The Genesis of the Pronoun *ngali in Australia

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The grand historical panorama which unfolds in R.M.W. Dixon's major new work, *The Languages of Australia* (1980), is quite breathtaking. This prolific linguist is to be heartily congratulated on having produced a work which will enable the lay reader to appreciate the scope of the linguistic diversity within Australia, and which at the same time will be of great value to the specialist linguist. Yet the picture which the writer paints of the routes through which this diversity unfolded is, to put it in a nutshell, too stupendous. He would have us believe, no less, that he has been successful in reconstructing the ancestor of virtually all of the two hundred or more modern Australian languages - languages whose roots in the continent go back to an almost unimaginably remote past.

In the realm of pronominal elements, Dixon has reconstructed, with very great professional skill and insight, plausible protoforms which are in fact essentially ancestral within the context of Hale's Pama-Nyungan construct - a genetic construct which Dixon is at pains to down-grade (e.g., pp. 226-7). He has, indeed, gone on to ascribe these forms, in what can only be described as a complete turnabout of logic, to what he calls 'Proto-Australian'. While this *tour de force* provides us with a far-flung vista extending back in time through an awesome gulf of, conceivably, 10,000 to 70,000 years, it represents a quite unrealistic approach to the problem of linguistic reconstruction in Australia.

I would like further to challenge Dixon in connection with his assertion (p. 256) that Pama-Nyungan 'has not yet been shown
to have any genetic significance.' In this he is, to say the least, seriously in error. Ironically enough, it is he himself who provides, by his masterful reconstruction of verbal conjugations on the evidence of eastern and western Pama-Nyungan languages (pp. 402-26), convincing further evidence for the genetic unity of Pama-Nyungan! Once again, however, as in the case of the pronouns, he ascribes the reconstructed forms and patterns to 'Proto-Australian'. In all fairness, it should be acknowledged that he does single out a few stray nuggets of what looks like hard evidence indeed, in the form of several monosyllabic verb roots, for the positing of a more inclusive genetic grouping than Pama-Nyungan. In another twist of irony, part of the intended contribution of this paper constitutes support for Dixon's basic premise, involving as it does the addition of at least one more nugget, namely an extremely ancient conjoining particle, *pa, to the Dixon 'Proto-Australian' collection. This accords, one would hope, with the principle that scholars should impartially allow the surfacing of both evidence and counter-evidence relating to the hypotheses which they espouse.

On the Pama-Nyungan side of the coin, however, I would point out that as early as 1966 I had recognized over fifty radical elements as showing cognation between Ngayarda languages such as Yindjibarndi and Pama-Nyungan languages in general; and these, in fact, only represent the tip of the iceberg. O'Grady (1966:113) also cites the handful of old monosyllabic verbs, represented in such Proto-Ngayarda forms as *nha.ku+Y-1 'to see', which he recog-

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1 Forms cited are transcribed uniformly in practical orthography, in which t, R, ñ, n are written j, nh, nh, ng, and rhotics r, ŋ appear as r, rr. Gupapuyngu retroflexed sounds are indicated by underlining, and the symbol ñ is retained, in accordance with the established orthography. In other languages, retroflexed [+cons]
nizes as having wider than just Pama-Nyungan provenience. On the whole, though, it is becoming more and more evident that there exists a dense network of genetic strands - grammatical and lexical - connecting the various Pama-Nyungan languages. By another stroke of irony, the full documenting of this evidence, because of its very richness, will require a huge expenditure of labour; and this, in turn, means that many years or decades will pass before all of the evidence needed for a full riposte to Dixon's attack on Pama-Nyungan can be presented. Later in this paper, I offer an estimate of the number of man-years of labour that will be necessary.

The strands which may be seen as connecting pairs of languages such as Ngandi and Maung are indeed sparse by comparison. This sparseness is emphasized, if anything, by the presence of a tiny handful of extremely hardy individual fibres such as are represented by Ngandi ma- 'to get, to grab, to pick up' / Maung ma- 'to take'.

These forms must be regarded as having survived through untold millenia with truly exceptional resilience.

