LANGUAGE PHYLA OF THE INDO-PACIFIC REGION: RECENT RESEARCH AND CLASSIFICATION

Roger Blench

Overseas Development Institute, Portland House, Stag Place, London SW1E 5DP, UK

ABSTRACT

The Indo-Pacific region exhibits the greatest language diversity of any comparable region in the world. Including major languages such as Chinese and Hindi, it is also the location of a great many isolates, suggesting long periods of diversification in relative isolation. The paper gives an overview of recent scholarship on the language phyla of the region, paying partcicular attention to classification issues.

1.1 GENERAL

The Indo-Pacific region may well be the area of the world where interaction between linguists and archaeologists has historically been most fruitful and where it continues to develop. It includes not only some of the languages of the world with most speakers (Chinese, Hindi) but also the greatest number of extinct or moribund languages (Australia). It also, strikingly, encompasses the great majority of the world's isolates or small phyla, that is phyla restricted to one or two languages. Research proceeds apace in both disciplinary areas and it seems useful for archaeologists to stand back at regular intervals and make sense of recent thinking about language classification and distribution. This contribution[1] is intended to provide an overview of the languages, summarising recent scholarly debates and synthesising recent thinking about classification. It should be read in conjunction with van Driem (this volume) which deals with the Sino-Tibetan languages. The sections are organised by phylum, except in the case of the Siberian languages which are grouped together to avoid multiplying major headings. Given the complexity of the topic, proposed connections with regional archae-ology are left in abeyance, but Janhunen (1998) has recently evaluated various proposals for the archaeological correlates of the language phyla of NE Asia.

The terminology of language classification is constantly evolving and has a tendency to vary with the scholarly traditions of each phylum. Indeed, the terms phylum, stock, family, branch, section, group, subgroup, language, lect, communalect and dialect are not always applied consistently even between authors in one area. Wurm and McElhanon (1975:152) attempted to develop a lexicostatistics-based system to refer to the languages of Papua New Guinea (Table 1).

Table 1. Definitions of language groupings

Term	Percentage Range
Phylum	5-12
Stock	13-28
Family	29-45
Subfamily	46-69
Language	70-81
Dialect	above 81

Source: Wurm and McElhanon (1975:152)

Scepticism about the value of lexicostatistics has inhibited many authors from adopting so mechanical a system, but the terminology has gradually made its way into academic writing. As more syntheses of world languages appear (e.g. Ruhlen 1991), a partial consensus is slowly emerging. Most important here is the use of "phylum", now applied to the large well-known and reasonably established families of languages such as Indo-European or Sino-Tibetan, but more controversially extended to any language grouping whose external affiliations are unclear

Table 2. Language phyla of the Indo-Pacific region and their status

Phylum	Acronym	Where Spoken	Status / Comment
Indo-European	IE	Eurasia	Accepted
Dravidian	DR	India	Accepted
Yeniseic-Burushaskic	YB	Siberia	A new idea proposed by van Dreim (in press)
Kusundic	K	Nepal	Accepted
Sino-Tibetan	ST	Central Asia	Accepted
Miao-Yao	MY	China	Accepted
Daic (=Tai-Kadai)	D	SE Asia	Accepted
Japonic	JP	Japan, Rukuyu islands	Accepted but sometimes placed within Altaic
Andamanese	AD[b]	Andaman islands	Inadequate data
Austroasiatic	AS[a]	SE Asia	Accepted
Austronesian	AN	Pacific, SE Asia, Madagascar	Accepted
Trans-New-Guinea	TNG[b]	Papua New Guinea	An earlier idea now regaining acceptance
Pama-Nyungan	PNY	Australia	Accepted
Altaic	AT	Eurasia	Usually accepted, affiliation of Korean debated
Papuan	PP[b]	Melanesia	Consists of a large number of accepted groups
Australian	AU[b]	Australia	Consists of a large number of accepted groups
Ainuic	AI	Japan	Extinct
Yukaghiric	YK	Siberia	Sometimes taken as a primary branch of Uralic
Chukchi-Kamchatkan	CK	Siberia	Accepted

