in the Jamburlurlu text. In other words, once the relevant word is completed, speaker always reverts to Marrku. If it were a case of code-switching or code-mixing, we would expect speaker to stay with the switched-to language, for a good number of instances.[17]

There are thus good reasons to see this as a case of wholesale hosted borrowing of paradigms of inflected verbs. This is comparable to the "compartmentalization" of verb inflection in some Romani dialects (Igla 1996; Matras 2002) in which Turkish verbs are borrowed with their inflections on, but without extending the inflectional morphology to native roots.[18]

7 Reflexive pronouns: a case of recombinant paradigm borrowing

We now turn to another part of Marrku grammar, that of reflexive pronouns. Here we find an apparent case of recombinant paradigm borrowing: the use of

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17 As Felicity Meakins (p.c.) points out, this is not a totally decisive argument, since one can also have code-switching without runons i.e insertional code-switching, which is linked to lexical items.

18 However, there is an important difference in terms of linguistic repertoires. In the case described by Igla (1996) and Matras (2002), the relevant inflections remained confined to Turkish-borrowed verbs for several generations after the relevant Romani speakers left Turkey for Greece or Bulgaria, even among speakers who do not speak Turkish.

possessor prefixes identical to those in Garig/Ilgar on a distinctive Marrku root in reflexive pronouns.[19]

In an earlier study (Evans 2000: 98), I referred to the formal parallels between the pronominal possessor prefixes found in Marrku reflexives, and the possessor prefixes found with body part nouns and reflexive pronouns in some Iwaidjan languages, with the similarity to the Garig/Ilgar forms being especially striking. In that article, I suggested that these formal resemblances were evidence for grouping Marrku with the other Iwaidjan languages. Let us review the exact evidence before deciding how it should best be interpreted.

First consider what happens with body parts. As can be seen in Table 1 (using IPA-based symbols to facilitate comparison without the distractions of different local orthographies), all languages except Marrku encode person of the possessor by prefix, with Garig/Ilgar and Mawng further encoding gender in the third person. Marrku appears to have generalised a 3sg (masculine) prefix *ɰi-*[20] (< earlier 3sg masculine genitive *ki-,[21] widely attested in non-Pama-Nyungan languages) as the general marker of some possessed body-parts, freezing them onto around half a dozen lexemes (in the sense that the roots *ɭuli, ɭud* etc. are never attested independently, or in other combinations).[22] This prefix (variably transcribed by Capell as *vi-, ɣi-* and *wi-*) is found on a number of other body parts (e.g. *ɣi:ni* 'nose', *ɣi:jin* 'tooth', *ɣiwud* 'belly', *wiɭḍa* 'ankle', *wilud* 'foot'), though most body parts lack it (e.g. *romad* 'ear', *alkic* 'liver'); Amurdak *wi-* for 3sg possessed body parts is a likely cognate of this prefix. Note also that, for body parts with a second singular possessor, both Amurdak and Mawng employ a prefix *nu-*, with widely attested cognates elsewhere, whereas Iwaidja and Garig/Ilgar have a form *aŋ-*, whose extension to body parts is apparently a local innovation, though in Mawng this form is found on intransitive verbs, as it is in Ilgar, Garig and Iwaidja. The body-part data, then, suggests that (a) on its body parts, Marrku has lost any trace of person-sensitive possessor marking, though retaining a frozen 3sg prefix *ɰi-* on some body parts, and (b) among the other

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19 Borrowing of reflexive pronouns is not unknown elsewhere. Matras (2007:53) mentions the borrowing of reflexive pronouns in Tasawaq, Western Neo-Aramaic and Rumungro.

20 The ɰ here is based on my own hearing of the word from Mick Yarmirr and Charle Wardaga: it represents what is, generally, a velar approximant.

21 See Evans (2003a: 21) for a tabulation, though most of the languages cited there, with the exception of Umbugarla, have lenited the initial. Further languages with an unlenited *k-* initial in 3sg possessor prefixes are Kungarakany, where most body part terms begin with *ki-* (e.g. *kibem* 'head') and Rembarrnga.