O'Grady and Klokeid (1969) attempt to provide an exemplar for the systematic lexicostatistic comparison of all Australian languages, citing in full the 100-item Test List used in twelve communalects of southern Australia, and illustrating problems in the detection and counting of cognates. Cognate densities are seen to range in Australia from values nearing 100% in the case of very close sub-

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segments are analyzed as clusters /rt rn rl/. Postposed L, Y on verbs are conjugation markers. Forms from sources dating from the pre-phoneme era are given in capitals. Capitalization of vowels in protoforms implies an absence of cognate material from languages which are diagnostic for vowel length. Dots indicate fossilized morpheme boundaries.

dialects of a dialect (the figure was 90% in the case of the comparison of the geographically adjacent dialects Yankuntjarra and Antikirrinya) to a putative low of 2% arrived at when comparing, for example, Nyulnyul with Bandjima. The authors take this extreme variation to provide a basis for at least preliminary hypotheses concerning language relationships.

At the same time, O'Grady and Klokeid urge upon linguists the desirability of entirely independent comparisons of Australian languages using, for example, grammatical indices in order to arrive at estimations of the degree of genetic closeness between languages. In addition, they point out that none of these approaches could be seen as superseding in any sense the ultimate massive use of comparative method techniques.

Blake (1977) provides, in effect, a stunning vindication of Pama-Nyungan through his thoroughgoing study of case marking in Australian languages, building on earlier work in this area, especially that of Capell (1956) and Wurm (1972).

O'Grady (1979), for yet another time, pursues the theme of the genetic unity of Pama-Nyungan languages, and seeks to trace some of the interconnecting strands which make up the complex web of Pama-Nyungan diachronic semantics, involving such mechanisms as metaphor, metonymy and, unquestionably, antonymy. Despite ongoing scepticism on the part of Australianists, I will continue to assert my claim that a systematic innovation is beginning to sweep the lexicon of the well-documented Western Desert Language, and that that innovation is the well-known Australian phenomenon of Initial-Dropping. I plan to demonstrate, when time permits, that Pintupi, as documented in Hansen and Hansen (1974), had made a substantial start along the road leading to the eventual loss of all word-initial [+int] segments, i.e. *p- and *k- (and, by implication,
ultimately of all initial consonants). Up to the time of the Hansens' work, at least, speakers appear to have been 'patching up' initial syllables by substituting, in the hiatus arising from initial loss, a non-nasal resonant, effectively $y$ or $l$ (in that order of preference). The structural constraint requiring all words to begin with consonants was thus still inviolate.

The reconstruction of at least Proto Nuclear Pama-Nyungan (PNPN) root elements, as discussed in O'Grady (1979:107-8), thus gains further impetus though the fully justifiable inclusion of Pintupi $yiku$ within the roster of reflexes of the PNPN root $*piku(+ny)$. In the following tables, initial consonants are enclosed in cartouches.

<table>
<thead>
<tr>
<th>Gawurna</th>
<th>P I K O, PIKUPUTI 'eyebrow'</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nuguna</td>
<td>p i k u 'forehead'</td>
</tr>
<tr>
<td>Pintupi</td>
<td>$y$ i k u 'face area'</td>
</tr>
<tr>
<td>Gupapuyngu</td>
<td>b u k u 'forehead,...cliff, face'</td>
</tr>
<tr>
<td>Yidiny</td>
<td>p i k u. ny 'finger- and toe-nail, claw'</td>
</tr>
</tbody>
</table>

Table 1 Reflexes of PNPN $*piku(+ny)$

Anticipatory vocalic assimilation is in evidence in Gupapuyngu, as in PNPN $*ngali >$ Gup. $\gamma ali+nyu ~ \gamma ili+nyu$ 'we DUAL EXCL(USIVE)'. In the case of Gup. $buku$, ancestral $*i$ can reasonably be regarded as having assimilated to the $[+\text{hi}]$ tongue position of the following $*u$, or of both the $*k$ and the $*u$. Further, the preceding $*p$ can be seen as a rounding influence operating on the $*i$.