[a]AA is unfortunately used for both Afroasiatic and Austroasiatic. AS is adopted here for Austroasiatic to eliminate confusion. PN is applied to Polynesian, hence the use of PP for Papuan here.   [b]Proposed acronym

or remain highly controversial. This can mean that a phylum contains only one language; thus Yukaghir, a single language spoken in Siberia with two dialects, is the sole representative of the Yukaghiric phylum. The assumption is that there once must have been other languages related to Yukaghir which have disappeared through the accidents of history.

1.2 Phyla and macrophyla

The classification of language into phyla can be controversial in another situation; where a large number of languages exist which show common features but which have not been shown to be related to the satisfaction of most researchers. Language phyla whose existence is generally accepted, such as Indo-European or Austronesian, are backed by extensive reconstructions of proto-forms. The assumption is that these phyla began to diversify sufficiently recently for the commonalties between lexical items to be generally recognised. Some phyla are more problematic: in the case of Nilo-Saharan, despite its being

first advanced in the 1950s, some researchers continue to question both its unity as a phylum and the validity of the families that compose it. More problematic still are zones of languages with common features and coherent lower level groups where overall genetic relations have proved resistant to the methods of historical linguistics. The most important of these are Papuan, Australian and Amerind; these "geographical" names are often shown as phyla in works of synthesis. Similarities of phonology, lexicon or other features might suggest a common origin; but recent studies on mixed languages underline the extent to which languages can borrow even supposedly "fundamental" features of lexicon or grammar. It is thus possible that a group of languages may have so far diversified from a common proto-language that proof will remain a chimaera. Inadequate datasets are increasingly less of a problem, with large comparative datasets being increasingly circulated, and access to areas long-closed now possible. Only the Andamans remain closed to outside researchers, and any conclusions about Andamanese are

thus highly provisional. Table 2 sets out the language phyla of the Indo-Pacific region with some notes on the degree of acceptance among researchers.

Proposals that go beyond "accepted" phyla in the project to unite the world's languages also abound. Macro-phyla, the uniting of several accepted phyla into one genetic group, have had a variable history; broadly accepted in the early years of the century, they fell victim to mid-century scepticism. Such large-scale comparisons remained part of scholarly discourse in the former Soviet Union and have again become more acceptable, although they are still rejected by the majority of linguists. A well-known example is Nostratic, a macrophylum that brings together most of the phyla of the Eurasian land mass, but whose membership varies according to different authors. Other more controversial proposals include Indo-Pacific (Greenberg 1971) and Amerind (Greenberg 1987) although it is safe to say these have gained few adherents among specialists in these languages.

2. SIBERIA

Siberia represents an exceptional clustering of language phyla, consisting of individual or small groups of languages not demonstrated to be linked with any others in the world. As such, they have provided a rich field for various types of speculative historical linguistics. For a considerable period, these language groups were treated together as "Palaeosiberian" or "Palaeoasiatic" but such a label was no more than a confession of ignorance, as each phylum must be treated individually. There is considerable historical evidence that these languages were once more widespread and have been driven back into remote areas by Samoyedic, Turkic and Russian expansion in historic times. Even, so they may reflect only a fraction of the diversity once found in Siberia, since evidence for low-density hunter-gatherers is of considerable antiquity.

2.1 Ainuic

The Ainu people are generally regarded as the aboriginal inhabitants of the Japanese islands, although there is no evidence for them in the south and it would be surprising if a single language were to dominate such a large land mass. Ainu-speaking populations also lived on Sakhalin and the Kuriles, but there is some evidence this is a recent northward extension. Ainu survived as a spoken language on Hokkaido until recently, but it may once have been indigenous to northern Honshu and was pushed northward as the Japanese expanded.