22 Generalisation of third person singular possessor affixes to part nouns has been attested elsewhere, e.g. in the Narayek and Dulerayek dialects of Bininj Gun-wok (Evans 2003b: 197).

languages of the group, there is a shared pattern of person- and gender-sensitive marking, with forms reconstructable with some confidence.

Table 1: Body-part terms with singular possessors

Possessor	Garig/Ilgar 'foot'	Iwaidja 'foot'	Mawng 'body'	Amurdak 'foot'	Marrku 'foot'
1sg *ŋa-	ŋaɭuli	ŋaɭuli	ŋaɲicalk	ŋayaŋa	ɰiɭut ŋaṭap
2sg *nu-	aŋkuli	aŋkuli	nukicalk	nuyaŋa	ɰiɭut niṭi
3sg m *(k)i-	iɭuli	ɻuli	iɲicalk	wiyaŋa	ɰiɭut
3sg f *(k)iɲ-	iɲculi		iɲɲicalk		

If we now turn to reflexive pronouns (Table 2) we find an interestingly different pattern: the appearance in Marrku of a series of prefixes that are remarkably similar to the Garig/Ilgar ones, but prefixed to a different root. First note that Amurdak is the odd one out this time, simply employing a person-insensitive form *waju(k)* 'by oneself, alone', whereas all the other languages have prefixes sensitive to person (and number in the case of Garig/Ilgar). What is striking is the similarity between the prefix series in Garig/Ilgar and that found in Marrku: 1sg Garig/Ilgar *ŋa-* to Marrku *ŋa-* or *ŋaṭ-* (the latter possibly influenced by or reduced from 1sg free pronoun *ŋaṭa*), 2sg Garig/Ilgar *an-* (in this environment but *aŋ-* in other environments as illustrated in table 1)[23] to Marrku *aŋ-*, and Marrku 3sg *i-* corresponding to what we can take as an underlying 3sg masculine *i-* in the Garig/Ilgar form (as attested in table 1), but dropped with the reflexive pronoun in what looks like a simplification of an initial *iyi* sequence that would otherwise result (i.e. *iyirrak > yirrak*). Mawng has no comparable series.

Table 2: Reflexive pronouns, singular forms[24]

Possessor	Garig/Ilgar	Iwaidja	Marrku	Amurdak
1sg *ŋa-	ŋayirak	ŋayirak	ŋaluɻat~ ŋaṭluɻat	wacu(k)
2sg *a(n)ŋ-	aɲcirak	aɲcirak	aŋluɻat	wacu(k)
3sg m *i-	(y)irak	cirak	iwuɻat	wacu(k)
3sg f *iɲ-	iɲcirak			

23 In fact the conditioning is *anŋ-* before vowels (e.g. anŋ-alak 'your shadow, spirit'), *aɲ-* before palatals (e.g. aɲciɰi 'your tooth'), and *aŋ-* elsewhere (e.g. aŋpaɰaɭ 'your head').

24 Our only source for the Marrku forms, namely Capell's (1963) fieldnotes, does not give clear forms for the plural, being confined to noting prefixes *ŋade-* (1 incl. pl.), *ŋadl-* (1 excl. pl.), *kut-* (2pl) and *w-* (3pl). It is not made explicit how these attach to the roots. In any case, the 1st person plural forms do not correspond particularly well to those in Garig/Ilgar (incl. *at-*, excl. *ŋat-*), nor does the 3rd plural form (*w-*), but the 2nd person plural form *kut-* is identical to the Garig/Ilgar form.

How should we interpret these similarities in the reflexive pronouns? There are three obvious lines of explanation:

(a) We could interpret these as the last bastion of inherited possessor prefixation in Marrku, lost on body parts but surviving in reflexive pronouns, with most formal similarities attributable to shared inheritance.

(b) We could see it as wholesale transfer of a Garig/Ilgar prefixal paradigm onto an indigenous Marrku root.

(c) We could see some of the forms in Marrku as indigenous, though possibly convergent, developments – the *ṭ* in the 1sg prefix *ŋaṭ* suggests derivation from free 1sg *ŋaṭa*, with the variant *ŋa-* perhaps influenced by Garig/Ilgar, though it would also be a natural reduction from *ŋaṭ*. Other parts of the paradigm have been filled out by direct borrowing from Garig/Ilgar, which is what appears to have happened with 2sg *aŋ-* (and 2pl *kut-*, not shown in the table).