Final judgment on the assigning of Yidiny $pikuny$ to the same etymon should come from within the Australian indigenous culture area. This form is included here because of clear evidence from
Nyangumarda and Umpila of a semantic association between 'eye, forehead, nose, face' and 'nail': PNPN *pIrri(+rn) 'nail' > Nya. *pirri.m 'forehead', and PNPN *miilpa(+ny) 'eye, face' > Nya. *milpi.ny 'fingernail, toenail'. The latter form is also discussed in O'Grady (1979:120). Concerning the status of the fossilized endings .rn and .ny, Alpher (pers. comm.) argues convincingly that historically they had an independent suffixal status.

Evidence from Umpila which dovetails with that of Nyangumarda and Yidiny, above, comes in the form of a doublet: PNPN *nugrru 'nose' has twin reflexes in this language, namely *uu'u 'forehead' and *wutu 'fingernail, toenail, claw'. Though the exact lines of evolution of these forms are not known, it is clear that both passed through stages whereby *ngurru > *wurru > *wutu (cf. *guna+Y 'to lie, sleep' > Ump. *wuna+y); in the one case *w then assimilated to the following *u, resulting in *uu'tu (' > uu'u - cf. also Proto-Paman *kuta.k 'dog' > Ump. *ku'a.k); and in the other, the final *u fronted to i following *t, so that *wutu > wuti, a development corroborated by PNPN *paarntu 'all' > Ump. *paanti.ku.

As a reminder to the reader that I continue in my attempts to add to the ancestral Pama-Nyungan lexicon, I would urge consideration of the problem of the ultimate etymology of the well-known Western Desert word yinma 'corroboree/song and dance'. When the possibility is left open that the initial y is historically prothetic, and is 'filling in' for a deleted p- or k-, then things start falling into place: plausible cognates come into focus in Pama-Nyungan languages which are geographically far removed from Western Desert, as is indicated in Table 2.
Table 2 Reflexes of PNPN *pirlma

This set, too, may well occasion raised eyebrows on semantic grounds (granted that *1 undergoes assimilation in manner to a following nasal in the Western Desert language, so that *pirlma is indicated as the ancestral shape, based on the Pintupi and Gupapuyngu evidence.

The resolution of the semantic 'problem' posed by Yidiny pilma+L, especially for a non-member of a traditional Australian indigenous society, is achieved by returning to the Hansens' large Pintupi dictionary with the question, 'what shapes do verbs of "clearing (the ground)" have in this language?' Appropriate search yields the following further set:

<table>
<thead>
<tr>
<th>Language</th>
<th>Reflex</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pintupi</td>
<td>y u r i+L- 'to wipe, clean an area of prickles, objects etc.'</td>
</tr>
<tr>
<td>Gupapuyngu</td>
<td>--</td>
</tr>
<tr>
<td>Umpila</td>
<td>aa ' i+L- 'to play, dance, sing'</td>
</tr>
<tr>
<td>Guugu Yimidhir</td>
<td>w uu r ii- 'to play, dance'</td>
</tr>
<tr>
<td>Yidiny</td>
<td>--</td>
</tr>
</tbody>
</table>

Table 3 Reflexes of PNPN *yuuri+L

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3 Ernabella dialect. Cf. also Nyangumarda yirma 'corroboree', an evident loan from the direction of Pintupi.

4 With which compare Rembarrnga prilmurr 'music sticks' (Graham
Here one finds direct semantic evidence supporting the connections implied in the *pirlma set, but now it is the phonological discrepancies that need to be reconciled. This is achieved by postulating ancestral *yuuri+L, with subsequent independently attested developments as follows:

1. Original long and short vowels merge in Pintupi.
2. Initial *y drops in Umpila; *uu assimilates in tongue height to the following [+low] rhotic; and finally, *r is replaced by glottal stop.
3. *y assimilates for the feature [bk] to the following *uu in Guugu Yimidhirr.

