12 The genetic position of Mangarrayi: evidence from nominal prefixation

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1 Introduction

This paper is an exploration of the genetic (and/or other) relation of Mangarrayi (M), a language of the Western Roper in the Northern Territory, to other languages in the region.

The affiliation of Mangarrayi has been uncertain. It was earlier classified as an isolate, a family by itself ('Mangaraian', by O'Grady et al. 1966:74). As far as genetic relationship is concerned, two obvious alternative possibilities suggest themselves. Mangarrayi might, on the basis of geographical proximity and also shared morphological material in particular categories, be regarded as part of a Gunwinyguan grouping, to which many languages to the north (and post-contact, also directly east) of Mangarrayi undoubtedly belong, including (without regard here to subgrouping) Kunwinjku and its closely related dialects, Dalabon (Ngalkbon), Jawoyn, Warray, Ngalakan, Ngandi, Rembarrnga, Nunggubuyu, and Anindilyakwa, among others.

But, secondly, it has been informally debated among linguists working on languages of the area whether Mangarrayi might belong to 'Marra-Alawic' (which was regarded by O'Grady et al. (1966:73-74) as comprising the three languages Marra, Alawa (Al) and Warndarrang). So far no specific arguments concerning Mangarrayi's genetic position have been published. In this paper I argue that comparative evidence and reconstruction from nominal prefixal paradigms of the languages of this proposed grouping support Mangarrayi's position within Marra-Alawic. I consider this evidence strong, for reasons to be discussed in conclusion.

It is presently not clear, however, whether all morphological reconstruction will point in the same direction. Alpher, Evans and Harvey (this volume) consider comparative aspects of verbal suffixation in a range of languages which clearly appear to belong to Gunwinyguan (although internal subgrouping has not as yet been definitively argued or determined). They show that the Mangarrayi verbal suffixal system shares a great deal of morphological material with these languages, and also some features of verbal categorial structure. These include a thorough-going distinction within the Past category between Perfective and Imperfective (or Punctual and Continuous) forms (a distinction which, however, is also

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thorough-going in Marra-Alawic), and the building of Past Negative upon the Irrealis stemform. Although the sharing of morphological material and the categorial correspondences are suggestive of perhaps strong Gunwinyguan influence upon Mangarrayi (speakers of the latter language have certainly been in long-term contact with speakers of Dalabon, Ngalakan, and Jawoyn, although the time-depths are unproven), many aspects of verbal comparison, both in terms of formal material and categorial structure, remain to be tested and seem less strongly indicative of Gunwinyguan affiliation of Mangarrayi. I present some discussion of these matters in §6.

In any case, the generally contrasting indications as to Mangarrayi's affiliation that arise from examination of the pronominal prefixal paradigms, versus the verbal paradigmatic material considered by Alpher, Evans and Harvey, suggest that we all need to keep in mind an overarching question: are certain sorts of evidence more probative of genetic versus other kinds of relationship, and why do we think so?

2 Gunwinyguan and Mara-Alawic: alternatives

The first thing that must be clarified is why, as far as the nominal prefix system goes, it has seemed most profitable and most clearly indicated to look to Marra-Alawic instead of to Gunwinyguan to establish proximate proto-levels from which modern Mangarrayi can plausibly be shown to have developed.

Within many of the Gunwinyguan languages, we find a recurrent set of four noun class/gender prefixes, which may be schematically represented:

na-	I masculine (higher animate)
(ng)al-	II feminine (sometimes more inclusive)
(ng)an- ~ man-	III vegetable
kun-	IV neuter IV

Class III is realised in western languages (Warray, Jawoyn, and the Gundjeihmi dialect of Bininj Gun-Wok (BGW), see Evans 2003) by (*ng*)*an*-, and in eastern languages (e.g. Gunbarlang, Ngandi) by *man*-. There are some dialects of BGW that have both *ngan*- and *man*- differentially distributed over nominal and demonstrative forms, and thus realise all four of the above categories.

Some Gunwinyguan languages have a reduced but obviously cognate set of the above four gender markers. Most, like Jawoyn and Kunwinjku, distinguish masculine and feminine, characterised in all of them by invariant prefix forms na- and ngal-. (Other languages such as Dalabon have these prefix forms, but not as part of a through-going noun classification system in the contemporary language; here, as in Rembarrnga, the subcategorisation of nouns is mainly suffixal, undoubtedly reflecting loss and reorganisation in the gender/class system). Jawoyn has a ngan- class prefix (which mainly occurs with body parts, geographic and topographic nouns and other part-whole terms, and also has some some secondary, fully adverbial, as well as adverbialising functions). In Jawoyn, the na- and ngan- markers have been extended beyond any narrowly defined semantic range as agreement markers, while ngal- has remained semantically specialised as both gender/class and agreement marker. In Jawoyn, class IV does not occur as a gender class; instead, many nouns are formally \emptyset -class. Thus Jawoyn has class/gender markers na-, ngal-, (ng)an-, \emptyset -. Jawoyn does have an instrumental prefix gun-, which occurs with nouns of \emptyset - and ngan- classes; but its use is to

some extent facultative. Presumably this gun- is a reflex of an earlier prefixal alternation in certain limited contexts between e.g. *gu- and *gun- of class IV (and other prefixes of shapes *CV- versus *CV-n-). The gun- form has been retained in Jawoyn, not as class prefix but as a relatively weak, i.e. often omitted, marker of instrumental function, in which only non-human and inanimate nouns may occur. Synchronically the nominal prefix paradigms generally in Gunwinyguan are invariant and do not have distinct case forms, except for some systemically minor (and hence historically, potentially highly indicative) alternations between gu- in locative function versus gun- elsewhere in Kunwinjku (see Evans 2003:234–235) for some examples). Instead, case relations are principally marked in the cross-referencing prefix complex on the verb, and/or (less systematically) by case suffixes on the noun.