Vovin (1993) represents an attempt to reconstruct "proto-Ainu" based on existing records of the language. However, all the attested forms are very close to one an-

other and Ainuic can thus be regarded as a single-language phylum. In spite of persistent attempts to find external affiliations none have commanded wide assent. A venerable theory is that Ainu has a remote relationship with Japanese, and should thus be included within Macro-Altaic (see §4.) (Patrie 1982). The historical influence of Japanese on Ainu is so pervasive that it is unclear whether contact phenomena can be effectively distinguished from genetic affiliation. Ainu has been the subject of a wide variety of theories, more-or-less far-fetched. Shibatani (1990) goes through these together with summarising the main information available on the language.

'Kennewick Man', a highly controversial skeleton found on the western seaboard of the United States, dated to ca. 9000 bp and of claimed "Caucasian" affiliation, has been at the centre of a controversy over claims by local Amerindians that this is part of a white American conspiracy to overturn their aboriginal status. Recent reports[2] suggest, however, that the osteology of the skeleton is most similar to Ainu material, which would at least be historically conceivable and thereby exclude more bizarre hypotheses such as very early navigation on or West Europeans walking across the Arctic. Unfortunately all research on both the osteometry and DNA of the skeleton has been halted pending legal proceedings.

2.2 Yeniseic-Burushaskic

The title of this section takes a risk on a new hypothesis recently launched in George van Driem's "Languages of the Himalayas" (van Driem in press). The Ket language, with some 1000 speakers in 1991, is divided into two lects, Imbat and Sym, spoken along the Yenisei river. A language, Yugh, with 3 speakers in 1991, is generally supposed to be related to Ket, but there seems to be no published proof of this. Extinct related languages such as Arin, Assan and Kott are recorded in the notebooks of nineteenth century explorers (Comrie 1981:262).

Werner (1994, 1995, 1997a, b, c) has recently published descriptions of the Yeniseic languages based on fieldwork carried out in the 1960s. In his studies of Yeniseic, Werner has remarked on its exceptional phonology and syntax, notably the tonal system and grammatical gender, which are absent in surrounding languages.

Burushaski is a well-known isolate, spoken in northern Pakistan, which has been the subject of considerable research since the 1920s. Although surrounded by Indo-European languages of the Dardic group, and heavily influenced by them, its isolate status has long been accepted (Lorimer 1935-38; Tiffou and Pesot 1989). Like Ainu and Basque, it has been connected with many of the world's language phyla with a success apparent only to the propo-

nents of individual theories. If the link with Yeniseian becomes accepted, it will provide further evidence for the highly mobile hunter-gatherer populations that must have been scattered through much of this region prior to the expansion of Altaic.

2.3 Yukaghiric

Yukaghiric consists today of two closely related languages, Northern (Vadul) and Southern (Odul) Yukaghir with respectively 150 and 50 speakers (1989 Census) spoken on the Indigirka and Kolyma rivers. In the recent past, two other related languages, Chuvan and Omok, are known to have existed. The Yukaghiric phylum seems to have been more widespread further south and only relatively recently has been pushed into its present position. Yukaghir is sometimes treated as co-ordinate with the Uralic languages (e.g. Collinder 1965) but this remains controversial.

2.4 Kamchukotic [=Luworetlan, Chukchi-Kamchadal]

Kamchukotic consists of two branches, the Chukchi languages (Koryak (=Nymylan), Alyutor and Kerek), and Kamchadal (=Itelmen). The Chukchi languages are spoken across the extreme northeast of Russia, bordering on the Bering Strait, spreading down into the northern half of the Kamchatka peninsular. Compared with the other Siberian peoples, the Koryak are relatively numerous, with some 6200 speakers in 1993. There are still several hundred Alyutor but by 1991 Kerek had fallen to just 3 speakers. Kamchadal, spoken in the southern part of the Kamchatka peninsular, had less than 100 speakers in 1991.

