

THE LEGACY OF RADCLIFFE-BROWN'S TYPOLOGY OF AUSTRALIAN ABORIGINAL KINSHIP SYSTEMS

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I review A. R. Radcliffe-Brown's approach to the classification of Australian Aboriginal kinship terminologies and marriage systems, including revisions by A. P. Elkin. I contrast Radcliffe-Brown's approach to typology with those of Lévi-Strauss and Scheffler, and I trace the way in which certain of Radcliffe-Brown's categories have become standardised in the anthropological literature. Following a discussion of approaches to classification, I propose a new classification of Australian systems and examine the frequency and spatial distribution of the proposed types.

Introduction

As Adam Kuper (1983:145) remarks, there is no doubt that A. R. Radcliffe-Brown made a significant contribution to the understanding of Australian Aboriginal systems of kinship and marriage in his 1931 synthesis, whatever the arguments about his originality and the validity of his claim to have 'discovered' the Kariera system (White 1981; Needham 1982; Radcliffe-Brown 1931). His typology of Australian systems, or rather, a simplification of it, has been the standard for some eighty years. Radcliffe-Brown's analysis classifies Australian kinship systems into a large number of 'types', although he took Kariera and Aranda as prototypes of many systems. He classifies not only systems of kin classification, but also systems of social organization including marriage, moieties and sections etc., and types of 'hordes'. He thought that many other systems were variants of the two focal types, Kariera and Aranda, but he recognized several other main types as well, including Murngin, and Forrest and Lyne Rivers types. Table 1 summarizes his typology.

In spite of his recognition of all this variation, Radcliffe-Brown saw the Kariera and Aranda types as focal:

The easiest way to classify the kinship systems of Australia is by reference to these two norms. In the Kariera type we have the bilateral cross-cousin marriage and the classification of all relatives into two lines of descent. In the Aranda system we have marriage with the mother's mother's brother's daughter's daughter, and the classification of relatives into four lines of descent (1930-31:52).

Turning to the geographical distribution of types, Radcliffe-Brown thought the provenance of the Kariera type to be limited to the area of Western Australia from the Ninety-

Table 1: Radcliffe-Brown's Classification of Aboriginal Kin Terminologies (Summary)

Kariera type (1930-31:46-49, 51, 208-211)

Two lines of descent, FFZ classified with MM, based on bilateral cross-cousin marriage, normally between actual FZS and MBD; four classes of relative in each generation; gen +2 classification: FF/FFB/MMB/FMZ, FM/FMZ/MFZ/FFBW, MF/MFB/FMB/MMZH, MM/MMZ/FFZ/MFBW (i.e., on basis of gender and parallel/cross distinction), self-reciprocal; gen +1 [bifurcate merging]; gen 0 terms for eZ, yZ, eB, yB, male and female cross-cousin; gen -1 mS, mD, ZS, ZD.

- [South and west Arnhem Land] (area 39) (pp. 330-331)

Kariera type kin classification, eight subsections working as four sections.

- Larakia and Worgait (area 45) (pp. 334-335)

No moieties or sections, some modification to Kariera kinship system (Larakia).

- Kumbaingeri type (area 23) (pp. 235-237)

As Kariera, but distant MBD/FZS marriage (or from mother's section), four sections.

- Kabi type (area 25) (pp. 338-340)

Kin classification of Yukum similar to Kumbaingeri, with some differences, four sections. (Radcliffe-Brown includes Bandjalang as one of the sub tribes.)

- Wikmunkan (Cape York Peninsula)

As Kariera, but marriage of a man to his MyB (pp. 52-53)

Forrest and Lyne Rivers (area 46) (pp. 335-337)

Differs from Kariera terminology: MMB = MM ≠ FF, FF = eB, patrimoieties, FZS/MBD marriage (but possibly FZD as well) and ZSD marriage; ZD exchange.

Aranda type (area 33) (pp. 50-51, 322-325)

Four types of male and four types of female relative in each generation under four terms (whereas Kariera classified FF with MMB etc); four lines of descent, FFZ classified with FF, marriage of a man to MMBDD/ FMBSD or someone of that category plus alternate marriages, related to four sections or eight subsections; gen +1 FF/FFB/FMZ/FFZ/FMBW, MM/MMZ/MFBW/MMB/MFZH, FM/FMZ/FFBW/FMB/FFZH, MF/MFB/MMZH/MFZ/MMBW;

Table 1: Radcliffe-Brown's Classification of Aboriginal Kin Terminologies (Summary) (cont'd)

- gen 0 F, M, MB and FZ, plus MMBS and MMBD distinguished from F and FZ (he omits FMBSC);
four kinds of relatives in generations -1 and -2.
 - Mardudhunera type (area 2) (p. 211)
Marriage to cross-cousin's child, alternative marriages, kin classification approximates Aranda type, four sections.
 - Talaindji type (area 3) (pp. 211-215)
Similar to Mardudhunera, four sections.
 - Dieri type (area 10) (pp. 21-22)
Aranda type kin classification, patrilineal, and matrilineal moieties.
 - Tjingali type (area 34, including Warlpiri and Warumungu) (pp. 325-327)
Aranda terminology, eight subsections, named patrimoieties
 - Binbinga type (area 35) (pp. 327-328)
similar to Tjingali, no named moieties.
 - Mangarrayi type (area 36) (p. 328)
Aranda terminology, eight subsections and named patrimoieties.
 - Mudbara types (area 37) (p. 328)
Aranda terminology, eight subsections.
 - Kimberley (Lungu, Djaru) (area 38) (pp. 329-330)
Alternate marriage in subsection terms.
 - Marra type (area 42) (pp. 332-333)
Aranda terminology, marriage to MMBDD and alternate marriages, moieties and semi-moieties.
 - Nyul-nyul type (area 48) (pp. 339-340)
Aranda terminology, four sections, ZSD and ZDHZD marriage (ZD exchange).
 - Bad (Bardi) type (area 49) (pp. 340-341)
Similar to Nyulnyul, Aranda type terminology, but marriage to very distant MBD.
 - Yaralde type (area 12) (pp. 223-224, 453)
Closely related to Aranda type, four lines of descent but not traced through whole of 'tribe', only clans to which an individual is related, skewing in FM (and MM) lines (to whole of patrilineal), marriage with woman of FM clan forbidden, prohibition of marriage with close relatives on clan basis, no prescribed marriage, classification of clans by gen+3 terms, system integrates six clans with man's wife from seventh; no moieties or sections.
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Table 1: Radcliffe-Brown's Classification of Aboriginal Kin Terminologies (Summary) (cont'd)

- Tjapwurong (area 13) (pp. 225-226)
Tjapwurong and Wotjobaluk probably similar to Aranda type, but Jupagalk marriage between distant FZS-MBD suggests system of Kumbaingeri type (p. 225).
 - Wati-wati type (area 14) (p. 226)
Similar to Aranda type.
 - Kurnai (area 19) (p. 229)
Modification of Aranda like classification in generation +2, but apparently only sibling categories in generation 0. No moieties or sections.
 - New South Wales South coast (area 20) (pp. 229-230)
Marriage between a man and his father's female cross-cousin's daughter.
 - Kamilaroi type (area 21) (pp. 230-231)
Aranda type kin classification, with some differences, marriage between a man and his MMBDD or MFZDD; matrimoieties and matriclans, and 'blood' moieties.
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Cape York Peninsula (area 31) (pp. 245-246)

Kinship systems marks distinction between elder and younger parents' siblings.

Murngin type (area 40) (pp. 331-332)

Seven lines of descent, based on matrilateral cross-cousin marriage, eight subsections, patrimoieties,

Karadjeri type (area 50) (p. 341)

Based on matrilateral cross-cousin marriage, FZD marriage forbidden, hence no sister exchange, but coastal people forbid cross-cousin marriage. Radcliffe-Brown saw similarities between Karadjeri and Murngin types (in matrilateral cross-cousin marriage) but did not subsume Murngin under Karadjeri.

Ungarinyin type (area 47) (pp. 337-339)

Some similarity to Yaralde, four lines of descent, skewing in M, MM, and FM lines, marriage to FMBSD, no sister exchange or ZSD marriage, patrimoieties.

Groote Eylandt (area 41) (p. 332)

Insufficient data.