Jawoyn, like Kunwinjku, has no overt case suffixes marking nouns in the major clause functions transitive subject and object, and intransitive subject. (For minor exceptions, note that e.g. in Kunwinjku, otherwise ablative -be(h) may be used to mark the body part, when instrumental, of transitive subjects, and in some dialects, occurs as ergative marker on intransitive subjects; see Evans (2003:210-211), also Carroll (1976:101) for the form -bewi). There are some better-developed ergative markers in other Gunwinyguan languages, e.g. Ngandi has ergative suffix -thu, and Ngalakan, Rembarrnga, Kune and Dalabon -yi' (forms of the latter widely occur as instrumental marker in Gunwinyguan). To the north and north-east of Mangarrayi are some Gunwinyguan languages which arguably form a closer subgrouping, including Ngandi, Ngalakan, Nunggubuyu, perhaps also Anindilyakwa. Of these, Ngandi has invariant nominal prefixes of the (singular) classes ni-, na-, a-, gu- and ma-, and thus we may say of those forms that seem likely cognate reflexes of the some of the prefixes discussed above (e.g. gu-, ma-) that *CV- (rather than *CVn-) has been generalised here. In Ngalakan, there are four noun classes, and two of them, the non-human and mainly inanimate gu- and mu- classes, show alternations CV-n-gu- versus Cu-, the latter more common with Ergative case-suffixed nouns, the former with nouns in absolutive case functions (see Merlan 1983:37-38); but the functional distribution is not neat.

A noticeable characteristic of the Gunwinyguan languages briefly discussed above is the low level of case-linked alternation in existing nominal prefix forms, the little there is occurring in the paradigms of non-human nouns, and taking the general form of an opposition CV-n- (or augmented CV-n-gu-) versus CV-. In strong contrast with this, we find that most of the putative Marra-Alawic languages show considerable case-linked alternation in their nominal (and demonstrative) prefixes, and among themselves in systemically rather similar terms, involving noun classes, membership of at least two of which includes principally human and higher animate (rather than neuter and inanimate) nouns. This suggests that reconstruction among them will yield a far more significant set of protopossibilities in nominal prefixation than will direct comparison of any of them with the Gunwinyguan languages. Whether this is so can only be confirmed or disconfirmed on the basis of an attempt at comparison here. There are, however, some initial questions of systemic comparability among the Marra-Alawic languages, having to do with the distribution of pre-nominal case forms over major clausal functions, consideration of which gives some insight into systemic organisation and change. Simply put, when these initial issues are considered comparatively, an earlier Mangarrayi prefix system similar to the ones in Alawa and Marra shines through.

3 Pre-nominal prefixes in Mara-Alawic: functional and formal equivalences

The only putative Marra-Alawic language which does not have case-linked prefixal alternate forms is Warndarrang. I have not undertaken any detailed consideration of this language or its conventional assignment to Marra-Alawic, and so we will only briefly summarise the situation there. The full set of invariant prefix forms is given in Table 1. Heath (1978, 1980) has suggested that the three nonhuman noun class prefixes, (r)a-, wu-, and ma-, are most likely diffused from (Gunwinyguan) languages to the north. Predemonstrative FemSg nga- can be shown to be relatable to forms in other Marra-Alawic languages, and it will be suggested that pre-nominal FemSg ngi- may be relatable at a protolevel to a pre-demonstrative prefix form of which reflexes exist in Alawa and Marra. Equally, MascSg na- is found elsewhere, in the Marra-Alawic languages and more widely. Except for a return to consideration of ngi-, Warndarrang will not figure in the rest of this discussion. Heath assumes, but does not argue the case, that the (non-alternating) nonhuman class prefixes originate from neighbouring Gunwinyguan languages. I assume that there may have been some redistribution of gender-marking prefixal forms as between nominal and demonstrative paradigms. We will move on to consider the situation of caselinked nominal prefix forms in Mangarrayi, Alawa and Marra.

 Table 1: Warndarrang prefixes (Heath 1980)

	MascSg	FemSg	Du	Pauc	Pl	Α	WU	MA
with nouns	na-	ngi-	yirri-	yili-	wulu-	(r)a-	wu-	ma-
with demonstratives	na-	nga-	wurru-	W	ulu-	(r)a-	wu-	ma-

Singular noun class/case-marking prefix forms for the three languages are set out in Table 2. All of them have three singular classes, which for convenience (and without seriously distorting the picture of class content for any of the languages) are commonly labeled MascSg, FemSg and Neut(er). However, it is difficult to neatly arrange nominal prefixes for all three languages in the same table, for Marra and Alawa differ from Mangarrayi in the organisation of case functions. In both Marra and Alawa, nouns in major clause functions (i.e. those that are cross-referenced by pronominal prefixation on the verb) pattern Ergative-Absolutively. In Mangarrayi, only Neut nouns pattern in this way; MascSg and FemSg pattern Nominative-Accusatively (*na*- versus \emptyset - for MascSg, and *ngarla*- versus *ngan*- for FemSg). Hence the clutter of alternative labelling in the M portion of the Table 2.