The semantic 'problem' involving the reflexes of *pirlma and *yuuri+L becomes a non-problem if viewed in the context of the semantic POTENTIAL:ACTUAL relationship in Australian languages, brought into focus in O'Grady (1960) and discussed further in Dixon (1972, 1980): the action of clearing the (dancing) ground of sticks, thorns, etc. is conceptualized in the mind of the speaker as 'POTENTIALLY (or perhaps better: VIRTUALLY) singing and dancing', just as such meanings as

McKay, pers. comm.). Note that the Gup. forms in Tables 1 and 2 could equally well be written with p- since the fortis/lenis opposition for stops in this language is neutralized word-initially.

5 In sub-environments which are not fully controlled as yet. But it appears that this lowering rule does not affect short *u - cf. *kuru(+N) > Pintupi kuru, Umpila ku'u.n 'eye', and *ngurru > Gupapyungu gurru, Warrgamay watu, Nyawaygi wuru 'nose', Umpila uu'u 'forehead' and wuti 'nail'. For further details concerning the Umpila reflexes, refer back to the discussion of *piku(+ny). The phonetic realization of /uu/ in Umpila ranges as low as [o:], lending added plausibility to the claim that *uu, but not *u, lowered to aa preceding *r.

6 Compare the use of the term virtuel in Herique (in this volume).
'firewood/fire', 'animal/meat', 'track of snake/snake' and 'hit/kill' are united within single lexemes. The speaker has the option of making further specification, as in Nyangumarda marlkarrri+ngi wirla+ma+ma, 'death+LOCATIVE hit/kill+NONFUTURE+I', 'I killed 3sg'.

Despite possible success in the above attempt at reconciling semantic differences for the reader, (which are certainly real enough from an Indo-European point of view), he or she may nevertheless be led to reject a hypothesis of 'creeping Initial-Dropping' as accounting for the appearance in Pintupi of yiku and yinma, above, rather than, say, *piku and *pinma. Some Australianists may incline rather to a borrowing hypothesis, in which case the logical donor language would be Aranda, a full-fledged initial-dropping language lying immediately to the east. Granted that certain individual Pintupi lexemes in y- may well be Aranda loans, the fact nevertheless remains that statistical evidence points decidedly in the direction of internal change as being the basic mechanism involved: phoneme-count studies of Pama-Nyungan languages reveal that the relative frequency values for initial p in fully initial-retaining languages cluster around 17%. The corresponding value in Pintupi for this segment is 13%, a figure which I take to be indicative of the loss of roughly one-quarter of all original p-initials across the lexicon. What is crucial to bear in mind is that initials such as j, w and m do not show comparable attrition.

Contrary to Dixon's assertion (1980:256), cited earlier, namely that Pama-Nyungan 'has not yet been shown to have any genetic significance', I would reiterate that Pama-Nyungan is indeed a genetic construct, consisting of clearly related and relatable languages.

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7 Dixon (1977:38) reports this figure for Yidiny, for example, and the same value holds for Bayungu, spoken on the opposite side of the continent.
I would like to round out my foregoing remarks with the following observation: linguists owe it to their students to use the terminology which they have generated in a reasonably consistent manner. It is completely misleading to the student, as well as to the non-Australianist linguistic specialist, to speak of, say, an 'Australian language family' and an 'Algonquian language family' in one breath. The newcomer to Australian linguistics will naturally assume that the detailed and systematic mapping of Proto-Algonquian forms, segment by segment, into daughter languages such as Ojibwa (as in PA *keʔtike:wa > Oj. kihtige 'he farms' - a fully inflected verb form) also has an Australian counterpart: reconstructions numbering one to two thousand, with adequate attestation of the descent of each segment appearing in a given environment or sub-environment (e.g. rhotic flap flanked by high front vowels) in at least half a dozen or so representative daughter languages.