Table 1: Radcliffe-Brown's Classification of Aboriginal Kin Terminologies (Summary) (cont'd)

<p>Tiwi (area 43) (pp. 333-334) Marriage with MBD and ZSD, no moieties or sections, matrilineal totemic clans.</p>
<p>Kakadu (area 44) (p. 334) Marriage to person of generation +1 permitted, no moieties or sections.</p>

Mile Beach to the Fortescue River, and possible at the head of the Murray River, and modifications of the Kariera type to exist in Arnhem Land (1930-31:52). Systems of the Kumbaingeri type, which is like Kariera except that marriage is between distant FZS and MBD, were found on the New South Wales coast and in western Queensland (p. 52). The Aranda type was widespread, found in Western Australia, central and northern Australia including part of the Kimberley, South Australia east of Lake Eyre, part of New South Wales, on the Murray River and in Western Victoria (p. 52).

In his 1951 article, Radcliffe-Brown simplified the scheme into Kariera type, Kumbaingeri type, Aranda type, and Karadjeri type, in which he now included the Yir Yoront and Yolngu ('Murngin') systems (Radcliffe-Brown 1951).

Elkin's Revisions

In his earlier writings, A.P. Elkin (1937-38:422) adopted the Radcliffe-Brown typology, but acknowledged the existence of 'significant variation' in South Australia, for example. He was unable to subsume the Arabana kinship system (and also Wilyakali) under any of the recognized types (1937-38:441). He likened the Diyari ('Dieri') kinship system to the Aranda type, but found significant differences (1938-39:60). In this work the Diyari kinship system becomes the 'Dieri type', also found in other parts of South Australia (p. 62). In his general work on Aboriginal society, Elkin (1954) subsumed Gunbayngirr ('Kumbaingeri') under the Kariera type, took Nyul-Nyul and Aranda to be a single type, and added the Western Desert Aluridja type (described in detail in Elkin 1939-40), which he characterized as a variant of the Nyul-nyul type. The Aluridja type has four lines of descent according to Elkin, but first cross-cousins are classified as brother and sister, and parents' cross-cousins are classified as parents' siblings. Cross-cousin marriage is prohibited, and marriage is to a different kind of second cross-cousin than in the Nyul-Nyul/Aranda system. Elkin describes the Karadjeri system as having three lines of descent.

Elkin's attribution of four lines of descent to the Aluridja system makes little sense, for relatives in the grandparental generation are distinguished only by gender (*bagali* (m.), *kabili* (f.)) and Elkin depicts only two broad categories of kin in Ego's generation (*malan*, sibling, and *maradu/waia*, parent's cross-cousins son and daughter) (Elkin 1954:73). His 'lines of descent' are those of kin-types rather than being terminological lines. Elkin's simplified scheme ignored the degree of variation recognized by Radcliffe-Brown.

Omaha Skewing, and Corrections to Elkin

Research by Lucich (1968), McConvell and Alpher (2002), and Rumsey (1981) added a 'type' which cuts across these categories, namely systems with 'Omaha' skewing in which terms in the mother's line are extended to succeeding generations in the patriline. This kind of extension had been described before: by Radcliffe-Brown on Ngarinyin (or Ungarinyin) and Hiatt (1965) on Gijingarli kinship for example, but the feature had not been systematically analyzed.

The structure of Western Desert kinship terminology has been clarified by Dousset (2003). Aluridja systems were characterized by Elkin (1938-40:423-424), Scheffler (1978) and others by the merging of cross-cousins with siblings, and as lacking section, subsections and exogamous moieties (Dousset 2003:44-45). Elkin's description has led to the classification of Aluridja systems as Iroquois in type, because of the presence of a specific affinal terminology among the 'Spinifex tribes' and the marriageability of 'parallel' cousins (p. 50). Dousset rejects Elkin's claim that the marriages between parallel cousins are permitted, and argues that Western Desert terminology has a Dravidian type of cross-cousin classification (p. 52). Sanctioned marriages among the Ngaatjatjarra are between cross-cousins or persons of the cross-category two generations removed, and at least of the third degree (p. 53). MB is classified as 'F' and cross-cousin as sibling in the context of generation moiety identity in certain 'sociological' situations (p. 55), and socially close cross-cousins may be reclassified as siblings, so debarring them as potential spouses (Dousset 2011).

Later Approaches to the Classification of Australian Kinship Systems

Radcliffe-Brown and Elkin classified Australian kinship systems on the basis of type cases. There have been two main alternative approaches to the classification of Australian systems of kin classification, namely the schemes of Lévi-Strauss (1969) and Scheffler (1978).

In his *Elementary Structures of Kinship* (1969) Lévi-Strauss took a quite different approach from that of Radcliffe-Brown and Elkin. His is a typology of exchange relations, based on kin classification, kin-based social categories including sections, subsections and semi-moieties, and marriage rules. The fundamental distinction made by Lévi-Strauss is between complex and elementary structures. In complex structures of kinship a person is more or less free to marry anyone not proscribed by incest prohibitions; in the case of elementary structures there is a positive marriage rule defined by kinship that narrows the field of possible spouses. Crow-Omaha systems are an intermediate type. Within elementary structures, restricted exchange refers to symmetrical relations of marriage exchange between an even number of groups, while generalized exchange is asymmetrical, and is compatible with any number of groups. These forms correspond to varieties of cross-cousin marriage – restricted exchange involves bilateral cross-cousin marriage while generalized exchange involves matrilineal cross-cousin marriage. Lévi-Strauss related these patterns to ideal forms of descent groups and residence to generate 'harmonic' and 'disharmonic' regimes. Restricted exchange corresponds broadly to Radcliffe-Brown's Kariera and Aranda-type systems and their variants, while generalized exchange corresponds to Radcliffe-Brown's Karadjeri-type systems especially the 'Murngin' (Yolngu) and Yir-Yoront systems. Lévi-Strauss relied in part on section, subsection, semi-moiety, and moiety systems to generate his models, although

these vary somewhat independently from the forms of kin classification. What is distinctive about Lévi-Strauss' approach is that he took the pattern of marriage relations between groups, generated by incest prohibition and marriage rules, as the primary criterion for his categories.

Scheffler

Harold Scheffler's (1978) approach to the classification of Australian systems is based on formal semantic analysis of a kind developed by Lounsbury (1964), and Scheffler and Lounsbury (1971) among others. Core 'meanings' of kin terms are subjected to componential analysis. Kin categories being polysemous, equivalence rules or extension rules 'account for' the extension of primary categories to other genealogical referents. Scheffler posits a number of semantic features and dimension underlying the meaning of Aboriginal kin terms, expressed as principles of conceptual opposition underlying the primary kin categories:

- kinsman v. non-kinsman
- lineal v. collateral kin
- degree of generation removal
- seniority
- sex of Alter
- relative sex
- sex of Ego.

Scheffler augments this mode of analysis with the concept of 'superclass' (a more general, inclusive class) to account for certain aspects of the Australian data. He holds that differences among the systems analyzed are secondary to, and partly based on, common structural features, for the varieties are based on the same components and there is little variation in the principle classes.

Scheffler (1978) posits a number of equivalence rules that describe a number of the key features of a variety of Australian kinship terminologies. The sibling merging rule (1978:102) describes the equivalence of a person's parent's sibling to that parent and the corresponding equivalence of a sibling's child to one's own child. The half-sibling merging rule (p. 101) describes the terminological equivalence of a person's parent's child to that person's sibling. The stepkin merging rule (p. 103) accounts for the equivalence of a parent's spouse to a parent of the opposite sex (e.g., MH = F), and conversely of a spouse's child to one's own child. According to the same-sex sibling merging rule (p. 115), a sibling of the same sex as Ego is structurally equivalent to Ego when considered as a linking relative, thereby accounting for the equivalence of a man's brother's child to his own child and a woman's sister's child to her own child. According to the parallel-cross neutralization rule, one's father's sister as a terminus is structurally equivalent to one's father's brother, and conversely a woman's brother's child is equivalent to a man's brother's child. Similarly, one's mother's brother as a terminus is equivalent to one's mother's sister, and a man's sister's child to a woman's sister's child (p. 132). The parallel-cross status extension rule accounts for the equivalence of one's parent's cross-cousin to the opposite-sex parent's sibling and the equivalence of a cross-cousin's child to the child of a sibling of the opposite sex to that cross-cousin (e.g., male cross-cousin's child is equivalent to sister's child), typical of Kariëra-type systems (p. 141). The cross-stepkin rule equates a linking kinperson's opposite sex sibling's spouse with that person's

spouse's opposite sex sibling (e.g., MBW and MHZ) (p. 141). The alternate generation agnates (AGA) equivalence rule equates a person's father's father with that person's brother, and a man's son's child with a man's sibling (p. 223). The alternative generation uterine (AGU) rule equates a person's mother's mother with that person's sister, and a woman's daughter's child with a woman's sibling (pp. 241, 249). A number of systems also equate generations +3 and -3 terminologically.