 Table 2: Singular case/noun class portmanteau prefix forms in Marra, Mangarrayi, and Alawa

	M	arra	Mangarrayi		Alawa	
	Abs	Obl	Acc	Nom	Abs	Obl
MascSg	Ø-	na-	Ø-	na-	na-	а-
MascSg FemSg	n-	ya-	ngan-	ngarla- ngaya- (Obl)	an- an-ga-	arr- arr-ga
Neut	n-	nya-	Ø- (Abs)	na- (Obl)	an-g- Ø-	arr-g- Ø-

It is important to explain why, for all the noun classes which pattern Ergative-Absolutively in all the languages, the general labels Abs(olutive) and Obl(ique) are adopted. From Marra and Alawa, where Ergative-Absolutive is the syntactic patterning for all noun classes (in fact, also for inflecting demonstratives as well, but not for free pronouns, see Sharpe (1972:57) and Heath (1981:130ff.) for the latter), we find that all cases implemented with non-zero suffix on the noun require the prefix form which otherwise occurs in transitive subject function. That is, the Ergative prefix is, in Kuryłowicz's (1966) terms, the *forme de fondation*, or paradigmatic basis, for all non-zero case categories. Thus, alternation in the prefixal system is fundamental to the system of case marking as a whole. So, for example, in Alawa, the FemSg noun 'woman' has Erg case form *arr-girriya (arr-* prefix, -Ø suffix) versus Abs *an-girriya*; but Locative and Genitive require the same prefix form as Erg., viz., *arr-girriy-irr* Loc and *arr-girriya-yi* Gen. (See Sharpe (1972:62) for the suffixal case categories in Alawa, Heath (1981:79) for them in Marra.) The label 'Obl(ique)' is used to highlight the more general paradigmatic role of the case category, the major syntactic function of which is to mark transitive subject nouns.

The different patterning in Marra-Alawa as opposed to Mangarrayi poses a question of the comparability of prefixal case categories for purposes of reconstruction. In Mangarrayi, the FemSg prefix required by all case categories realised with non-zero suffix is ngaya-, and for this reason it, too, is labeled 'Obl(ique)' in Table 2. That is, ngaya- is distributionally comparable to Al arr- and ya- as the forme de fondation for all non-zero case categories, and as well for the Dative, which only for feminine nouns is marked solely by prefix, and not with the suffix usual for the other noun classes, -wu/-gu. But M ngaya-, unlike the prefix forms which occur on nouns in transitive subject function in Marra and Alawa, does not occur on transitive subject nouns. On the other hand, M FemSg Accusative ngan- is clearly to be related to Al an- etc. and to Marra n- etc. via an earlier *ngan-. In Al there has been loss of initial velar nasal, but in Marra of the following vowel as well.

The centrality of *ngaya*- in the M feminine paradigm suggests that earlier overall patterning in the M FemSg category was on an Abs--Obl basis, as for the other languages, but that there has been functional innovation of a FemSg form *ngarla*- which has been part of a general process of shift in patterning in the feminine noun class to a Nom-Acc distribution. That is, *ngarla*- has replaced *ngaya*- in transitive subject function, but also intransitive subject has come to be marked by the same form. With the ousting of *ngaya*- from its earlier primary function, namely the marking of feminine nouns as transitive subjects, this prefix is continued in its earlier secondary, morphologically founded functions.

We may propose that functional redistribution and change in prefixal form has occurred in the M MascSg category to yield the modern situation, although overall evidence from the three languages suggests that MascSg nominal prefix forms in Abs and Obl functions may not have been distinct at the proto-level which should be posited to account for all of them. Marra has na- in the MascSg Oblique, and Al a-, for both of which we may probably reconstruct *na-, with subsequent loss of initial nasal in Al. Al has na- in Abs function. This, together with the fact that na- occurs everywhere in Marra (in both Abs and Obl) as pre-demonstrative prefix suggests that *na- may be reconstructed in both functions. For M MascSg nouns, besides being regular in transitive and intransitive subject functions, naoccurs in some but not all case categories with non-zero suffix: it occurs in Genitive/Dative and Locative, but not in Allative and Ablative. Thus its distribution does differ somewhat from that of ngaya- in its secondary functions, suggesting that while na- as MascSg subject

form is historically comparable to the Oblique MascSg prefixes of Marra and Al, it may also be directly comparable to non-zero Absolutive na- in Alawa. In M, as is the case for feminine nouns, MascSg prefix forms now pattern Nominative-Accusatively, and if our proposed reconstruction of na- pre-nominally in Proto Marra-M-Al in both Abs and Obl is entertained, this would mean that a pattern shift to a Nom-Acc opposition here in M has been implemented with the ousting of Absolutive *na- from transitive object function, an occurrence likely to have been concomitant with changes in the M Neut category (see below).

Although I will not take up the pre-demonstrative prefixes in great detail in this paper, it should be noted that Al, M as well as Warndarrang provide some direct evidence of what were likely some pre-demonstrative forms in Masc and Fem categories, distinct from prenominal ones. M has a MascSg pre-demonstrative ni- in direct object form of a non-distant deictic ni-nggi; but also the same prefix in both Nom and Acc forms of the MascSg distant ('that') demonstrative, ni-na and ni-nggi-na respectively. Al is interesting in this regard: in Table 3 are reproduced the forms of what Sharpe calls 'demonstratives not inflected for case'. In the MascSg nida 'this' we see a reflex of *ni, and in the feminine form anngida 'this' an apparent FemSg element -ngi-, preceded perhaps by a reflex of the Abs pre-nominal prefix *ngan-. In the 'that' forms note MascSg nurlu, the MascSg element evidently to be analysed historically as na-, the FemSg as *nga- which has been truncated to a- through initial loss of velar nasal, typical of Al. (See also Al 'indirect' 3MascSg form ni-pa in Table 9, part of a series discussed below). In Marra, in demonstrative pronouns we have oppositions in MascSg of ni- Abs, vs na- Obl; and in FemSg of ngi- Abs vs ya- Obl. Whatever we may suppose to have been their distribution with respect to case and possibly deictic category at a posited proto-level, we here have reflexes of pre-demonstrative MascSg alternants na- and ni-, and FemSg nga- and ngi-. The latter we may suppose to be reflected also in Warndarrang case-invariant FemSg pre-nominal prefix ngi-. However, while in Warndarrang the pre-demonstrative FemSg is nga-, both M and Al, and parts of the Marra pre-demonstrative system, suggest that forms with *i* vocalism were characteristic of predemonstrative prefixes. Available evidence thus suggests redistribution in Warndarrang.