I believe that (a) is unlikely (contra Evans 2000). The evidently innovative nature of 2sg **a(n)ŋ-* counts against it, as does the awkward fact that different roots are involved, and the clear evidence for the borrowing of verbal morphology presented in the preceding sections shows how far Marrku has been opened up to influence from Garig/Ilgar. As far as (b) is concerned, there are two problems: first the fact that not all prefix forms match (so we need to explain where the other forms have come from), and second the problem of explaining why the series only attaches to reflexive roots, not to other body part nouns as in Garig/Ilgar. Explanation (c) avoids both these problems: it is reasonably common typologically for languages to develop possessive prefixation just in reflexives, and it allows us to account for both the similarities and the differences of forms: the differences through initial grammaticalisation of some values, and similarities through borrowing to fill gaps in the paradigm.

If we accept (c), we have a case of recombinant though partial paradigm borrowing: the prefixes are certainly not attached to a borrowed root, and some elements are clearly direct borrowings from Garig/Ilgar: most clearly the 2sg *aŋ-* and the 2pl *kut-*, but the 1st sg *ŋa-* variant and the 3rd singular *i-* fit closely with the Garig/Ilgar forms.

8 Structural and sociolinguistic characteristics promoting paradigm borrowing

I hope to have convinced the reader that two types of paradigm borrowing have occurred: the "hosted borrowing" of entire paradigms of inflected verbs on the

one hand, and "recombinant paradigm borrowing" of at least some elements of the possessor prefix system found on body parts and reflexives in Garig/Ilgar and Iwaidja. Since both types are cross-linguistically rare (cf. Gardani et al, 2014), this raises the question of whether there are particular characteristics – either language-internal structural characteristics, or sociolinguistic characteristics stemming from widespread multilingualism – which are specific to Garig/Ilgar, Iwaidja and Marrku, and the sociolinguistic setting of egalitarian multilingualism in which they were traditionally spoken. I treat each of these in turn.

8.1 Structural (language internal)

Two factors are relevant here:

(a) *preexisting paradigmatic irregularity and verbal specificity.* In Marrku (like many other languages of the region, such as Gaaguju (Harvey 2002) and Umbugarla (Davies 1989)), it appears that there was a high level of paradigmatic irregularity, with paradigms differing from verb to verb. Table 3 gives subparadigms (i.e. three person/number combinations and past vs present vs future) for five Marrku verbs, along with excerpted prefix forms. Through there are some recurring regularities (e.g. 1sg future *ki(X)-*, past *ma-*), there are also many irregularities from paradigm to paradigm. For example, 1sg present varies between *nga-*, *th#-*, *ø-*, *nga-* followed by metathesis, and *nga-* followed by deletion of the first root syllable, and 3pl present varies between *ø-*, *yina-*, *i-* plus stem suppletion for plural, and *ø-hany-*. These examples are simply those found in five chosen verbs, and a wider set of verbs would enlarge the options further.

Once paradigms vary so much from verb to verb, there is not much point in learning rules of regular composition: each verb paradigm may as well be learned by heart with little of no internal analysis. But once this happens, the differently-structured paradigms of another language become just one more set of paradigms to learn, lock, stock and barrel, rather than conspicuous exceptions to regular principles of forming inflected verbs. In other words, the higher the levels of paradigmatic suppletion already present in the system, the more ready speakers may be to incorporate fully inflected verbs from another language, as just one more paradigm to learn.

A caveat is in order here: clearly this would depend on having comparable semantic TAM (tense-aspect-mood) categories. Unfortunately we know far too little about the semantics of Marrku TAM inflections to make a confident statement here, but at least on what we have to go by there is evidence for a clear