Table 2 indicates the distribution of the equivalence rules among the cases analyzed in his 1978 work. All terminologies share the half-sibling and stepkin merging rules, all but one share the same-sex sibling merging rule, and so on. Pitjantjatjara stands out in having only three equivalence rules, of which one (sibling merging) is unique among this set of cases.

Table 2: Distribution of Scheffler's Equivalence Rules (Scheffler 1978)

	Pi	Ma	Ny	Kd	YY	Mu	Di	Ab	Ng
sibling merging	x								
half-sibling merging	x	x	x	x	x	x	x	x	x
stepkin merging	x	x	x	x	x	x	x	x	x
same-sex sibling merging		x	x	x	x	x	x	x	x
parallel-cross neutralization		x	x	x	x	x	x	x	x
parallel-cross status extension		x	x	x	x	x		x	
cross-stepkin rule		x	x	x	x	x	x	x	
spouse-equation		x	x	x	x	x	x	x	x
AGA				x	x	x	x	x	x
AGU							x	x	
G±3 rule					x	x			
Omaha skewing									x

Legend

- Pi = Pitjantjatjara
- Ma = Mari'ngar [Kariera]
- Ny = Nyul-nyul/Mardudhunera
- Kd = Karadjeri
- YY = Yir-yoront
- Mu = Murngin
- Di = Dieri/Walbiri/Aranda
- Ab = Arabana
- Ng = Ngarinyin
- AGA = alternate generations agnatic
- AGU = alternate generations uterine

Nyul-nyul is identical to Mari'ngar/Kariera systems, in contrast with Elkin's analysis. (In the proposed new typology below, Nyul-nyul is classified as Quadruple, consistent with Elkin's analysis). Karadjeri, Yir-yoront and Murngin add the AGA (alternate generations agnatic) merging rule, and in two cases the G±3 rule. Dieri/Walbiri/Aranda add the AGU (alternate generations uterine) rule and delete parallel-cross status extension, and Ngarinyin is distinct from Nyul-nyul and Dieri/Walbiri/Aranda in lacking

parallel-cross status extension, cross-stepkin merging and AGU, and in having an Omaha skewing rule. I have suggested elsewhere (Keen 1988:85) that through the focus on equivalence rules and the clustering of kin classes under posited superclasses, Scheffler is led to underestimate differences between, for example, Kariera on the one hand and Yir- Yoront and Murngin on the other. Crucial differences associated with matrilineal cross-cousin marriage and asymmetrical marriage networks linking groups are elided.

Scheffler's set of equivalence 'rules' could be greatly expanded to describe equivalences and differences in each generation, and across generations. His selection accounts for only some features, while others are handled in terms of semantic classes and superclasses.

The Standardisation of Types

Radcliffe-Brown's core types of Kariera, Aranda and Murngin have shaped discussions of kinship in the Australianist literature, both in general works on Aboriginal society (e.g., Berndt and Berndt 1977; Maddock 1972; Keen 2004) and specialist works on Aboriginal kinship and marriage. Like Radcliffe-Brown, Maddock (1972:55) focuses on Kariera and Aranda as types of marriage rules: first cross-cousin and second cross cousin marriage respectively. He regards the majority of Aboriginal kinship systems as having Aranda type marriage (his Type 1), Kariera type marriage (his Type 2) or a combination of the two (his Type 3). In his overview of Aboriginal social organization, Shapiro (1979) does not appeal to types of kin terminology but examines variation in kin terminology and 'marriage classes', drawing on a variety of case studies as appropriate. Turner (1980) uses a distinctive analytical framework with categories of brotherhood group endogamy, patrilineal family exogamy, and direct exchange in consecutive, alternate, and every third generation. He also appeals to Kariera and Aranda types and sees Murriny-Patha and Karajarri ("Karadjeri") systems as intermediate types.

Kariera, Aranda, and to a lesser extent Murngin types have become reified and standardized in the international kinship literature. In some representations of Radcliffe-Brown's contribution, the variety of types becomes reduced to Kariera and Aranda (White 2007 [1959]:109-110; Kuper 1983:45; Bearman 1997), while in others Murngin is added (Fox 1967; Layton 2011:121). Of these, Kariera has become a core ideal type, not least because of its relationship to Dravidian systems.

Murdock (1949) subsumed Kariera, Dravidian and Iroquois systems under Dakota-Iroquois (Viveiros de Castro 1998:334). Radcliffe-Brown (1953) defined an Australian-Dravidian type as characterized by cross-cousin marriage and the absence of affinal categories or their non-classificatory character. Dumont (1983a cited in Viveiros de Castro 1998) contrasts the 'local formula' of Indian systems with the 'global formula' of Australian ones, and classifies Kariera as a type of Dravidian system based on bilateral cross-cousin marriage (Dumont 1983a; Trautmann 1981; Hage 2004:110; Viveiros de Castro 1998:335). In Trautmann's (1981) scheme, Kariera is identified with Dravidian B, which is Kariera-like in generations ± 2 and has a parallel-cross distinction. Hage (2004:110) distinguishes Kariera from Dravidian systems by the presence of alternate generation equations implying the presence of four marriage classes or sections, but combines Kariera and Dravidian types into 'Dravidianate' systems (2006).

A simplified Kariera system appears in Allen's (1989) tetradic theory, based on bilateral cross-cousin marriage structured by cross-cutting exogamous descent moieties

and endogamous alternate generation moieties (Hage 2006:395). Leaf and Read (2012) present a formal, algebraic analysis of the Kariera system based on a kin term map of the terminology and elucidate the relationship between the system of kin classification and the section system. Read (2010) compares the Kariera system with Dravidian systems and shows that there are fundamental, structural differences between Kariera and Dravidian terminologies, that each has a structurally different basis for a cross-cousin marriage rule, along with qualitatively different implications of the cross-cousin marriage rule for features of their respective forms of social organization.

The degree of variation in Australia has thus been reduced through the promulgation of ideal types based on Radcliffe-Brown's core types. The original choice of type cases was the result of historical and ethnographic chance, however – the fact of the early intensive field research of Gillen and Spencer with Arrernte ('Arunta', 'Aranda') people and their neighbors (Spencer and Gillen 1927), Lloyd Warner's lengthy fieldwork with Yolngu ('Murngin') people (Warner 1937), and Radcliffe-Brown's own research with Kariyarra ('Kariera') speakers (Radcliffe-Brown 1913). A different colonial and anthropological history might have produced a rather different typology based around a different set of type cases.

Alternative Approaches to Classification

The construction of the Austkin database (Dousset *et al.* 2010), which is the result of a research project funded by the Australian Research Council (ARC) from 2008 to 2011 (Grant Number DP0878556), affords the opportunity to scrutinize the Radcliffe-Brown typology and, if necessary, re-classify the Australian systems. A variety of sources have been scrutinized, including word lists, dictionaries, linguistic monographs, and ethnographic records, resulting in a database of 689 records representing several hundred languages. Of the terminologies, 82 appear to be reasonably complete, having cross-cousin terms for example, although it is likely that some apparently Kariera-like (Dual) terminologies in this sample are in fact incomplete Aranda-type (Quadruple) terminologies. It is for this reason that I also chose a more restricted sample of 41 terminologies selected on the basis of the reliability of the sources (e.g., reputable ethnographic sources and comprehensive linguistic studies of kin terminologies). Both samples give a good coverage of a greater part of the continent, although the ethnographic and linguistic record for the southeast and southwest is very thin and the database is restricted for the most part to Pama-Nyungan languages.