	MSg	FSg	Pl	Du
'this'	nida	anngida	yilarrnyida	yirrarrnyida
'that'	nurlu	adurlu	yilurlu*	yirrurlu*

 Table 3:
 Alawa demonstratives not inflected for case (Sharpe 1972:66)

*V in first syllable is often u

A few comments are now in order on the Neut prefix forms among the three languages. Al Neut category has \emptyset - in both Abs and Obl functions. Marra has Obl *nya*-, and this seems to be the best candidate for reconstruction in this category. The Marra neuter Abs, on the other hand, has become identical with FemSg Abs, possibly by a process which has truncated an earlier non-zero Neut Abs form **CV-n*-. M Neut Obl/Erg *na*- suggests that whatever earlier form there may have been in this function, it has been renewed by functional spread from the MascSg (and Marra, too, has specialised *na*- as an ergative-instrumental prefix (see Heath 1978:76). In partial parallel, recall from above that Jawoyn retains the Proto Gunwinyguan class/gender prefix IV **kun*- only as instrumental marker). We must conclude that M does not provide direct evidence of the form of earlier non-zero Neut prefixes, while Marra clearly does. There is also arguably a now isolated reflex of Neut *nya*- in Al, in the paradigm of an adjectival form which means 'different'. This has a segmentable stem -*kul*-, preceded by *nya*-; case forms are *nyakul*, *nyakulyi*, *nyakultuyunu* (Nom, Gen, Elative, Sharpe 1972:66). Segmentation of the stem is rather clearly suggested by a contrast with a second lexeme which Sharpe glosses 'another', and which has case-forms *nakul*, *nakultya*, *nakultu*, *nakultuwur* (Nom, Gen, Op(erative), All(ative), El(ative)). In other words, the semantic distinction between the two series is linked to differences in the (now lexicalised) prefix, and *nya*- seems a likely reflex of the NeSg pre-nominal prefix.

We may now summarise in Table 4 the proposed equivalences among prefix forms for singular nouns. While reconstruction of FemSgAbs *ngan- is unproblematic, for the NeObl we can only propose nya-, and for NeAbs nya-n-, based on the Marra and slender Al evidence. In the FemSgObl, Marra ya- and M ngaya- match nicely, especially given the fact that loss of initial nga- is attested also in the Marra FemSgAbs n-, and these two together suggest that the shape of the prefix reconstructed in this category should be *ngaCa. This would involve positing that besides well-attested loss of initial nasal in Al, there has also been apocope of the second vowel, yielding modern arr-. More problematic is the question what should be reconstructed as the second C, and I incline to think *ngarra- is somewhat more plausible than *ngaya-, with a shift to y posited for Marra and M. Formal and functional categories are summarised in the bottom row, amounting to the positing of a Proto Marra-M-Al level at which the organisation of nominal case marking was on an Abs-Obl basis.

	MascSg Abs	MascSg Obl	FemSg Abs	FemSg Obl	Neut Abs	Neut Obl
Marra	Ø-	na-	n-, n-nga-	ya-	n-, n-nga-	nya-
Μ	(na-)	na-	ngan-	ngaya-	Ø-	na-
Al	na-	а-	an-	arr-	Ø-	Ø- (plus relic nya-)
proto	*na-	*na-	*ngan-	*ngarra-	*nya-n-	*nya-

Table 4: Equivalences among prefixal case forms and functions for singular nouns

3 The comparative distribution of -rla

An important outstanding question is that of the posited innovation of ngarla- as FemSg Nom pre-nominal prefix in M, and the proto-level to which it may be assigned, at least relative to other events. Recall the distributional evidence suggests that ngaya- was the earlier Proto M. transitive subject form, opposed to Abs ngan-; and that ngarla- ousted ngaya- from its primary function. What are the possible sources of the innovated form ngarla-, and in particular, of -rla? Both M and Al have some material which needs to be considered in discussion of this question; some of the following points will be brought up for purposes of completeness, only to be dismissed as not immediately relevant to the issue. I will show, however, that there are clear reflexes of a functionally relevant -rla in both M and Al, which seems to have been continued in Al in third person free forms (Sharpe (1972) calls these, as well as first and second person forms, 'pronouns'); and it seems, on present evidence, that this was the original morpho-syntactic environment in which -*rla occurred.

The contrast in M between prefix forms ngaya- and ngarla- suggests, at least initially, that we ought to examine any phonological alternation between y and rl, in order to establish a model for relating the forms to each other. There are two environments in M in which y alternates with rl. The first of these is the alternation in certain verb stems of Present tense shape Caya- with stem forms CarlV(C) in past tenses (e.g., daya 'bite', Pres; darli, Past Continuous; darlag, Past Punctual; see Merlan 1982:151). We will not consider this further, as it does not seem on either categorial or functional grounds to be related to the issue at hand.