There is a long history of relating Kamchukotic to New World languages, either Eskimo-Aleut or even Amerindian languages (e.g. Hamp 1976). Given their geographical position there would be nothing surprising about this; however, the evidence is not overwhelming, and could equally well be explained by ancient loans. Janhunen (1998:205) argues that there is no reason not to suppose that the Kamchatka peninsular is not the original homeland of the phylum and that the three closely related Chukchi languages represent a recent northwards extension.

2.5 Amuric (Gilyak, Nivkh)

Amuric refers to a language isolate referred to as Gilyak in older literature but usually now known as Nivkh. No convincing argument for relating Nivkh to the world's other language phyla has yet been advanced (Comrie 1981). There are some 400 speakers on the lower reaches of the Amur River, and on Russian-controlled northern

Sakhalin island as well as on Southern Sakhalin (under Japanese suzerainty). The expansion on to the Sakhalins is thought to be quite recent, and that the Nivkh have been enclaved in the Amur basin by the northward expansion of Tungusic.

3. JAPONIC

Japonic consists of Japanese and the closely related languages of the Ryukyuan islands. Early inscriptions in Japanese provide historical information about the language and this has stimulated immense debate about its classification and affiliations. The most common hypothesis is that Japanese is somehow related to Altaic, i.e. that it forms part of Macro-Altaic (§4) (Miller 1980, 1994; Vovin 1994; Janhunen 1994). Other views, including the alternative hypothesis of a link with Austronesian, long supported by Japanese scholars and by Benedict (1990) are reviewed in Shibatani (1990: 94 ff.). Austronesian seavoyagers must have reached at least the southern part of Japan during their exploratory journeys and in some ways it is surprising that Japanese does not show more influence from Austronesian languages.

As Janhunen (1998:201) notes, whatever view is taken of the linguistic classification of Japanese, it seems difficult to reject the notion that the original homeland was on the mainland opposite. Apparent confirmation comes from a short vocabulary of a language (Old [Pseudo-] Koguryo) recorded from the Korean peninsula during the Three Kingdoms (Samgwug) period (Miller 1979). Almost certainly the ancestors of the Japanese were present in Korea, moved to the Japanese islands encountering the Ainu and perhaps other populations, and subsequently Japonic languages died out on the mainland.

4. ALTAIC

4.1 General

Altaic is the most widespread phylum in the Indo-Pacific region, but its exact composition remains highly controversial and a consensus view now seems unlikely. As originally conceived, the members of Altaic are Tungusic, Mongolic and Turkic. It was also formerly thought that Altaic and Uralic (the language phylum that includes Finnish and Samoyedic) constituted a macrophylum, but this relationship is generally today considered to consist of ancient loanwords (Abondolo 1998).