Several alternative approaches to constructing a new typology present themselves. One is to follow Radcliffe-Brown's method of type cases, with *ad hoc* descriptions of variants. A second would elaborate on Scheffler's (1978) approach: the aim would be to specify in detail all the alternative equivalences and differentiations for each generation and construct a matrix showing the array for each case. An alternative would be the algebraic/kinterm map approach of Read (Read 1984, 2011; Read and Behrens 1990; Leaf and Read 2012). The approach taken here, however, is to classify systems first according to their broad morphology, based on the concept of 'two line', 'four line' and 'five line' systems (seven in some Yolngu variants and the Ngarinyin system), congruent with the Radcliffe-Brownian categories of Kariera, Aranda and Murngin. Variants are classified on the basis of a variety of features, such as the marking of relative age, the

Table 3: Types of Gen +2 Terminologies

0	<p>Single PP term (e.g., Minang <i>them</i> and <i>murra</i> for PP do not seem to sort in an obvious way; Dench's (1994) Nyungar set has <i>them</i> for all PPs.)</p>				
1	<p>Sibling merging + same sex merging PPs differentiated by <u>gender</u> only, PP siblings equated with PP of same-sex:</p> <p style="text-align: center;">FM/FMZ/MM/MMZ/FFZ/MFZ FF/FFB/MF/MFB/MMB/FMB</p> <p>(e.g., Luritja, Pitjantjatjara, Bandjalang, Kok-Kaper, Kuuku Yalanji (in modified form) Kukata;</p> <p>Djabugay is anomalous with //PP classified together but has two categories of xPPs; cross-cutting this, FF and MF are both <i>ngaty</i> – I classify this as type 1/2)</p>				
1B	<p>//PPSb and xPPSb are separate categories from PPs and are also sorted by gender into four categories:</p> <table border="0" style="margin-left: auto; margin-right: auto;"> <tr> <td style="padding: 0 20px;">FM/MM</td> <td>FF/MF</td> </tr> <tr> <td style="padding: 0 20px;">FMZ/MMZ/FFZ/MFZ</td> <td>FFB/MFB/MMB/FMB</td> </tr> </table> <p>(e.g., Wirangu)</p>	FM/MM	FF/MF	FMZ/MMZ/FFZ/MFZ	FFB/MFB/MMB/FMB
FM/MM	FF/MF				
FMZ/MMZ/FFZ/MFZ	FFB/MFB/MMB/FMB				
2	<p>Parallel-cross differentiation but not gender differentiation + sibling merging</p> <p style="text-align: center;">FF/B/ZFM/Z/B MM/Z/B MF/B/Z</p> <p>(e.g., Kuku-Yalanji, Uw-Oykangand)</p>				
2B	<p>As 2 but with separate MM term (e.g., Ogunyjan)</p>				
3	<p>//x and gender differentiation + sibling merging Parallel and cross grandkin are distinguished, and grandkin are distinguished by gender; a PP's same and opposite sex siblings are equated with that PP:</p>				

Table 3: Types of Gen +2 Terminologies (cont'd)

	FM/Z/B	FF/B/ZMF/B/Z	MM/Z/B
	(e.g., Diyari, Linngithig, Mangarrayi, Pirladarpa, Warlpiri)		
4	<p>// and xPPs differentiated, and PPs differentiated by gender PP's same sex sibling equated with that PP PP's opp. sex Sb equated with PP of same x-ness, i.e., xPP opp, sex Sb = same sex xPP, //PP opp, sex Sb = same sex // PP):</p>		
	<p>FM/Z FF/B MF/B MM/Z</p> <p>MFZ MMB FMB FFZ</p>		
	(e.g., Adnyamathanha, Kariyarra, Walmajarri) (Yalukal has added FFZ term)		
4B	As 4 but with separate FFZ and FMB terms (Wilyakali)		
5	<p>// and x PPs differentiated, and PPs are differentiated by gender; sibling merging applies to //PPs; xPP's opp. sex Sb merged with PP of same sex:</p>		
	<p>FF/B/Z FM/Z MF/B MM/Z/B</p> <p>MFZ FMB</p>		
	(e.g., Yir Yoront, Yolngu; in the Yolngu terminology parallel grandkin merged at superclass level, and MMMBS/D (WMM/WMMB) terms and their reciprocals added)		
6	<p>Modified type 3: Parallel and cross PPs are differentiated, and then by gender, but FFZ and FMB migrate to the complementary //PP and xPP respectively:</p>		
	<p>MM/Z/B FF/B MF/B/Z FM/Z</p> <p>FFZ FMB</p>		
	(e.g., Martuthunira)		
7	<p>// and x PPs differentiated and PPs differentiated by gender; same-sex sibling merging in case of FM/FMZ, sibling merging in other cases; FMB equated with MF:</p>		

Table 3: Types of Gen +2 Terminologies (cont'd)

	FM/Z	MF/B/Z FMB	FF/B/Z	MM/Z/B
	(e.g., Murriny Patha)			
8	Differentiation of PPs by gender; PPSbs classified separately and differentiated by gender; AGA equation: $PP_{maleSb} = eB$, $PP_{femaleSb} = eZ$:			
	FF MF	MM FM		
	FFB, MMB FMB, MFB	MMZ FFZ MFZ FMZ		
	(e.g., Wirangu)			
9	Parallel PPs merged and differentiated from cross PPS; two categories of xPP; xPPSb merged with that PP; MM = FM in an additional category:			
	MM FF	FM	MF	
		FMZ FMB	MFB MFZ	
	MM FM			
	(e.g., Buandig (Bungaditj); Muruwarri appears similar, though not all PPSbs are recorded; FFb is classified as eB.)			
10	Same-sex sibling merging, not sibling merging except MM/MMB:			
	FF/FFB FFZ MF/MFB MFZ FM/FMZ FMB MM/MMZ/ MMB			
	(e.g., Ngarinyin)			

addition of certain categories such as parent's cross-cousin, Omaha skewing, the form of the grandparental terminology, and so on.

Classifying Systems of Kin Classification in the Austkin Database

The typology is based implicitly on the idea of 'lines of descent' in the structural-functionalist models of Australian kinship systems and so it bears some resemblance to Radcliffe-Brown's and Elkin's typologies. It substitutes the categories of *Dual* and *Dual Augmented* for Kariera type and its variants, and *Quadruple* for Aranda type and its variants. The Western Desert or Aluridja ('Loridja') systems become *Dual with horizontal*

merging. The so-called Murngin (or Karadjeri) type becomes the *Asymmetric A* type (Yolngu and Yir-Yoront), and the Ngarinyin system (shared with Wororra and Wunambal people) becomes the *Asymmetric B* type. The Dual and Quadruple categories are subdivided according to a number of features, such as the marking of relative age in generation +1 and AGA or AGU equivalence. I classify the Garnai (“Kurnai”) and Bidawal systems of eastern Victoria as *non-Dual*, for there appears to be no cross-cousin term and the terminology is not markedly dual in the other generations.

The categories are justified by being able to sort terms in Dual, Quadruple and Asymmetric systems consistent with moiety and (in the first two cases) section, subsection and semi-moiety systems; that is, into distinct sequences of terms linked by filiation. With some exceptions, categories in the Dual systems sort into two sequences through patrification or alternatively through matrification (although Dual Augmented systems are not so neat). Dual terminologies are the most common; they are also the most varied in the classification of grandkin, which is by no means uniform across Dual terminologies, and in other features.

The Non-Dual terminologies are so called because the terms cannot be sorted consistently into patri or matri-sequences. The *Dual with Horizontal Merging* (Western Desert terminologies) systems are dual only in generation +1 and generation 0 where cross-cousin is differentiated from sibling/parallel cousin terms. Relatives in generation +2 are differentiated only by gender.

The Quadruple systems can be represented as having four terminological lines, although there is some horizontal merging in a number of systems; that is, the degree of differentiation consistent with four terminological lines is reduced in some cases. Asymmetric A systems have between five terminological patri-sequences (Yir-Yoront and some Yolngu variants) and seven (other Yolngu variants). Asymmetric B systems comprise the terminologies of Ngarinyin people and their Wororra and Wunambal neighbors (with seven terminological patri-sequences), and possible Marra of the western Gulf of Carpentaria, which has a similar form to the Ngarinyin terminology in Heath’s (1981) account, although Warner (1933) gives it an Aranda type form.