The second environment in which we find y/rl alternations seems, at first glance, more relevant; and it will clearly be important to further development of reconstruction in the area of combined number and case marking. For present purposes, a brief summary will suffice.

M, unlike the other languages, has elaborated suffixal non-singular number marking on the noun (Merlan 1982:89), and on pronouns (1982:102), and in a few other areas of its nominal morphology, in which a plural marker -rla (which very systematically contrasts with dual elements of forms -rr-, -rra- etc.) contrasts as Nominative with other case-linked forms. Thus, case marking of the explicitly number-marked noun, as well as the pronouns, is expressed by an elaborated suffixal system, organised on a Nominative-Accusative basis. The nominal plural marker is $-yarla \sim -garla$ (the $ya \sim ga$ quite clearly a phonologically motivated augment; see Merlan 1982:87). Its Nominative case form contrasts with Accusative -ya-yanngan/-ga-yanngan, which may be segmented -ya-ya-n-ngan, i.e. phonological augment plus -ya- Acc. case form of the number marker, plus Acc-marking -n-, plus another apparent Accusative, non-singular number-marking element -ngan. Here, then, Nominative rl alternates with Accusative y. See in Table 5 an example plural noun paradigm, and sample 2Pl pronoun paradigm. These show the Nominative suffix form to be paradigmatically basic in the noun, as it is the form upon which all other cases except Acc are built; but Dative (in plural forms, with characteristic internal segment -rnya-) to be foundational in the pronominal paradigms.

	Noun	Pronoun
	(MascSg na-malam 'man, person')	(2Pl, <i>nurla</i>)
Nom	(na-)malam-garla	nu-rla
Acc	malam-gayanngan	nu-ya-n-ngan
Gen/Dat	(na-)malam-garla-wu	nu-rnya (Dat/Purp)
		nu-rnyang-gu (Gen)
Loc	(na-)malam-garla-yan	nu-rnyang-gu-yan
All	malam-garla-rlama	nu-rnyang-gu-rlama
Abl	malam-garla-wana	nu-rnyang-gu-wana
	(Merlan1982:89)	(Merlan1982:102)

Table 5: Example of Mangarrayi plural noun and pronoun paradigms

The functional match between y of the plural Acc marker -ya-(n- etc.) and the y of prenominal ngaya- is not a good one, and it is in fact not to be suggested that these forms are relatable to each other. Rather, recall that we have found satisfactory comparability on both formal and functional grounds of M ngaya- with Marra FemSg Obl ya-. We have also established that in M a portmanteau suffixal element -rla which marks plural number and Nominative case has an Accusative case form -ya-n- etc. The question is, then, what elements elsewhere may be established as directly comparable with this -rla?

	pre-nomi	pre-nominal		nstrative
	Abs	Obl	Abs	Obl
Du	wurr-	wirri-	warr-	wirri-
Pl	wul-	wili-	wal-	wili-

 Table 6: Marra number oppositions in non-singular pronouns

Table 7: Alawa number oppositions in non-singular pronouns(Sharpe 1972:57, 60)

	1 Incl.	2	3	nominal prefix
Du	ngarru	wurru	yirru-rla	yirr-
Pl	ngalu	wulu	yilu-rla	yil-

Table 8: Mangarrayi number oppositions in non-singular pronounsNote plural -rla versus other languages' -lu.

	1 Excl.	1 Trial	2
Du	ngi-rr	nga-rr	nu-rr
Pl	ngi-rla	nga-rla (1 Incl.)	nu-rla

Since the element marks both plurality and Nom case, we might look to the number-marking elements in the other languages. But examination quickly reveals two things. First, most of the languages show a thorough-going distinction in a number of systems between plural number marked by -lV- versus dual number marked by -rr(V), so much so that this distinction may be easily posited for Proto Marra-M-Al-Warndarrang in some of these systems (see Tables 6 and 7 for some examples, also Table 1 for Warndarrang). But secondly, the -rla Nom/plural number marker in M is not to be equated with plural -lV-, on phonological and other grounds. (See Table 8, where contemporary M Pl/Du contrast is between -rla and -rr in non-singular pronouns; plurality in the corresponding pronouns of other languages is marked, for example, by Al -lu).

Clearly, any match between M -*rla* and -*lV*- as plural marker in the other languages is to be rejected because the M element has initial retroflex liquid, while the other languages have non-retroflexed articulation in plural elements. (For the same reason, M pre-nominal FemSg *ngarla*- is not aptly compared with FemSg pre-nominal *ngal*-, briefly mentioned early in this paper as occurring in some Gunwinyguan languages). What we must suppose instead is that in their plural forms M pronouns have been reshaped, and an earlier Pl -*lV* versus Du -*rr* number opposition has been restructured as one between -*rla* which synthetically marks both number and Nom case, versus -*rr* which is the Du Nominative form. (M Nom Du -*rr* has Acc case form -*rra*-, as in the pair 1ExDu Nom *ngi-rr*, versus 1ExDu Acc *ngi-rra-ngan*, with additional non-singular Acc-marking element -*ngan*). And the fact that the plural Nom number-marking suffixal element in the noun is the same -*rla* as is found in the pronouns may be understood in terms of the fact that those nouns which are number-marked (for either

dual or plural) are typically human or higher animate, and/or referentially specific (see Merlan 1982:87).