Table 3: Verbal subparadigms and excerpted pronominal prefixes for five Marrku verbs

	lawuthi 'talk, speak'			Excerpted prefixes		
	Pres	Pst	Fut	Pres	Pst	Fut
1sg	*ngalawuthi ~ thawuthi*	–	*kirrilawuthi ~ kirriyawuthi*	*nga- ~ th#*	–	*kirri- ~ kirriy#*
3sg	*lawuthi*	–	*wirryawuthi*	*ø-*	–	*wirr-*
3pl	*lawuthi*	*malawuthi ~ manathawuthi*	–	*ø-*	*ma- ~ mana-*	–

	thuwa 'die, be sick'			Excerpted prefixes		
	Pres	Pst	Fut	Pres	Pst	Fut
1sg	*thuwan*	–	*kirrithuwan ~ kirriyuwan*	*ø-*	–	*kirri- ~ kirriy#*
3sg	*iluwan*	*malhun*		*il#-*	*malh#-*	
3pl	*yinathuwan*	*manathun ~ manathuwa*	–	*yina-*	*mana-*	–

	ldayi/lkuyi 'die, be sick'			Excerpted prefixes		
	Pres	Pst	Fut	Pres	Pst	Fut
1sg	*ngaldayi*	*mangaldayi*	*kildayi*	*nga-*	*manga-*	*ki-*
3sg	*ildayi*	*maldayi*	–	*i-*	*ma-*	–
3pl	*ilkuyi*	*malkuyi*	*wildayi*	*i-*	*ma-$*	*wi-$*

	ma 'say, do'			Excerpted prefixes		
	Pres	Pst	Fut	Pres	Pst	Fut
1sg	*ng(a)an*	*mangany*	*kirrman*	*nga~~m~~-*	*nga↩*	*kirr-*
3sg		*mamany*	*wirrman*	*il#-*	*malh#*	*wirr-*
3pl	*hanyman*	*mahanyman*	*wirrhanyman*	*ø-hany-*	*ma-hany-*	*wirr-hany-*

	(ra)rrun 'return'			Excerpted prefixes		
	Pres	Pst	Fut	Pres	Pst	Fut
1sg	*ngarrun*	*magarruny ~ mararruny*	*(ra)rrun*	*nga~~ra~~-*	*manga*	*kirri-*
3sg	–	*mararruny ~ mihirarruny*	*wirrirarrun*	–	*ma- ~ mihi-*	*wirri-*
3pl	–	*mirangkuny ~ miyarngkuny*	–	–	*mi-*	–

Key for Table 3:
\# displacing following segment, e.g. *kirriy#-lawuthi* > *kirriyawuthi*
↩ with metathesis of consonant segments, e.g. %*ngamany*% > *mangany*
$ + suppletive plural stem
~~ra~~ deletion of relevant segments

three-way tense system (as in Garig/Ilgar and Iwaidja), plus an imperative and an irrealis (also as in Garig/Ilgar). There is likely to have been some form of perfective vs imperfective contrast in the past, an inference based on the existence of a certain number of different past forms of the same verb (e.g. *malawuthi* and *manathawuthi* for 'they spoke', and *manathun* and *manathuwa* for 'they died, were sick'). Again this parallels, in a prima facie way, the past contrasts found in Garig/Ilgar and Iwaidja, but we lack the translations, revealing discourse contexts, or full paradigms that would help us make a more definitive statement. Nonetheless, we can at least say that there are no clear differences between the TAM semantics of the various languages, within the limited evidence we have.

(b) the *difficulty of segmenting roots* (in both languages) and the *frequency of suppletive forms* makes roots hard to isolate as a borrowed unit; both Weinreich (1968: 35) and Heath (1978: 105–7) mention these as factors which hinder morphological borrowability but would aid borrowing of inflected stems. And they are factors which apply especially to Marrku, but also to Garig/Ilgar and Iwaidja. Considering our five Marrku verbs again, we should not be misled by the confident and arbitrary stem forms cited at the head of each paradigm. For 'say', we have *man*, *an* and *hanyman* in the present, *ngany*, *many* and *hanyman* in the past, and *man* and *hanyman* in the future. For 'be' we have *ldayi* in the singular and *lkuyi* in the plural; for 'return' we have *arrun*, *rarruny*, *hirarruny* and *rarrun* in the singular and *rangkuny* or *yarngkuny* in the plural, and even for a relatively regular verb like 'talk' we have *lawuthi*, *thawuthi* and *yawuthi* as alternate stem forms. Taking the same verb in Iwaidja, stems vary from *ldaharrama* in 'I talk' (*nga-ldaharrama*), *kaharrama* in 'you talk' (*an-kaharrama*) and *raharrama* in '(s)he talks' (no segmentation possible, since underlyingly r combines the hardening prefix *K-* with the now-invisible initial *ld*). It is often said in studies of language contact (e.g. Thomason and Kaufman 1988) that formal invariance favours borrowability. However, in situations where speakers already have expectations of high morphological variability, based on the structure of both languages they speak (or, put differently, their language does not dispose them to operate with "morphemes" in their analyses of their language's morphology), families or paradigms of inflected words may be the units they operate with, so having morphemic, invariant stems may simply not be part of the game.