These categories are roughly equivalent to Radcliffe-Brown’s and Elkin’s Aluridja or Loridja type (Dual with horizontal merging), Kariara type (Dual, Dual Augmented), Aranda type (Quadruple), Murngin type (Asymmetric A), and Ungarinyin type (Asymmetric B) types.

Table 3 shows the typology of grandkin terminologies, ranging from a single PP term (Type 0, Minang), to same-sex sibling merging only (Type 10). The discussion that follows indicates the type of grandkin terminology for each main terminological type. Table 4 shows an extract of the full typology and analysis, followed by a general outline and discussion of the typology.

Non Dual

I have classified the Garnai (Kurnai, Gunnai) and Bidawal terminologies of eastern Victoria as non-Dual, for they differ from Western Desert terminologies in apparently lacking a cross-cousin category and having only sibling categories in generation 0. The grandparental terminology is more complex with five self-reciprocal terms and with sibling merging except for FF/B and FFZ. Some PPSb terms are missing, however, making a

Table 4: Sample of the Full Analysis and Typology

Dual augmented	<i>Language</i>	<i>Group</i>	<i>Location</i>
with parent's x-cous term			
4 PP ?2CC terms non self-recip. type 3 , Sb merging; Added Pxcous term (MMBS/WB), PeSb terms; yBS term, general C term.	Linngithigh	Paman Northern Pama	W CYP QLD (note marriage to MMBD of Dyirbal) [Hale letter]
with second x-cous terms			
4 PP, 3CC terms, type 7 (Sb merging except FMB = MF, sep. FM term); sep. MMBS&D terms = WM, WMB; MMBSS&D = W & WB; wSC = mDC, mSC ≠ wDC.	Murriny Patha	Murrinhpathan	Daly River NT [Blythe, Walsh]
with parent's x-cous term and second x-cous terms			
2 PP/CC terms type 1 ; _ <u>Parent's x-cous term (umari)</u> , _ <u>parent's matri-x-cous term</u> W/WB (waia); second xcous term.	Kokatha	Southwest Wati	Ceduna SA [Elkin]*
with distant x-cous term			
2 PP terms type 0? (incomplete); plus distant x-cous term; FyBS term	Minang	Southwest Nyungar	King George Sound SW WA [Bates]
and relative age in gen +1			
5 PP terms, 1 CC term non-self-recip. type 3/4 (incomplete); <u>MeB, MyB</u> ; distant x-cous term, FyBS term.	Paakantyi	Baakandji group	N Central NSW
with AGA and/or AGU equivalence			
4 PP/CC self-recip type 4 ; <u>sep. MMBDD term</u> ; AGA MF = MBC .	Adnyamathanha	Southwest Yura	L. Frome, Flinders Ra. SA [McEntee dict. Schebeck]

Table 4: Sample of the Full Analysis and Typology (cont'd)

6 PP/CC self-recip. type 6 modified (Sb merging except FF/B ≠ FFZ, FMB≠FM/Z, add. wFMB term [self recip.]); sep. Mfxcous term (WM etc.); wC/ZC = mC/BC (several terms); horizontal merging MBDS = MMBSSS; sep. terms for wSC, mZSD and wSS; AGA: MM/B = MMBSC, MMBS&D = MMBSSS&D.	Martuthunira	Southwest Coastal Ngayarda	NW WA [Maitland, west of Port Hed- land] [Radcliffe-Brown]*
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Key

PP	grandparent
xPP	cross-grandparent
CC	grandchild
recip.	self-reciprocal
sep.	separate
x-cous.	cross cousin
Mfx-cous	mother's female cross-cousin
AGA	alternate generations agnates

complete determination of its type difficult. There is a general C term plus opposite sex SbC terms.

Dual with Horizontal Merging

These systems are characteristic of the Western Desert (Pitjantjatjara, Ngaanyatjarra, NE Aluridja) and of Ceduna in the South Australian Bight (Wirangu). Even though there are just two grandparental terms distinguished only by gender, I classify these as 'Dual' because cross-cousin is distinguished from the sibling categories – although socially close cross-cousins are reclassified as siblings (Doussset 2003). These terminologies consistently have generation ±2 terminologies of type 1, which distinguish PP's and their siblings by gender only. The Wirangu system incorporates AGA equivalence and vertical merging (eZ = PZ = PPZ, x-cousin = C).

In generation -1, Pitjantjatjara has terms for own and same-sex sibling's S and D and separate terms for opposite sex sibling's son and daughter.

I have classified the Mandjindja system as *Dual with horizontal merging, augmented* as it is a Western Desert terminology but with an extra MMBSC term distinguished from the sibling terms.

Doussset (2003, 2008) classes the Western Desert kin terminology as Dravidian. Consistent with this view, Dravidian systems as a class differ from most Australian systems through lack of congruence between generations in terms of a 'parallel-cross' distinction. While the categories of parallel and cross may not be applicable to Australian systems (Viveiros de Castro 1998), nevertheless the congruence between generations in terms of lineality enables many of the terminologies to be mapped onto kin-based catego-

ries (moieties, sections, subsections, and semi-moieties) in a consistent way. The Western Desert terminologies and the non-Dual Garnai system (see article by McConvell and Gardner) are fully consistent only with endogamous generation categories. The classification of parent's cross-cousin's child as a sibling and the assimilation under certain circumstances of cross-cousins to siblings are both inconsistent with moiety and section organization.

Dual Systems

Dual terminologies (in the restricted sample) are associated with types 1, 2, 2A, 3, 4 and 9 grandkin terminologies. This is surprising, for it is the type 4 PP terminologies that are supposedly diagnostic of the 'Kariara type'. This variety continues in the more elaborate Dual terminologies, including those with AGA and AGU equivalence, where types 2C, 3, 4, and 9B grandkin terminologies are found.

In generation +1, the terminology is bifurcate merging. Some Dual terminologies include additional categories such as a parent's older and younger sibling. Some Dual Augmented terminologies add a parent's cross-cousin category. The restricted number of categories means that a parent's cross-cousin's children are merged with the siblings of the opposite-sex parent. Same-sex sibling merging entails that a parent's same-sex sibling's children are merged with siblings.

In generation 0, parallel cousins (MZC, FBC, etc.) are classified as siblings and siblings/parallel cousins are differentiated from cross cousins. The classification of siblings varies in detail (e.g., the presence or absence of a 'ySb' term), as does the classification of cross-cousins (e.g., the presence or absence of opposite sex cross-cousin terms). Some Dual Augmented terminologies add a second cross-cousin term.

In generation -1, a man's own children are classified with a person's brother's children and distinguished from a woman's children, who are classified with a person's sister's children. Male cross-cousin's children are equated with wC/ZC (or the gender differentiated categories) and female cross-cousin's children are equated with mC/BC (or mS/BS and mD/BD).

In generation -2, the terms are often self-reciprocal. Generally, mSC is merged with wDC and wSC merged with mDC. The children of cross-cousin's children are merged with these categories (MBSSC = mDC/wSC, etc.).

Some variants have opposite sex cross-cousin terms (Wati-wati), a single mC/BC term and wC/ZC term (Mayi-Thakurti), marriage to 'FMB' (Jaru), cross-sibling's child terms (Kuyani), adoptive child terms (Bardi), and a separate MZ term (Walmajarri). One variant has relative age differentiation in gen +1, notably in eastern Cape York Peninsula, with 2 PP and 2 CC terms (non self-reciprocal) and a distinction between own C and SbC (Bandjalang). Another variant has AGA equivalences and another adds AGU equivalence. Some AGA terminologies have relative age differentiation in gen +1. Some Dual systems have Omaha skewing, notably in Cape York Peninsula.

The Wirangu (Ceduna) terminology is unusual in being Dual with AGA equivalences (PPB = eB), vertical merging (but not skewing) of PPZ > PZ > eZ and, oddly, equivalence between cross-cousin and own child.

With some exceptions, such as the Wirangu equivalence between cross-cousin and own child, the terms form two sequences or 'lines' traced through patrilineation and two sequences or 'lines' traced by matrilineation, hence are generally consistent with matri-

and patri-moiety systems. They are also consistent with section systems in distinguishing the generations.