Having established quite clearly that we may not relate M -*rla* to forms of plural number markers found in all the other Marra-Alawic languages, we may now suggest what it is comparable to. In Al, Sharpe describes an opposition within the free pronouns that she calls 'direct' versus 'indirect'. The 'direct' forms are used for subjects of equational and verbal clauses, 'and in verbal clauses also for any other noun phrase with which the verb agrees in person and number. It is also used whenever a pronoun is placed at the beginning of a clause or phrase for emphasis' (Sharpe 1972:57). Sharpe adds that the function of the direct pronouns is usually to render emphasis (as in *ngina ng-arla* 'I [*ngina*] am going'). The 'direct' pronouns like *ngina* cannot be considered to coincide entirely or simply with transitive and intransitive subject clause functions, as some of Sharpe's (1972:58, see also Sharpe 1976) examples clearly show, for one finds such pairs as illustrated in (1a and b), where both free pronouns 3SgM *nurla* and 1Sg *ngina* are of the 'direct' series.

(1) after Sharpe (1972:58)

a.	Nurla	yang	karr-ngatan-na.	b.	Ngina	yang	karr-ngatan-na.
	he-DIR	hit	I-did-him		I-DIR	hit	I-did-him
	'I hit hi	m.'			'I hit hi	m.'	

The 'indirect' pronouns, on the other hand, are used 'for other nuclear noun phrases, for possession, both alienable and inalienable, and whenever the genitive case of the substantive would be used (i.e. for purpose or beneficiary). In verbal clauses, therefore, the direct pronoun is always used for the subject of the verb, but is only used for a referent [i.e. oblique adjunct, FM] when the verb is direferential (DR) and has an agreeing affix (or for emphasis as stated above)' (Sharpe 1972:58). See also Heath (1981:130ff.). on the Marra pronouns, which as in Al exhibit different case organisation from the Erg-Abs patterning of nouns and demonstrative pronouns. (Morphologically, the Marra pronouns exhibit a three-tiered system, with a Nom stem form, a Gen stem form on which Ablative is built, and an 'Oblique' stem form on which Allative, Locative and Purposive are founded).

Thus, we can see that the uses of the Al 'direct' series comprehends transitive and intransitive subject functions, though it may also be used for nouns in other functions which are cross-referenced on the verb, and/or for 'emphasis'; while the 'indirect' series might be glossed essentially Dative-Objective (and secondarily, 'non-emphatic').

We note that third person 'direct' forms have a final element -rla (see Table 8; it is very likely etymologically the same element which occurs in 'that' forms of 'demonstratives not inflected for case' — refer to Table 3). This -rla contrasts, as Table 8 also shows, with 'indirect' element -nga which, we may note, unlike -rla, only occurs in non-singular forms. I think it may be reasonably concluded that this -rla in Al is a reflex of an element *-rla which in M renews pre-nominal FemSg prefix as transitive/intransitive subject function—marking *ngarla*. It may also be concluded that -rla of the Nom. plural number marker (-ya-rla/-ga-rla etc., as above), is to be regarded as yet another reflex of this same element, now obviously functionally differentiated within contemporary M. But these conclusions need to be argued. What is it necessary to posit in order to equate Al 'direct' -rla with the element -rla- in the remodelled M FemSg pre-nominal nga-rla-, and with the plural Nom number-marking element?

	Direct	Indirect
3MascSg	nu-rla	ni-pa
3FemSg	nga-du-rla	nga-tu
3Du	yi-rru-rla	yi-rru-nga
3PI	yi-lu-rla	yi-lu-nga

 Table 9: Alawa direct and indirect pronouns, third person forms (after Sharpe 1972:57; segmentation added)

First, it is necessary to posit an historical situation in which *-rla could occur with both singular and non-singular third person forms, and we have warrant for doing so on the basis of its distribution in Al over singular, dual and plural number forms. Second, it is necessary to suppose a primary functional identification of this element with non-objective case functions, and here again the distribution in Al, though not entirely straightforward as explained and illustrated above, nevertheless provides clear warrant for doing so. In as much as it is opposed in Al to the 'indirect' non-singular element -nga, we find also in the latter a promising element to be compared functionally and perhaps etymologically with M Acc plural element -ya-, or possibly also, with the additional Acc non-singular element -ngan (though the latter seems to me at that stage less likely to be directly comparable). The Al oppositions in the pronoun, 'direct' -rla versus non-singular 'indirect' -nga, at least permit us to see that although combined number-and-case marking is elaborated more in M as a suffixal system than in the other languages, there are historically comparable materials elsewhere in Marra-Alawic.

We may posit that the M reflex comparable to Al's 'direct' -rla underwent functional differentiation, becoming number-specialised in its function as plural (Nom) marker in the M nominal and pronoun systems. A concomitant of this was the ousting of former plural number marking (by -lV) from those pronouns. That is, an earlier opposition between 1ExDuNom ngi-rr and 1ExPlNom (functionally 'direct' form) *ngi-la-rla is simplified to one between ngi-rr and ngi-rla. The element -rla comes to mark plural number and Nom case fusionally, and we may also hypothesise concomitant development of full paradigmatic suffixally marked case oppositions in the pronouns, from some kind of rather less elaborated number/case system such as is attested in modern Al's 'direct'/'indirect' opposition (and with some greater degree of complication, also in Marra). This leads to a wider distribution of this element in M compared to Al, i.e. over non-third categories in the plural personal pronouns; the widening in terms of co-occurrence with person categories is consistent with its number specialisation in this language. Also, as observed above, we may posit clear formal/functional linkage between pronominal and nominal number in M, where in the latter system only human/higher animate nouns and/or nouns with referents which are specific are marked for non-singular number (and in regard to this, there would seem to be considerable coincidence between the nominal specifications human/higher animate and the textual specification, referentially specific).