In point of fact, Dixon has been able to propose considerably less than a score of primal shapes which one can confidently conceive of as at least hearkening well back toward 'Proto-Australian'. In sum, then, I urge all who would pause for reflection to do their own careful weighing of the relative degrees of reality attachable to the labels 'Australian Language Family' and 'Pama-Nyungan Language Family'. I, for one, will continue to represent Pama-Nyungan to students and colleagues as the largest coherent genetic construct, i.e. 'language family', in Australia, and 'Australian' as a phylum, a more inclusive and more vague grouping of languages, supposedly genetic, but with so few shared elements that the detailed mapping of innovations into daughter languages is not possible. I would

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8 This reconstruction is #771 given in Aubin (1975).
envision the time depth for a language family as ranging from perhaps 3,000 to 6,000 years; that for a phylum, possibly 8,000 to 15,000 years - beyond which even the tentative identification of cognate material is probably not possible; cf. Bolinger (1975: 307). This leaves an indeterminate intervening area, the six to eight millennia range, where evidence for the reconstruction of some details might be adequate, but lacking for others.

The present paper should be thought of as at least a fourth battery of hard evidence marshalled directly for the defense of Hale's Pama-Nyungan construct - the first three being O'Grady (1966), O'Grady and Klokeid (1969) and O'Grady (1979). I am thus directly contradicting Dixon's claim about Pama-Nyungan's not having been shown to have any genetic significance. I let loose this salvo, then, on the premise that if one waits for the requisite two hundred to three hundred man-years of work on the assembling of all relevant attestation within Pama-Nyungan to be performed before seriously attempting to defend the theory, it could well come to pass, not for the first time in history, that a wrong-minded theory will have gained general acceptance.

In saying this, I intend in no sense to convey the impression of an overall condemnation of Dixon's latest work. It represents, in point of fact, a deeply impressive achievement. I feel that its author is entirely correct to the degree that he ascribes extreme antiquity to the handful of monosyllabic verb roots on which his postulated 'Australian Language Family' mainly rests (1980:402-11). But this antiquity, clearly recognized by Capell forty years ago, is surely of an order vastly greater than that normally associated with language FAMILIES. I therefore reiterate my assertions made over the years, e.g. in O'Grady (1966:113; 1979:108-9) to the effect that a handful of radical elements evidently predate Pama-Nyungan, but
that the vast majority of widely reconstructible grammatical markers and word roots in Australia, appearing in languages ranging from Bayungu to Pittapitta to Umpila, and surely to number well over a thousand eventually, will turn out to be reconstructible only on the evidence of Pama-Nyungan languages, or on the basis of cognate sets established within various subgroups thereof.

To pursue this vein further, I would challenge Professor Dixon to follow up whatever Pama-Nyungan reconstructions I and others may put forward, e.g. *piku(+ny), *pirlma, *pIrri(+rn), *miilpa(+ny) *ngurru, *paarntu and *yuuri+L posited earlier in these pages, and demonstrate plausible cognates (not reflexes!) in well-documented non-Pama-Nyungan languages such as Alawa, Ngandi, Maung and Ungarinyin. To the extent that cognate shapes fail to appear, he will increasingly have to rely on his basic thesis that many (most?) elements of 'Proto-Australian' have fallen into desuetude in the non-Pama-Nyungan languages of northern Australia. This, I take it, is the argument which he advances to account for such absences as that of the 'Proto-Australian' first person dual pronoun *ngali through virtually the whole of the area of Capell's 'prefixing' languages (largely coterminous with Hale's non-Pama-Nyungan) in the north. He has thus, in effect, adopted a 'Desuetude Hypothesis' to account for the gap and the instances of non-cognition seen in the following array.
<table>
<thead>
<tr>
<th>Family</th>
<th>Language</th>
<th>First Person Dual Inclusive Pronoun</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pama-Nyungan</td>
<td>Wembawemba</td>
<td>ngalein</td>
</tr>
<tr>
<td></td>
<td>Gumbainggir</td>
<td>ngali</td>
</tr>
<tr>
<td></td>
<td>Nyawaygi</td>
<td>ngali</td>
</tr>
<tr>
<td></td>
<td>Umpila</td>
<td>ngali</td>
</tr>
<tr>
<td></td>
<td>Wadjuk</td>
<td>NGALLI 10</td>
</tr>
<tr>
<td></td>
<td>Bayungu</td>
<td>ngali 11</td>
</tr>
<tr>
<td></td>
<td>Nyangumarda</td>
<td>ngali</td>
</tr>
<tr>
<td></td>
<td>Gupapyungu</td>
<td>na</td>
</tr>
<tr>
<td>Maran</td>
<td>Alawa</td>
<td>nyalu</td>
</tr>
<tr>
<td>Gunwinyguan</td>
<td>Ngandi</td>
<td>nyaka</td>
</tr>
<tr>
<td>Iwaidjan</td>
<td>Maung</td>
<td>--</td>
</tr>
<tr>
<td>Tiwian</td>
<td>Tiwi</td>
<td>mua</td>
</tr>
</tbody>
</table>