The controversial aspect of Altaic is what may be called the "Macro-Altaic" hypothesis, which is that Korean (§4.5), Japanese (§3) and Ainu (§2.1) are related to it at various degrees of remoteness. Figure 1 shows a graphic representation of this hypothesis.
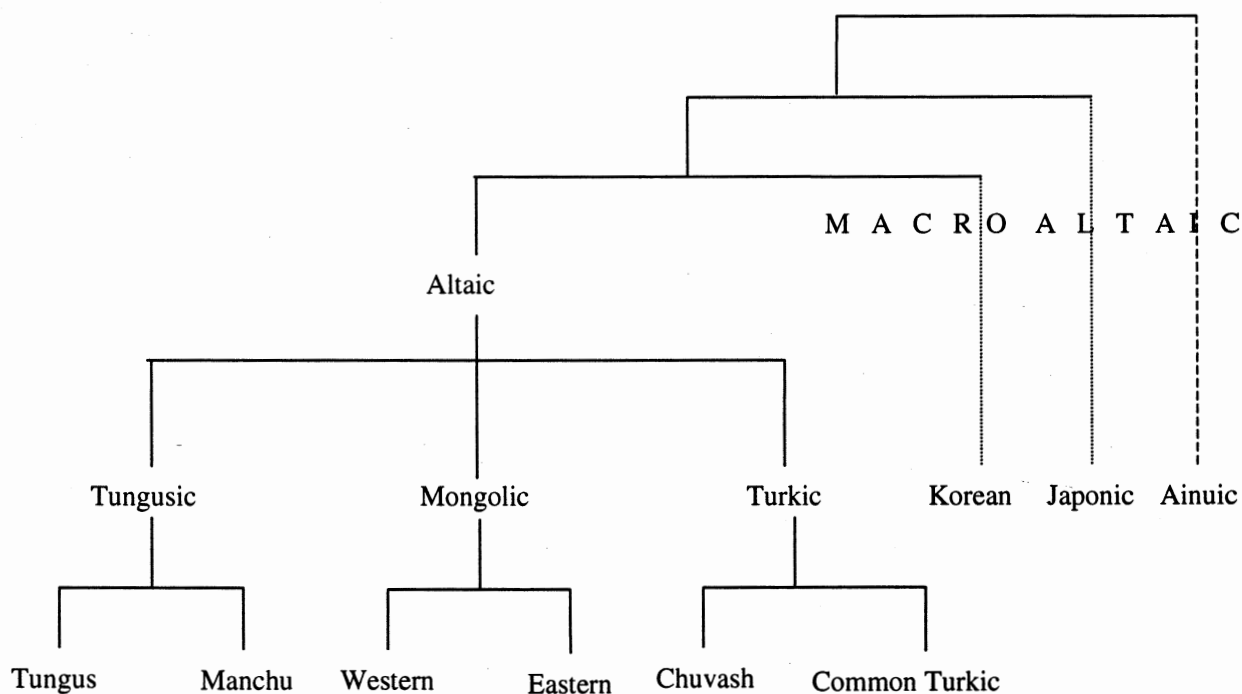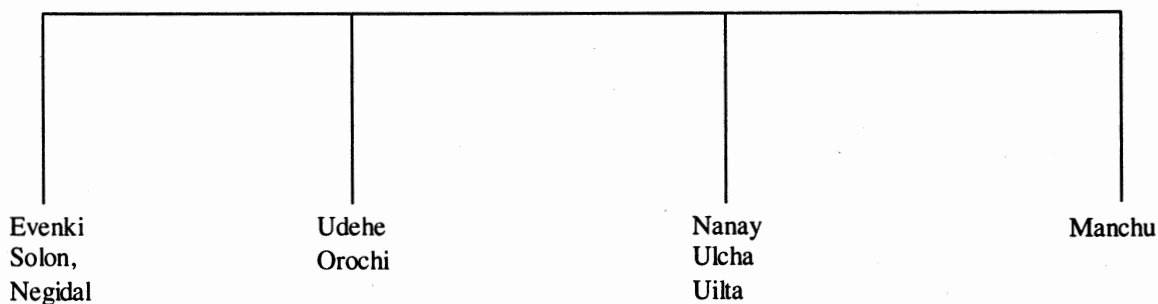
Figure 1. Altaic and Macro-Altaic

Figure 2. Classification of Tungusic languages

The Macro-Altaic hypothesis, excluding Ainu, has recently been defended vigorously by Miller (1996) although Janhunen (1998) takes the opposing view that Korean, Japonic and Ainuic are unrelated language phyla, and fit the pattern of diversity in NE Asia.

4.2 Tungusic

The Tungusic languages are all spoken in Siberia and the adjacent parts of China (Doerfer 1978). There are usu-

ally considered to be nine Tungusic languages, classified as in Figure 2.