But besides becoming number-specialised in M's nominal and pronominal system, we have posited that another functional specialisation of -rla was its recombination with FemSg pre-nominal element nga- to innovate pre-nominal FSG Nom nga-rla-; and this specialisation now seems quite dissociated historically from its spread into the suffixal number system. In

positing this second specialisation I assume that the element primarily functioned approximately as what Sharpe (1972) called a 'direct' (third person) element. And in fact it may be supposed that it was partly through this formal innovation, and the institution of an opposition with FemSg (now Acc) *ngan*-, that the functional shift from Erg-Abs towards a Nom-Acc distribution in the human noun classes (for which there was support in the non-singular nominal case/number system) was given impetus. (It seems evident that this was the direction of change in this feminine category, and that the changes we have been examining are part of a wider, systemic change in a range of functionally associated categories, for which there are no such clearly demonstrable formal-and-functional parallels in Gunwinyguan languages). It may be objected that the move of *-rla* into the pronominal prefix system is problematic on positional grounds; but is this telling, in a pre-nominal system where the paradigmatic contrast **ngan*- versus *ngaya*- was very much alive and the **nga*-was clearly identifiable as FemSg?

There is in fact another prefix which must be compared with pre-nominal ngarla-, in a small area of M pre-demonstrative morphology. In both non-distant and distant 3SgF deictic categories, we find a demonstrative prefix form ngarli- (non-distant ngarli-wa, distant ngarli-na, which in both deictic categories contrast with Acc forms prefixed with ngan-, and with all other case forms which require the prefix ngaya- in addition to any non-zero case suffixation (Loc, All and Abl; see Merlan 1982:110). In these deictic forms, then, we have a three-way FemSg prefixal contrast ngarli-/ngan-/ngaya- which may be older than the three-way contrast in the modern M pre-nominal FemSg prefixes. Although the i vocalism of the first form cannot presently be accounted for, it seems very likely that its element -rli- is comparable to the suffix found distributed over Al third person 'direct' forms, and as we have also discussed, over plural/Nom suffixal forms in M. Where there are 'splits' by type of nominal category in 'split-ergative' languages, demonstratives (and/or some or all pronouns) will be more likely than nouns to show some Nominative-Accusative patterning. This is quite in keeping with what we may assume about nominal feature specifications in terms of their metapragmatic transparency (see Silverstein 1976, 1981), and their relation to case structure at morpheme- and word-level constituency. Thus we may also assume that a Nom-Acc kind of organisation would be historically prior in demonstratives (and/or pronouns) rather than nouns, and be secondarily introduced into the latter by analogical processes of the sort we might posit for the instance at hand: [pre-demonstrative] ngaya-:nga-rli/V-::[pre-nominal]ngaya-:X (where X is renewed as nga-rla-, given the distribution of the -rla- as a 'direct' element).

5 Nominal suffixation: summary conclusions

Substantively, we have been able to conclude that Proto Marra-M-Al had a nominal prefixation system organised on an Abs-Obl basis, and we have been able to show formal/functional correspondences among contemporary pre-nominal forms that allow us to reconstruct such a system. Second, we have described some other aspects of formal/functional redistribution in M from the posited Proto Marra-M-Al nominal prefix categories. Third, we have posited that M innovated a third pre-nominal feminine category as part of a shift to Nom-Acc organisation of case marking in the human noun classes, supported by the development of a Nom-Accusatively organised suffixal case/number-marking system on nouns and pronouns. Fourth, we have shown an element (*-*rla*) to have participated in both

developments, that is in the innovation in the 3Sg feminine pre-nominal prefix, and in plural number marking on nouns and pronouns. This result is perhaps the most interesting, because on first inspection the -rla found in the FemSg Nom pre-nominal prefix ngarla-, and that found in the plural Nom/number marking suffix (-yarla/-garla) would not seem to be obviously relatable to each other. Yet, via comparison with Alawa, we have seen that they are historically comparable, probably reconstructable at a proto-level as an element which had a generally non-objective case distribution over free (i.e. non-bound) third person forms. both singular and non-singular, and an important discourse-related role which was compatible with functional reinterpretations of the kinds we have seen in M. Compared to the other languages, M has been relatively innovative and elaborating both in its pre-nominal morphology, and in its suffixal case/number morphology. Despite this, comparison shows reflexes of various parts of older pre-nominal, pre-demonstrative, and number/case-marking systems distributed over all the languages, their comparability demonstrable at a level of specificity required for interesting genetic subgrouping. As is so often the case in historical linguistics, it turns out to be very significantly elements which are not widely distributed, in specific formal and functional interrelations with other language elements, which are critical to reconstruction. Via the discussion of the specialisations of the element -rla in M, it has been possible to posit an historical source for the third FemSg pre-nominal prefix form ngarla-, for which no comparable forms exist in Marra and Al pre-nominal morphology and functional distribution. This last is unsurprising, as the M system, prior to this innovation, was formally and organisationally much more similar to Marra and Al.

At a more general level, this area of comparison clearly indicates the profitability of positing a Marra-Alawic genetic grouping. We have been dealing with specific morphological elements, some of which have somewhat difficult and elusive distributions in the modern languages. But they provide clear evidence for the reconstructibility of a formally and functionally defensible proto-system which accounts for them, in a far more specific way than could be achieved by the assignment of any or all of these languages to any other grouping of languages in the region. Yet, as noted at the outset, aspects of verbal organisation and formal marking suggest a link with Gunwinyguan. The following discussion of the possibilities here is only indicative, not complete.