Dual Augmented

Dual Augmented terminologies move closer to Quadruple terminologies by having a separate parent's cross-cousin term (e.g., Kokatha) or a distinct second cross-cousin term (e.g., FFZSC, MMBDC), or distinct distant cross-cousin term (e.g., Murrinh Patha). Some also have relative age differentiation in gen +1 (Lin-ngithig) along with some horizontal merging (MBDS = MMBSSS in Martuthunira). Pakantyi adds a distant cross-cousin term and relative age differentiation in gen +1. Some Dual Augmented systems have AGA or AGU equivalences, or both, and Wangaaypuwan has AGU with relative age differentiation in gen +1.

By no means do all Dual terminologies have what Radcliffe-Brown took as a criterion of Kariera type systems, namely the classification of grandkin on the basis of parallel/cross and gender (FM/Z = MFZ, FF/B = MMB, FM/B = FMB, MM/Z = FFZ). The Dual augmented terminologies are associated with types 1, 3, 4, 6 and 7 grandkin terminologies, and possibly type 0, with one terminology being ambiguous due to incomplete data (3/4). Type 3 is the most frequent in the Dual and Dual augmented types, with six cases altogether.

Overall, Dual terminologies, including Dual with Horizontal merging and Dual Augmented terminologies, are the most common in the sample (67.1% in the larger sample, a proportion of which may be incomplete Quadruple terminologies, and 41.5% in the restricted sample) and are also very widely distributed. In addition, they vary considerably in form, not least in the grandparental terminologies. This variability may be an indication of comparative antiquity. The distribution is inconsistent with Radcliffe-Brown's belief that Aranda type systems were the most common in Australia.

The augmentation of Dual systems brings some quite close to Quadruple systems, especially Quadruple with horizontal merging (e.g., the Martuthunira system, see Table 2).

Quadruple Terminologies

Quadruple terminologies conform, more or less, to Radcliffe-Brown's 'Aranda type'. All the examples in the restricted sample have type 3 grandparental terminologies in which four categories of grandparents are distinguished and their same and opposite-sex siblings are merged with the respective grandparents, yielding four categories.

In generation +1, the bifurcate-merging terminology is supplemented with parent's cross-cousin categories, and, in addition, FMBC = FFZC and MFZC = MMBC. Thus a parent's cross-cousins are distinguished from the opposite sex parent's siblings and parent's cross-cousins' children are distinguished from siblings and cross-cousins. These categories are sometimes divided on the basis of gender.

In generation 0, the distinction between siblings/parallel cousins and cross-cousins is supplemented by parent's cross-cousin's children categories (FMBSC, MMBSC, etc.)

In generation -1, second cross-cousins' children are differentiated from mC/BC and wC/ZC (MMBSSC is differentiated from mC/BC and FMBSSC from wC/ZC).

Quadruple with horizontal merging

Several terminologies in the sample, including Ngan'gikurungurr and Warumungu, are Quadruple in form but neutralize some horizontal distinctions. In Ngan'gikurungurr MMBSSC is equivalent to mC/BC and possibly MMBDSC is equivalent to wC/ZC; in Warumungu wC/ZC is equivalent to MBSC. I have classified Warumungu primarily as Quadruple with Omaha skewing, however, as this is the more dominant feature in the sense that it governs a greater number of categories in the terminology than horizontal merging.

Quadruple With AGA and/or AGU Equivalences

Thirteen Quadruple systems in the larger sample have AGA and/or AGU equivalences (e.g., Diyari, Warlpiri) (There are eleven cases in the restricted sample.) Some of these also have relative age differentiation in gen +1 and some add horizontal merging; e.g., MMBSS and MMBSD with siblings (Wangkangurru and Yandruwandha).

Quadruple with Omaha Skewing

A number of Quadruple systems have Omaha skewing, which does not occur with AGA or AGU equivalence but is combined in the Warumungu terminology with horizontal merging.

Asymmetric A

Yir Yoront and Yolngu terminologies are of the Asymmetric A type. They have three to four grandparental terms of type 5 and 5A and differentiate MBC from FZC. This distinction ramifies throughout the terminological system. For example, the proper wife category for *ngapipi* (MB) is *mukul* (MMBD). There are nine Yolngu 'dialect groups' (Schebeck 1968; Morphy 1983) and there is some variation of kin classification among the dialects.

These terminologies are of Radcliffe-Brown's Murngin type, but he appears to have been mistaken in typifying Karadjeri (Karajarri) as an asymmetric system (Scheffler 1978:209). I class them as 'asymmetric' primarily because matrilineal cross-cousins are differentiated from patrilineal cross-cousins (see also Fox 1967), but also because the marriage network between patrilineages is asymmetrical, although exchange relations between more inclusive patrilineages or 'clans' is often reciprocal (Keen 1982). The type marriage is between a man and someone classified as his matrilineal cross-cousin (*galay'miringu*), while marriage between a man and his patrilineal cross-cousin (*dhuway'miringu*) is forbidden. This asymmetry is found throughout the terminology, so that, for example, wC/ZC is not equivalent to MBSC as it is in a Dual terminology.

In generation +2, FMB is merged with MF and MFZ with FM, but FF and FFZ are distinguished from MM and MMB, unlike the Dual terminologies. Some variants of the Yolngu terminology (but not the Yir-Yoront terminology) further differentiate MMMBD and MMMBS from FM/MFZ and MF/FMB as WMM and WMMB, respectively (and the reciprocals are also differentiated). These categories are repeated by AGA equivalence two generations lower. In generations +3 and -3, however, the form of the terminology is Dual in form as it distinguishes only two kinds of kin in each generation: *ga:thu* ('mC/BC') for a relative in generation +3 of the same patri-moiety, *waku* ('wC/ZC') for a relative in generation +3 of the opposite patri-moiety, *ba:pa* ('F/FB') and *mukul*

ba:pa ('FZ') for relatives in generation -3 of the same patri-moiety, and *nga:ndi* ('M/MZ') and *ngapipi* ('MB') for relatives in generation -3 of the opposite patri-moiety.

In generation +1, the terminology includes a bifurcate-merging component as in other Australian types of kinship terminologies, but not all kin of this generation are so classified. Ego's mother's matri-cross-cousins are not 'F/FB' or 'FZ' but comprise distinct WM/WMZ and WMB categories. Ego's father's patri-cross-cousins are classified not as 'M/MZ' or 'MB' but as 'wC/ZC' through alternate generation agnatic (AGA) equivalences. A similar number of distinctions are made in the generation of Ego's children.

In generation 0, siblings are classified by gender and relative age, parallel cousins (FBC, MZC, FFFBSC, etc.) are merged with siblings, but matrilineal cross-cousins are differentiated from patrilineal cross-cousins. In Kariera systems, cross-cousins of cross-cousins are classified as siblings, but in the Yolngu terminology the patri-cross-cousin of a matri-cross-cousin, and the matri-cross-cousin of a patri-cross-cousin are classified as siblings, while the matri-cross-cousin of a matri-cross-cousin is classified as 'MM/MMZ' or 'MMB' (through AGA equivalences) and, reciprocally, the patri-cross-cousin of a patri-cross-cousin is classified as 'wDC/ZDC'.

The exemplars of this type are isolated and situated on opposite shores of the Gulf of Carpentaria, in northeast Arnhem Land (Yolngu) and western Cape York Peninsula (Yir-Yoront). There are a number of Yolngu languages however, with nine recognized 'dialect groups' (Morphy 1983; Schebeck 1968) and some variation in kin terminologies. McConvell and Keen (2011) and Keen (2013) propose that the Asymmetric A systems may have evolved from Dual (Kariera-like) terminologies through an ordered series of

Table 5: Distribution of types in the larger sample

Non-Dual	2	
Total Non-Dual	2	2.3%
Dual with horizontal merging	2	
and with AGA and vertical merging	1	
Dual with horizontal merging, Augmented	1	
Total Dual with horizontal merging	4	4.6%
Dual simple	20	
with rel. age gen +1	6	
and opp-sex x-cous terms	1	
and general C term	1	
and ownC/xSbC differentiation	1	
with AGA/AGU	11	
and rel. age gen+1	2	
and opp, sex SbC term	1	
with Omaha skewing	1	
Total Dual	44	51.8%

Table 5: Distribution of types in the larger sample (cont'd)

Dual Augmented		
with P x-cous. term	1	
with 2 x-cous. term	1	
and Px-cous. term	1	
with distant x-cous. term	1	
and rel. age gen +1	1	
with AGA/AGU	3	
and rel. age gen +1	1	
with Omaha skewing	1	
and AGA/AGU	1	
Total Dual Augmented	11	12.9%
Quadruple with horizontal merging	1	1.2%
Total Quadruple with horizontal merging	1	
Quadruple		
with AGA/AGU	8	
and rel. age gen +1	1	
and horizontal merging	3	
with Omaha skewing	2	
and AGA/AGU	1	
Total Quadruple	15	17.6%
Asymmetric A with AGA	2	
with MMMBS/D terms	3+	
Total Asymm. A	5+	5.9%
Asymmetric B	4	4.6%
Total Asymmetric B	4	
Total	85	101%

differentiations, beginning with the distinction between MBC and FZC categories and the addition of AGA equivalences in several patri-sequences of terms.