Manchu was the language of the ruling class in China until recently and has almost disappeared. Apart from Manchu, these are all languages with a small number of speakers whose populations were until recently hunter-gatherers. Surprisingly, however, these languages are not highly diverse as is generally the case with other Siberian

populations (§2.), suggesting that the Tungusic expansion is probably quite recent.

4.3 Mongolic

Mongolic languages are dominated by Khalkh Mongol, spoken throughout much of modern Mongolia, with out-lying Mongolic languages spoken in China and Afghanistan. The empire of Chinggis Khan (ca. AD 1200 to 1400) grew to control the largest land empire ever recorded and the relative uniformity of Mongolic can be attributed to this, as an earlier ethnic and linguistic diversity was probably eliminated during this period. Janhunen (1993) has analysed lexical elements borrowed from Mongolic into Manchurian Tungusic to argue that the family formerly exhibited much greater diversity.

4.4 Turkic

Today the Turkic languages spread across Central Asia from Sakha (Yakutia) to the Turkish republic. The principal sources on the languages and history of this group are Menges (1995) and Johanson and Csato (1998). Generally speaking, the Turkic languages are very closely related and are consistent with a pattern of expansion from the present-day region of modern Mongolia, both westwards to Turkey and north to Sakha. There is, however, one language, Chuvash, spoke in the Volga region, markedly divergent from the others. This has been seen as evidence of the original homeland of the Turkic peoples and Mongolia would thus only be a centre of secondary expansion. Curiously, there are runic inscriptions written in a Turkic language dating from the 7th-9th centuries AD in the region of the Yenisei. No convincing explanation for their similarities to the Viking runes has yet been advanced.

4.5 Koreanic

Korean is a single language and there is no evidence for other languages clearly related to it. However, there is evidence for linguistic diversity in Korea in earlier periods, as the fragment of a Japonic language mention above suggests. Korea was gradually drawn into a single political entity between AD 500 and 1000 and presumably its linguistic uniformity dates from this period. Korean has most commonly been claimed as part of Altaic (Martin 1991), although it shares many typological features with Japanese. This is most likely the result of intensive interaction over an extended period rather than evidence for a genetic relationship between the languages (Janhunen 1992:10-13).

5. TIBETO-BURMAN/SINO-TIBETAN

Tibeto-Burman/Sino-Tibetan has been dealt with in greater detail elsewhere in this volume by van Driem and is summarised here only for completeness. The name "Sino-Tibetan" encapsulates the traditional view of the phylum, consisting of Chinese on the one hand and all the other languages, "Tibeto-Burman", on the other. This exclusivity has increasingly been questioned as representing a non-linguistic view; Chinese was set apart because of its cultural distinctiveness. Van Driem (1995, 1998) has argued that Chinese (Sinitic) is in fact co-ordinate with the Bodic branch of Eastern Tibeto-Burman and has put forward a series of archaeological correlations to interpret this re-alignment. If this is accepted then the name of the entire phylum would become Tibeto-Burman. The phylum has been the subject of two recent catalogues, providing valuable information about the status of the languages that compose it (Matisoff, Barton and Lowe 1996; Bradley 1997).

6. DAIC [=TAI-KADAI]

The Daic or Tai-Kadai languages, of which Thai is the most well-known and widespread representative, are spoken from southern Thailand into Laos, Cambodia and China. Up-to-date maps of their distribution are given in Edmondson and Solnit (1997a) who estimate the number of speakers of these languages as at least 80 million. Overviews of the phylum are given in Edmondson and Solnit (1988, 1997a).

Daic consists of a core of languages whose relationships are both close and well-known and a variety of others, mostly spoken in China, whose affiliation remains controversial. Figure 3 shows the view of the internal relationships of Daic given by Edmondson and Solnit (1997b).