8.2 Sociolinguistic

The Cobourg Peninsula region, like many parts of indigenous Australia and indeed many other parts of the world (Southern New Guinea, Vaupes, Mandara

Mountains of Cameroon, etc.), was traditionally characterised by widespread and intense multilingualism (cf. Evans 2011). For people whose indexical clan language was Marrku, it is quite likely that the standard repertoire included Garig/Ilgar and Iwaidja in addition to other languages of the region.

In such situations, it may have been quite normal not to expect everything to have its own distinct lexical items or language-specific formatives in the emblematic language: signalling of group membership could have taken place quite adequately by using Marrku-specific words and constructions with sufficient frequency (say, 50–70% of words per utterance, on average). It is worth drawing a parallel with the semiotics of special registers in Bininj Gun-wok here: the respect register Gun-gurrng (Evans 2003b, Garde 2013) does not have distinct lexical items for every concept, but it distributes them sufficiently across the frequency curve that almost every utterance will include each one, thereby being immediately identifiable as belonging to a respectful tenor.

Recent work by Höder (2014) suggests an interesting way to view this issue, though his Diasystematic Construction Grammar approach. This allows for communicative systems in which multilingualism is the norm, and in which some constructions are language-specific while others are associated with more than one language. These constructions, could, in principle, include fully inflected verb paradigms, as in the case of the 'work' and 'want' verbs discussed above.
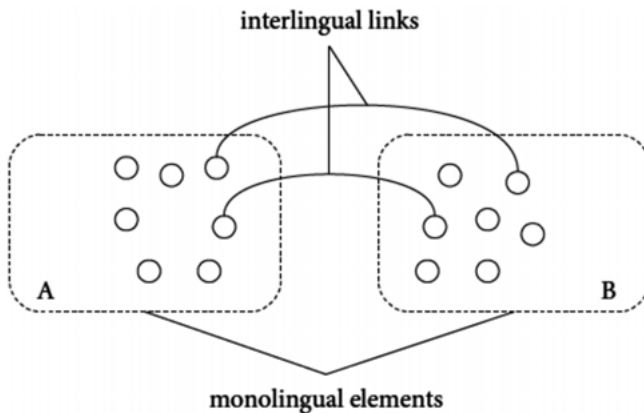
Figure 3: Monolingual and interlingual constructional elements in a multilingual setting (Höder 2014: 45)

In the Marrku context, the verb paradigms for 'work', 'want' and 'be from' would be shared with Garig/Ilgar through interlingual links, as would (parts of) the prefix paradigm for the reflexive pronoun, while the paradigms for other inflected verbs would be confined to Marrku.

9 Paradigm borrowing, subsystem integrity, and the genesis of mixed languages

In the preceding section I made some suggestions regarding how both structural and sociolinguistic features of Marrku and its multilingual setting may have favoured the borrowing of morphological paradigms, both hosted and recombinant.[25] We now view the issue from another angle, namely of how the data we have considered can be seen as a first step in the development of a mixed language.

Seifart (2012: 475) proposes the "Principle of Morphosyntactic Subsystem Integrity" in language contact:

> in situations where various grammatical morphemes are borrowed, these tend to be morphosyntactically interrelated, rather than being random collections of forms or sets of forms that are best described by well-known borrowability hierarchies

He gives, as an example, the case of Resígaro (Arawakan, Colombia), which has borrowed entire paradigms of inflectional and derivational morphemes from Bora (Bora-Muinane, Northwest Amazon), including:
– about 20 noun class and gender markers
– six number markers
– eight bound grammatical roots that are used to form e.g. numerals and demonstratives
– other pro-forms

Most of the borrowed morphemes he considers belong to subsystems for expressing countable units (through nominal classification), number marking, and quantity. Seifart (2012: 498) goes on to argue that his Principle of Morphosyntactic Subsystem Integrity, and the Resígaro data:

> may also open a new perspective on the treatment of mixed languages, which ... defy a common characterization in terms of current models of contact-induced language change. Mixed languages may differ from cases like Resígaro in the extent to which material from different languages is mixed, but at least for some cases of mixed languages, a primary determinant seems to be the maintenance of the integrity of morphosyntactic subsystems.