Table 4  First Person Dual Inclusive Pronouns

According to the Dixon scenario, *ngali is almost unimaginably archaic in Australia (10,000 years old? 20,000 years?), and in the more recent history of northern languages such as Alawa, Ngandi and Maung (if not Tiwi) has simply disappeared without a trace. For untold eons, in other words, generations upon generations of speakers of virtually all Australian languages pronounced the segments [ŋ], [ʌ], [l] and [i] in that sequence, with nary an umlauting of the [ʌ] by the [i], palatalizing of [l] preceding [i],

9 Family affiliations are as originally postulated by Hale, and reported on in O'Grady, Voegelin and Voegelin (1966).

10 Glossed in Moore (1884) as 'p. dual - we two; brother and sisters; or two friends'.

11 The inclusive: exclusive distinction is not present in Bayungu.
Until a relatively few centuries ago, that is. Developments whereby *ngali, Thargari Yinwum le- (with umlaut followed by C, and V₁ loss) Awngthim lay (with C₁ loss and metathesis), and Kāla Lagāw Ya ngoey- ngoel- (with raising of *a to /e/) are all evidently quite recent. The KLY form has undergone a switch in pronominal function in addition to sound shift: it is now a first person plural exclusive pronoun; by way of exchange, a cognate of Proto-Paman *ngampa cited in Hale (1976:57) as a first person plural inclusive pronoun, descends in KLY as ngaba 'we DUAL INCL'. The KLY pronoun ngalpa 'we PLUR INCL' evidently reflects ancestral Pama-Nyungan *ngali *pa, and compares well with the Warlpiri plural form given in Table 5, as does the secondary KLY form ngalbay 'we DUAL EXCL'.

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To my mind, such a claim is simply not plausible. I would like to put forward the proposal, again contra Dixon, that *ngali is a quite modern innovation on the Australian linguistic scene. I would claim, in fact, that this form probably made its first appearance as a pronoun only after at least 90% of the period of unchallenged tenancy of Australia by its original settlers had run its course; *ngali, in other words, could well be less ancient than the oldest of the Egyptian pyramids - dating to perhaps only 4,000 years ago. The elements which went into the creation of *ngali, I would like to suggest, were the extremely archaic Australian first person pronominal base *nga- and an old conjoining particle, *li. The resultant *nga+li 'I+AND (thou)' had specific first person dual reference.

So long as the Dixon scenario is more or less turned turtle in this manner, perspective suddenly reasserts itself, and a direction of focus more in keeping with the uncanny overall Sprachgefühl of such linguistic giants as Hale emerges. We now see a non-Pama-Nyungan language such as Maung (which lacks dual pronouns entirely) as never at any point in its history having had a dual pronoun con-
stituted as ng-a-l-i; in other words, dual pronouns simply never evolved in Maung. Yet uncannily enough, the seeds still exist in this language which elsewhere, namely in an early ancestral stage of Pama-Nyungan, were to fuse into this form.

It remains to make a case for the proposed development *nga-+ *li > *ngali. This will be attempted by first citing what has to be entirely independent and incontrovertible evidence pointing to pronominal genesis elsewhere in Australia, in which the two radical building blocks have been a pre-existing pronominal and a conjoining particle. The evidence will involve a close examination of an extremely archaic, possibly Proto-Australian(!) particle *pa, briefly mentioned at the beginning of this paper (and see also footnote 12).