Daic languages share many features in common with neighbouring phyla, notably Austroasiatic, Miao-Yao and Sino-Tibetan. These were used by Benedict (1975) to erect "Austric" or "Austro-Tai," a macrophylum that would unite Austroasiatic, Miao-Yao, Daic and Austronesian. Various configurations of SE Asian phyla have been proposed in more recent times. Ruhlen (1991) provides a useful narrative of other classifications but concludes mysteriously by supporting Benedict. The general trend however, has been in the opposite direction; to regard each of these phyla as distinct and unrelated. Thurgood (1994) has shown that the evidence for hypotheses, such as Benedict's Austro-Tai, linking together the major language phyla of SE Asia, derive from ancient loanwords and cannot be used as evidence for genetic affiliation.
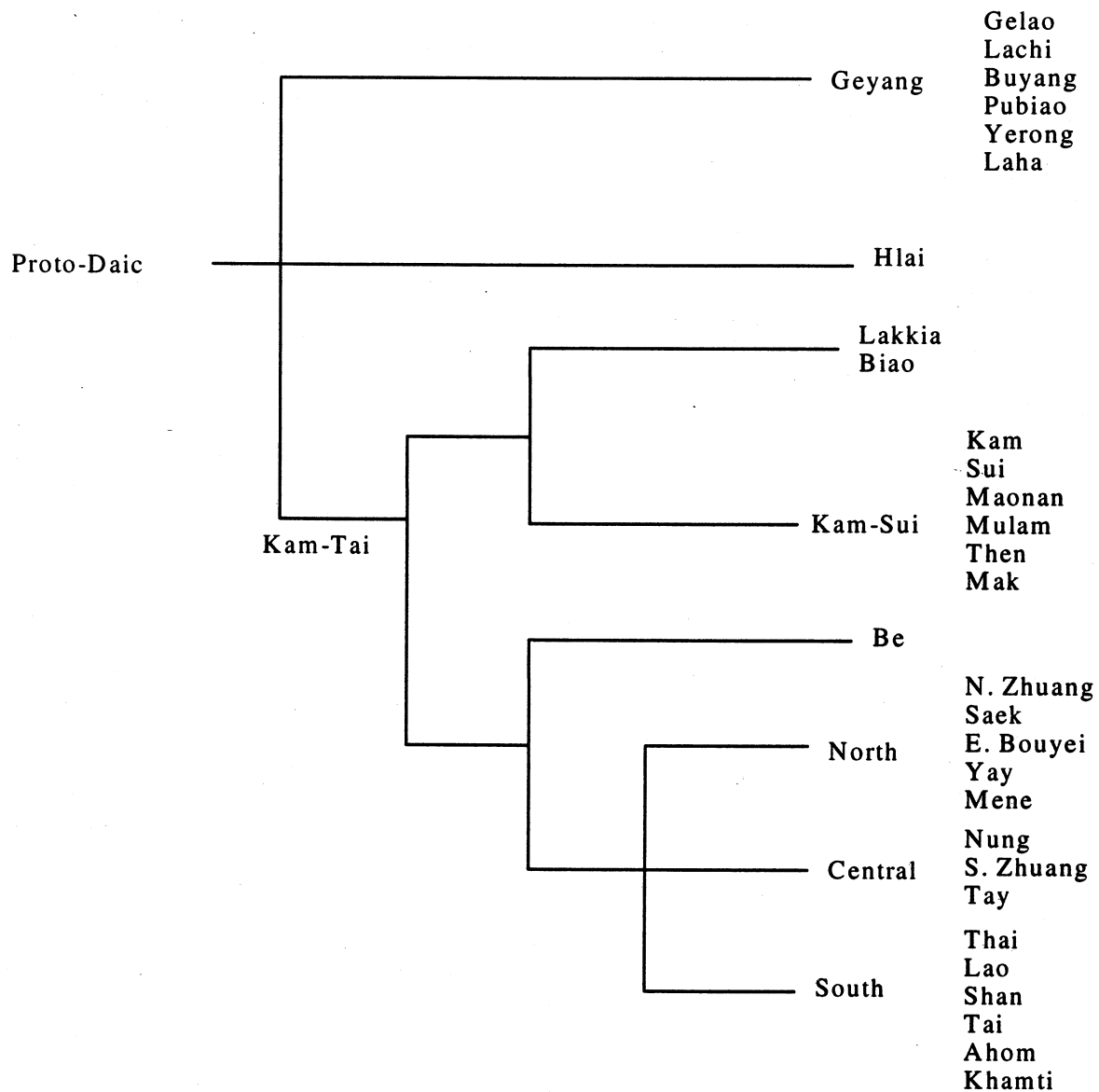
Figure 3. Daic languages (Edmondson and Solnit 1997b).