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25 It might be objected that on the Höder analysis just outlined, it may be more accurate to refer to some of them as 'shared' rather than 'borrowed', thereby avoiding claims of directionality. But against this the clear grounding of the morphological paradigms in principles which hold generally in Garig/Ilgar but only with the relevant verbs in Marrku makes it clear that there is, in fact, a directionality involved.

> In a number of mixed languages, including some that are considered to be close to the 'prototype' of mixed languages (Bakker 2003: 124), the sets of etymologically distinct morphological material seem to be divided precisely along the lines of tightly integrated morphosyntactic subsystems, e.g. verbal inflectional subsystems in Copper Island Aleut … Resígaro, under the analysis proposed here, constitutes an intermediate case, a 'missing link' between borrowing and language mixing that may eventually help to bridge the perceived gap between 'normal' contact-induced changes and mixed languages.

The Marrku data discussed above presents some further cases of wholesale borrowing of morphological subsystems – whether the 'sub-' in the subsystems is characterised by being just a subpart of a word class (i.e. a subset of the class of all inflected verbs), or, in the case of reflexives, by a prefixal system confined to combination with a single element. Like the Resigaro data discussed by Seifart, as well as the Turkish-influenced varieties of Romani discussed by Igla and a number of other cases, it illustrates the first step in a process by which organised inflectional series can be transferred from one language to another, preserving their forms, their meaning, and the paradigmatic relations between the forms. To get from the Resigaro, Marrku or Turkish-influenced Romani cases to a full-fledged mixed language, two further steps are needed; it is an unanswered question for further research what the relationship is between them.

(a) within the linguistic system itself, the relevant morphological subsystems need to be extended more widely (e.g. generalising the prefixes in Marrku from 'work' and 'want' to other verbs) so that they become a more productive part of the system.

(b) within the sociolinguistic matrix, the repertoire of languages needs to change so that it is no longer a matter of dipping into an integrated Höderian 'diasystematic constructional pool', but instead the words or constructions are regarded as being monolingual elements. We know that this happened with Michif, for example, as changes in racial and legislative identity of its speakers isolated them from the Canadian French and Cree speech communities which had earlier been part of their bilingual repertoire, leaving Michif speakers lacking a knowledge of French, Cree or indeed both. Of course, in another situation, such as abiding and stable multilingualism of the sort that appeared to be the traditional norm on the Cobourg Peninsula, this sociolinguistic tradition may never have occurred, leaving the relevant subsystem elements as permanently shared elements in the diasystematic constructional pool.[26]

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[26] And it is likely, in fact, that the Michif case is atypical. Apart from Michif, all other mixed languages are symbiotic mixed languages i.e. speakers are bilingual in one of more of the source languages.

In closing, one final remark needs to be made about the relationship between paradigm borrowing and the postulation of genealogical links. In Evans (2000), the shared morphology in the person/number prefixes on reflexive pronouns in Marrku was taken as crucial evidence for the inclusion of Marrku within a postulated Iwaidjan family. If we reconsider this, now seeing it as a case of paradigm borrowing, the phylogenetic picture changes: the evidence for including Marrku in the same family as Garig, Ilgar, Iwaidja, Mawng and Amurdak dwindles to the point where, apart from some borrowed lexicon, nothing particular is shared beyond what is also shared with a raft of other non-Pama-Nyungan languages such as Gunwinyguan (e.g. 1sg prefixes in *nga-*, verb stems like **thuwa* 'sicken, die'). Adjudicating on when we are dealing with shared inheritance and when we are confronted with paradigm borrowing is not straightforward, but the accumulating evidence from languages like Resígaro and some Romani dialects – as well as from other languages discussed in the present volume – suggests that paradigm borrowing is more common than once was believed.

Acknowledgements

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