In their Maung Grammar, Capell and Hinch (1970:91) make it clear that among Australian languages this northern tongue is exceptionally rich in monosyllabic conjoining elements. One of these, pa, joins clauses, as in kiwarunlar, pa kapijalakaken 'they finish it and they scatter' (Text 7, p. 125). From the opposite geographical extreme of Australia, Hercus (1969:213) cites Wembawemba mir pa kanyuk 'eyes and nose' as an example of the function of pa 'and' in that language. In the west of the continent, Nyangumarda shows a cliticized use of *pa, as in mayi+pa kyui+pa 'food and meat', comparable to Sanskrit -śa, Greek -te and Latin -que (PIE *kʷe), but appearing on both conjoined constituents. Nyangumarda kujarra+pa kujarra ('two and two') 'four' is evidently a fixed locution.

In the east, Yidiny appears to lack an AND-like particle, or any conceivable reflex of *pa, except - and this is crucial - as a final syllable on the pronoun nyuntuu+pa 'you NON-SING'. That
this is transparently a suffix is seen by comparison with the second person singular pronoun *nyuntu*, discussed in Dixon (1977:165, 177). Dixon argues, quite correctly I feel, that *nyuntu*pa has supplanted earlier *nyurra*, the well-attested Pama-Nyungan second person plural pronoun. Yidiny *nyuntu*pa, then, is taken to be historically 'thou+ AND (thou)'.

In the centre of the continent, Warlpiri, as reported on in Hale (1974:5), shows a directly comparable but quite independent development, in which an old first person plural inclusive pronoun has been replaced by a formation which is transparently based on *ngali* 'you and I':

<table>
<thead>
<tr>
<th>Language</th>
<th>First Person Dual Inclusive Pronoun</th>
<th>First Person Plural Inclusive Pronoun</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nyangumarda</td>
<td>ngali</td>
<td>nganyjurru</td>
</tr>
<tr>
<td>Warlpiri</td>
<td>ngali</td>
<td>ngali+pa</td>
</tr>
<tr>
<td>Yidiny</td>
<td>ngali 13</td>
<td>nganyji</td>
</tr>
</tbody>
</table>

Table 5 First Person Dual and Plural Inclusive Pronouns

It is clear that the Nyangumarda and Yidiny forms are cognate, while the Warlpiri plural form reflects *ngali+pa 'we two+AND (thou)'. Ultimately, then, Warlpiri *ngalipa* shows historical cliticization twice over: *nga- *li > *ngali, followed by *ngali *pa > ngalipa, etymologically 'I AND (thou) AND (thou)'. And so history repeats itself in the selfsame language, leaving to the historical linguist the task of peeling off successive

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13 Dixon (1977:166) describes Yidiny *ngali* as 'a marked "dual" form, making a further, optional distinction within non-singular'.
layers of evidence.

A further instance of the fusing of *pa on to a pronoun is to be seen in the second person dual pronoun in Pama-Nyungan languages, commonly attested as *nyu(m)pala/u. If, contra Dixon (1980:336-46), we take the Pama-Nyungan second person singular pronominal base to have been *nyun\(^{14}\), then the second person dual form can be viewed as being transparently based upon *nyu(n) + *pa (> *nyu+pa in some dialects of PNPN; *nyu+pa in others). At a very early stage in Pama-Nyungan, a further conjoining particle, *la\(^{15}\), came to be cliticized in turn, resulting in *nyum+pa+la, *nyu+pa+la. Through paradigm pressure from such forms as *nyun+tu 'thou+ERGATIVE', variant forms such as Bayungu nhupalu 'you too' arose.

If first and second person dual pronouns in Pama-Nyungan are to be seen as relatively recent compound forms based on much older elements, it is reasonable to conclude that 'pronouns' such as Gawurna PURLA, Nyangumarda pulany 'they two' are innovatory in function at least, if not in form. That this is so is borne out by Bandjalang pulaa, Wadjuk BULA, Gupapuyngu bulal', the referents of which are in each case 'two' rather than 'they two'. The old numeral was pressed into service as a pronoun, thus completing the fleshing out of a dual pronominal paradigm.