Asymmetric B

Asymmetric B systems are also associated with marriages linking patri-groups in asymmetrical relations. This type includes the kin terminologies of the Ngarinyin people, their Wororra and Wunambal neighbors of the Kimberley region, and possibly the Marra terminology of the western Gulf of Carpentaria, which Warner (1933) classified as Aranda type. Radcliffe-Brown (1931) thought that Yaralde was similar to Ngarinyin, but the ter-

minology is in fact Dual (Kariera type). The Ngarinyin kinship terminology appears, on the face of it, to be Quadruple (Aranda-like) by distinguishing four kinds of relatives in the grandparental generation (see Turner 1980). Its grandparental terminology is type 10, as it differentiates MFZ from FM and FMB from MF. The terminology also differentiates first and second cross-cousins. The terminology differs from Quadruple terminologies, however, in that wC/ZC (*marlangi*) is not equivalent to FMBSSD (*marringi*) and FMBSSS (*wayingi*), so it does not form part of the FM/FMB terminological patriline, and the mDC/BDC category (*marlangi*) is not equivalent to MBSSC (*mamingi*) in the MF patriline, although wDC (*gayingi*) is equivalent to categories in the MMB patriline (see Keen 2004, 2013).

The preferred marriage in the Ngarinyin system is between a man and his 'FM', including FMBS and FMBSSD. This is a matrilineal marriage (from the man's point of view), for the preferred wife category is of the father's mother's patriline. The skewing of terms in Ego's mother's and father's mother's lines, combined with a preference for marriage of a man to his classificatory 'father's mother', transforms the system into an asymmetrical one.

Heath's (1981) record of the Marra terminology is similar in form to the Ngarinyin one, although Warner (1933) represents the Marra terminology as Aranda type (i.e., Quadruple). The grandkin terminology is type 3, consistent with a Quadruple terminology. As with Asymmetric A, the exemplars of Asymmetric B are widely separated in space and in language family: Ngarinyin, Wororra and Wunambal languages (which share this type of terminology) are situated in the western Kimberley, while Marra language is situated at the southwest of the Gulf of Carpentaria. Keen (2013) proposes that Asymmetric B terminologies may have evolved from Dual (Kariera-like) terminologies, primarily through Omaha skewing.

The Frequency and Distribution of the Types

The distribution of types in the larger sample is shown in Table 5 and of the smaller sample in Table 6. It is evident that non-Dual terminologies are very rare in both samples (2.3% and 3.8% respectively). Figures for Dual with horizontal merging (Western Desert) are 4.6% and 9.6%. Dual and Dual augmented terminologies are the most frequent (64.7% of the larger sample and 40.3% of the restricted sample). Quadruple and Quadruple with horizontal merging terminologies are significantly less frequent, though they form a larger percentage in the restricted sample (18.8% and 28.8% respectively), and Asymmetric A terminologies are quite rare (5.9% and 9.6%), as are Asymmetric B terminologies (4.6% and 7.7% respectively), although the number of Yolngu terminologies would appear greater if all language varieties were taken into account.

The distribution maps (Maps 1-8) show that non-Dual terminologies are restricted (in the smaller sample) to the southeast corner of the continent (Map 1); Dual terminologies with horizontal merging are characteristic of the arid zone (Map 2); Dual terminologies are widely distributed, although the paucity of the record means that they do not appear in the southeast and southwest in the restricted sample (Maps 3-4). Quadruple terminologies are largely confined in distribution to certain language families (Murrin Patha, Karnic, Nyulnyulan, Maran, Gunwinyguan, Mangarrayic, Southwest Ngarga, Enindilyagwan, Nunggubuyan, and Waramungic in the larger sample) from the Lake Eyre region

Table 6: Distribution of types in restricted sample

Non-Dual	2	
Total Non-Dual	2	3.8%
Dual with horizontal merging	4	
Dual with horizontal merging, aug.	1	
Total Dual horiz. merg.	5	9.6%
Dual	9	
with rel. age gen+1	2	
with AGA/AGU	1	
with Omaha skewing	1	
with opp, sex SbC and general C term	1	
with opp, sex cous and opp, sex SbC term	1	
Total Dual	15	28.8%
Dual augmented		
with Pxcous term	1	
with 2xcous term	1	
with Pxcous and 2x-cous	1	
with AGA/AGU	2	
and rel. age gen +1	1	
Total Dual aug.	6	11.5%
Quadruple with horizontal merging and Omaha skewing	1 2	
Total Quadruple with horiz. merg.	3	5.8%
Quadruple		
with AGA/AGU	8	
and rel. age gen +1	1	
with Omaha skewing	3	
Total Quadruple	12	23.0%
Asymmetric A with AGA	2	9.6%
with MMMBS/D terms	3+	
Total Asymm. A	5+	
Asymmetric B	4	
Total Asymm. B	4	7.7%
Total	52	99.8%

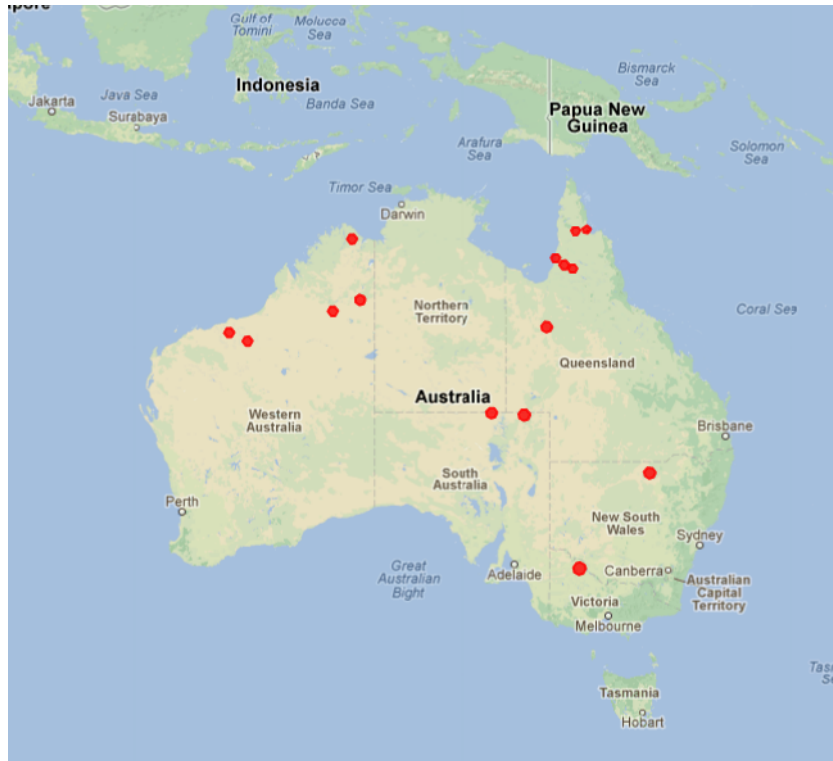
to northern Arnhem Land (Maps 5-6), while the asymmetric terminologies are restricted in provenance, confined to the tropical north coast (Maps 7-8).



Map 1: Non-dual terminologies.



Map 2: Dual with horizontal-merging terminologies.