6 Verbal suffixal categories: Mangarrayi and Gunwinyguan

Alpher, Evans and Harvey (this volume) compare some of the verbal suffixal resources of M with those of various Gunwinyguan languages. They allude to the various ways in which the M verbal system in general typological terms is very different from standard Gunwinyguan. The latter languages are polysynthetic, and many different categories of information can be expressed by the long verbal constructions. M, though it marks subject and object pronominal information by prefixation to the verbal word, is not at all polysynthetic, and does not incorporate adverbial or quantificational elements or nouns into the verb. In addition, while verb compounding is highly productive in Gunwinyguan, it is not so in Mangarrayi. However, leaving general typological issues aside, Alpher et al. show that there are a number of suffixal endings in Mangarrayi that can be fairly confidently related to endings in comparable categories in Gunwinyguan. For example, the relationship for some verbs between M Past Punctual -b and a Past Perfective -m in a good number of Gunwinyguan languages (M bu-b, e.g. Jawoyn bu-m 'hit') is matched by similar

correspondences for other verbs between M final Past Punctual -j and Gunwinyguan -ny. (See also further re what appears to be synchronically another $-b\sim-m$ ending in M). Certain verbal paradigms, such as of Marra ga- 'take' seem to correspond well in a range of tenseaspect forms; whereas others present problems in one or more forms (e.g. Alpher et al. mention that the suffix in M Past Punctual wu-na 'gave' cannot be related to suffixes of this category in Gunwinyguan; nor can the Past Continuous form, mi-nyi, of the 'get' verb (mi-) be related to comparable forms). Nevertheless, in part, and especially for some verbs in Nonpast, Past Punctual and Past Continuous parts of the paradigm, there are plausible correspondences with Gunwinyguan forms.

Though they show some good comparable forms between M and Gunwinyguan, Alpher, Evans and Harvey by no means attempt an exhaustive evaluation of the suffixal verbal resources in M. There are a number of regular paradigm types and forms in the language that do not seem comparable to Gunwinyguan; and though it is presently not clear how these should be compared and reconstructed, nevertheless the Marra-Alawic family appears to offer some interesting possibilities. Most notably, there is an important class of M verbs, most of stem shape CVCV-, that have a number of interesting characteristics. They have Past Punctual forms that appear to end in -Cag (namdag 'held' from nama- 'hold'; bandag 'made' from bana-; jumdag 'mentioned' from juma-, darlag from daya- 'bite' etc.). The irregular verb ja- 'eat' also conforms to a similar patterning in its Past Punctual, jirrag 'ate', as does the inchoativiser -yi- and the reflexive-reciprocal marker -yi-, -ji-, -(ny)jiyi: namjiyag 'held itself', bani-nyjiyag 'made itself', and so on. Most of these verbs have Past Continuous forms in -Ci, e.g. bandi 'made', namdi 'held', darli 'bit' etc. The last, and certain other similar forms, suggest that, historically at least, one of the Past Continuous endings was *-rli, an ending synchronically segmentable in both Marra (where it is the most common Past Continuous ending - see Heath 1981:230-246) and in Alawa (although here, more problematically, it appears to have nonpast tense, but continuous aspectual, value, see Sharpe 1972:88). I suspect such irregular and synchronically difficult-to-segment parts of the M verbal suffixal system are crucial to understanding its history. As of now, this paradigmatic set, significant for its irregularity and unsegmentability, does not point to a shared history with Gunwinyguan, but is suggestive at least of connections with Marra and Alawa.

There are many other elements of the M verbal system that seem quite significant to an understanding of its history, contemporary structure and historical reshaping, for which no clear Gunwinyguan correspondences come to mind. One of these is the thorough-going system of verbal augments found in two aspectually non-punctual forms, the Past Negative and the Habitual. Both forms for many verbs are built with an augment. With the verb *bu*-'hit', for example, the relevant forms are P Neg *bu-rnda-b* 'did not hit' and Hab *bu-rnda-n* 'habitually hits', while for *daya* 'bite', they are P Neg *day-nga-m* 'did not bite' and Hab *day-nga-ma-n* 'habitually bites'. The respective augments are thus *-rnda-* and *-nga-*; for many verbs, the Hab additionally requires the element *-ma-* before a regular *-n* Nonpast ending. See Merlan 1982, Table 2–17. The fact that there is in the P Neg verb forms a regular phonologically conditioned, alternation $-b \sim -m$, (such that *bu-rnda-b* 'did not hit' compares with *day-nga-m* 'did not bite', where the occurrence of *-m* following the form with nasal-initial augment is regular) strongly suggests that this desinence is not to be compared with the *-b* $\sim -m$ variation in the Past Punctual category, discussed above. Past Negative and Habitual are clearly aspectually continuous, while the Past Punctual of e.g. *bu-m* 'hit' is not.

Nevertheless, these desinences need to be analysed as part of the contemporary structure of Mangarrayi, and the relation of the (probably distinct) $-b \sim -m$ alternations considered. On the face of it, the augment system is something that appears to offer an important clue to the internal reconstruction of verbal categories in Mangarrayi. Such augments are, I suggest, less likely to be subject to diffusion than are clearly segmentable verbal suffixes. I am not proposing we relegate the correspondences that Alpher et al. discuss to the 'diffusion' basket without further consideration. But I do think the old historical-comparative rule of thumb probably has some application here: that it is precisely the most irregular and difficult-to-compare contemporary forms (like the *daya-*, *darlag*, *darli* paradigms) that are liable to ultimately provide the most telling insights into historical process.

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