All of these developments completely escaped languages such as Maung, perhaps even to some extent because this language had - and has - a very natural device used in expressing such notions as

\[14\] Dixon may be correct (p. 344) in his assertion that monosyllabic *nyun appears in no Australian language. But note Wirangu nyurni 'you (SG)'.

\[15\] In Maung, according to Capell and Hinch (1970:91), *la is used in conjoining either nouns or clauses.
'you and me'; a conjoining particle which was, and is, used specifically and solely in linking pronouns; and the shape of this particle is li! The crucial example given by Capell and Hinch is ngapi li yanat16 'I and he'. Here, then, is the evidence which, I feel, clinches the hypothesis that compounding has been the basic process by which dual pronouns in Pama-Nyungan have been formed.

If Maung is to be seen as a language which is related to Pama-Nyungan, albeit very remotely, the data for this language indicate very clearly that the period during which Maung has been evolving independently of Pama-Nyungan has been very long indeed - perhaps eight to twelve millenia. Among northern Australian languages Maung, at least, is not in any sense a Pama-Nyungan language: it essentially lacks the pronominal forms which are generally diagnostic for Pama-Nyungan languages, for the simple reason that it never had them. The languages with ngali 'we two', set out in Tables 4 and 5, show such striking agreement in meaning and form for this and other pronouns because they inherited them in single chunks which had coalesced out of older elements at the time when Proto Pama-Nyungan had hardly begun to differentiate; and Pama-Nyungan itself is quite modern, relatively speaking - almost certainly not as ancient as Proto Indo-European.

The lines of investigation pursued here have probably not been exhausted. In particular, the archaic conjoining particle *pa has probably come to perform double, or even treble, duty in languages

16 In view of the appearance which Maung gives of extensive word-initial lenition, this form should be noted as a possible cognate of PNPN *jana 'they PLUR'.
such as Nyangumarda, where a marker -pa occurs in relative clauses, as in nyarra+lu yi+nya+ny+a tupa+u+pa, Nguru+ngu+pa wani+nya (Ngulibardu dialect) 'that (remote)+ERGATIVE give (yi+...+a) PAST+me two pounds, white sand+LOCATIVE+RELATIVE live+NONFUTURE', 'that man who lives in Port Hedland gave me £2'. The third function of *pa which has evolved in Nyangumarda is its appearance as a phonological device which has the effect of preventing non-permitted consonant clusters from occurring. In the process, it has lost all semantic content. Thus verb forms such as ka+nya+rrna 'carry+PAST+I, 'I carried it' and ka+nya+nn 'you-SING carried it' can be further combined with -lu 'for him': ka+nya+rrna+lu 'I carried it for him'; but since *nl is a non-permitted sequence, for 'you-SING carried it for him' one must say ka+nya+npa+lu.

In languages such as Western Desert and Yinggarda, a phonological device consisting of the syllable pa, placed in word-final position, ensures that all inherited forms with final consonants end with a vowel. So, for example, in Bayungu the absolutive (uninflected) case form of 'woman' is nyanyjil, and the ergative nyanyjil+tu. The corresponding forms in Yinggarda are nyanyjil+tu. Here again, pa is to be thought of as being totally devoid of any lexical or grammatical content.

Perhaps this paper has helped pave the way, in a sense, to a vindication of both Hale's 'Pama-Nyungan Family' Hypothesis and Dixon's 'Australian Family' Hypothesis. To the extent that further reconstruction of affixal and root elements in Australia has to proceed on the basis of Pama-Nyungan evidence alone, Dixon's 'Proto-Australian' theory is left high and dry. But to the degree that Maung nga(pi), pa, li and la can be plausibly assigned cognition to segments long since fused into pronominal forms in Pama-
Nyungan, and because of further nuggets, such as -ma- 'to take', Maung must be seen as being ultimately related to Pama-Nyungan. In this regard, Dixon is indeed vindicated, in the sense that there is evidence - thin and sparse though it be - for the genetic relatedness of most Australian languages. In no way, however, can a dozen or so probable cognate elements be equated to the concept 'proto-language' as exemplified by Algonquian, Salishan, Wakashan, Indo-European - and, yes indeed, by Pama-Nyungan!

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