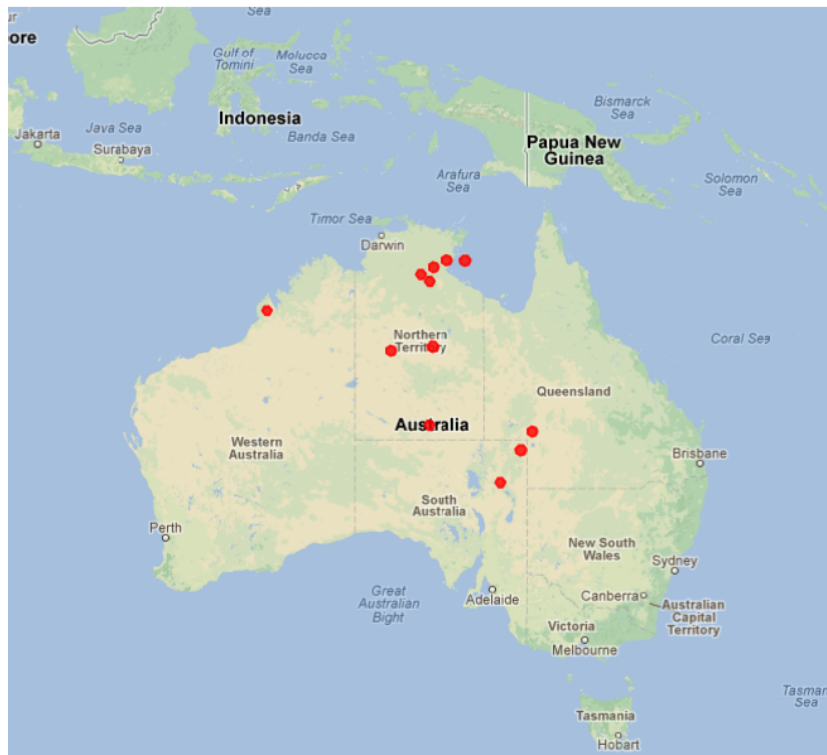
Map 3: Dual terminologies.



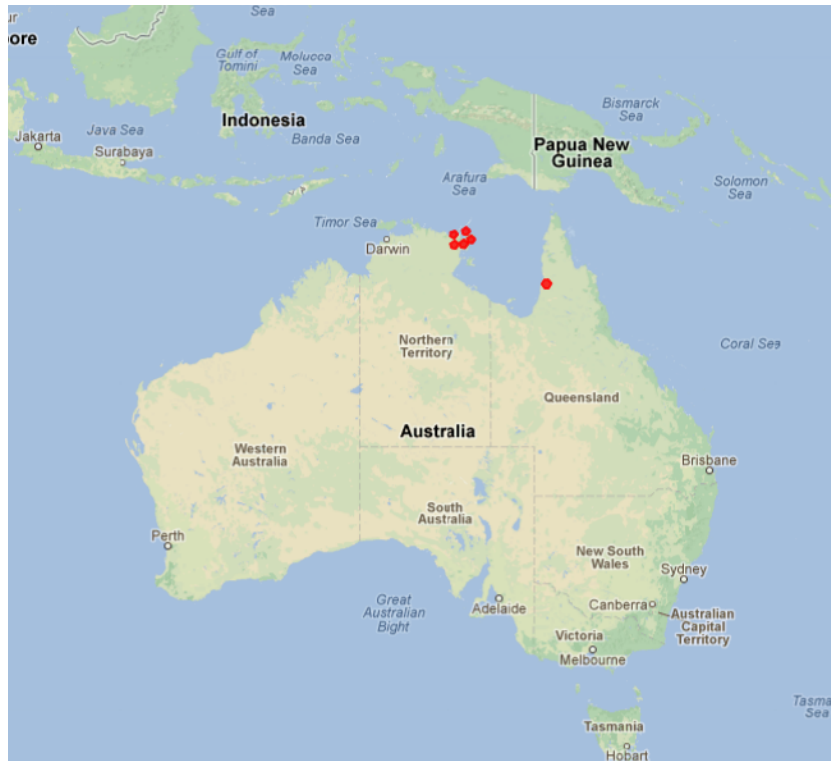
Map 4: Dual augmented terminologies.



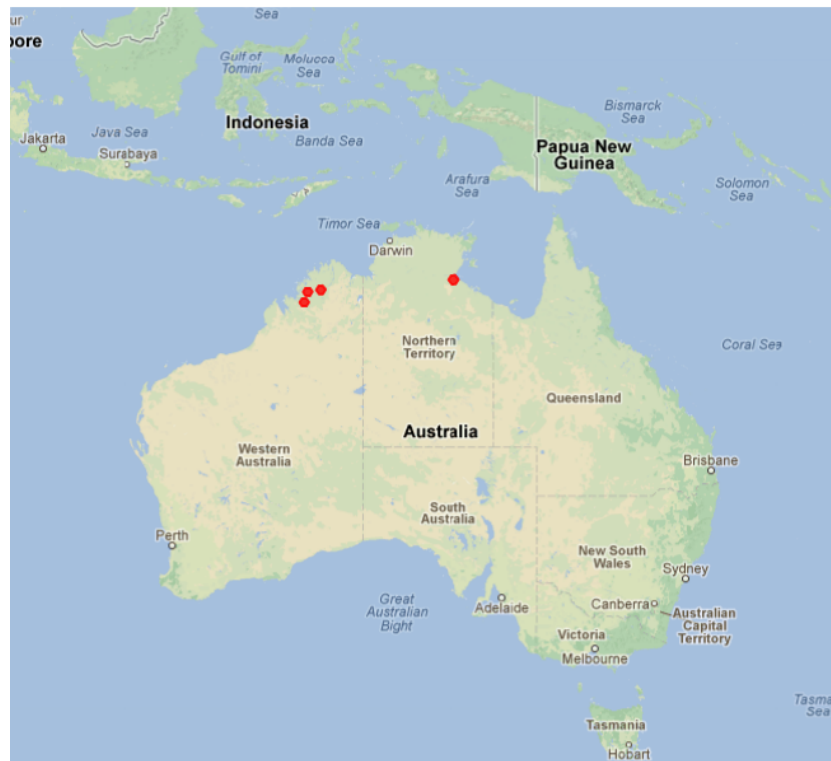
Map 5: Quadruple with horizontal merging terminologies.



Map 6: Quaruple terminologies.



Map: 7 Asymmetric A terminologies.



Map 8: Asymmetric B terminologies.

Conclusions

How well does the Radcliffe-Brown typology stand up in light of the new typology based on the Austkin database? In many ways the new typology supports Radcliffe-Brown's main insights: Dual and Quadruple terminologies, corresponding to his Kariera and Aranda types, are indeed numerically dominant in Australia, although the Dual terminologies are the most frequent and not Quadruple, and 'Murngin' (Asymmetric A) does form a distinct type. The 'Aluridja type' Western Desert terminologies (Dual with Horizontal Merging) are also distinctive, as recognized by Dousset. The most radical change is the classification of the Ngarinyin system (and perhaps Mara) as a distinct type (Asymmetric B). The Ngarinyin system is associated with a particular marriage networks, different from the marriage network associated with the Yolngu terminology (Blundell and Layton 1978; Keen 2004, 2006).

A difficulty with the proposed typology, characteristic of some modes of classification in biology, is that it is not strictly nesting, but reticulated, so that a feature may occur at different 'levels' of the typology. Horizontal merging, for example, is the basis for a major variety of Dual terminologies, but also appears as a lower level feature of Quadruple terminologies. It could be argued that Dual Augmented is not a unitary type but a cover term for several distinct variants of Dual terminologies.

What advantages does the new typology confer? Due to the size of the Austkin database, it is more comprehensive in coverage than Radcliffe-Brown's survey, giving a better idea of the variation across the continent and the geographical distribution of types, although non-Pama-Nyungan languages are as yet poorly represented. The typology is also more systematic than Radcliffe-Brown's in its treatment of variants of the key types. It is unfortunate that some very interesting features occur in terminologies that are too incomplete to confidently assign to a type; many have the appearance of Dual terminologies, but may be incomplete Quadruple ones.

I have not considered here the relationship between systems of kin classification and kin-based categories and groups (descent groups, moieties, sections, subsections and semi-moieties), or indeed marriage rules and practices. These topics will be the focus of research by Harold Koch, Patrick McConvell, and Jane Simpson of the Australian National University in a new research project recently approved by the Australia Research Council, following up the Austkin project. The more detailed typology of kin terminologies will enhance research into the relations between kin classification to other aspects of social organization.

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