7. MIAO-YAO [=HMONG-MIEN]

The Miao-Yao languages are spoken almost entirely in China with some groups crossing over into Laos, Vietnam and Thailand. Miao-Yao languages are quite close to one another, and although the Ethnologue lists some 32 languages, many of these are mutually intelligible lects. There have been various comparative overviews of the group, starting with Purnell (1970) and Wang Fushi (1994). The linguistic geography of Miao-Yao is thus rather surprising, since it appears as a series of fragmentary populations pushed into refuge areas by the expansion of Han Chinese. This has sparked a number of debates on the relative antiquity of these groups; if Miao-Yao preceded Chinese, it should be more diverse. One language, She (§15.2), may be a remaining outlier of this diversity but the general impression is that Miao-Yao was a fairly homogeneous group prior to Han expansion and its fragmentation only dates from that period.

8. AUSTROASIATIC

Austroasiatic is probably the language phylum most central to the Indo-Pacific region, yet it remains one of the least-known. Although including some well-known languages such as Vietnamese and Khmer, most of its 150+ languages have few speakers and remain poorly documented. Political insecurity in Indo-China has been an important factor in impeding research, but in the case of India, where two important branches, Nicobarese and Muṇḍā, are situated, the government effectively prohibits research for unknown reasons.

Strangely, the best overviews of Austroasiatic are published by Gerard Diffloth in the Encyclopaedia Britannica and updated every few years, the most recent recension being 1997. Parkin (1991) has provided a valuable general view of speakers of Austroasiatic languages especially from an anthropological point of view as well as a comprehensive bibliography.

Austroasiatic is conventionally divided into two families, Mon-Khmer and Muṇḍā. Mon-Khmer has then been subclassified in different ways; Diffloth (1997) prefers to treat Mon-Khmer as having eleven co-ordinate branches, including Nicobarese and Aslian. Earlier classifications have elevated these last two to primary branching of Austro-Asiatic, but no evidence for these realignments has been published. Indeed Austro-Asiatic classification has been dogged by a failure to publish data, making any evaluation of competing hypotheses by outsiders a speculative exercise. With these reservations, therefore, Figure 4 shows the most recent "tree" of Austro-Asiatic.

9. AUSTRONESIAN

Austronesian is the second-largest language phylum in the world after Niger-Congo and certainly one of the most widespread, stretching from Easter Island to Madagascar. Compared with many of the other phyla in this region, its internal structure is relatively transparent and there are few doubts about the languages it includes. The only exception are some languages of Melanesia, such as Magori or Maisin (Dutton 1976; Ross 1984), with a complex history of interaction with Papuan. The papers in the edited volume on the Austronesians (Bellwood, Fox and Tryon 1995) present a "mainstream" view and the arguments for linking Austroasiatic and Austronesian into an Austric phylum are summarised in Reid (1996).

One of the current debates in Austronesian studies now focuses on the Formosan languages spoken on Taiwan which are extremely different one from another, and whose history is blurred by the large number that have vanished in the last few centuries following mainland Chinese expansion on the island.

The documentation of Formosan languages is crucial because of the small number of speakers and the possibility that languages such as Thao (16 speakers at last count) will simply become extinct. There are large number of competing hypotheses for the subclassification of Formosan and it is now argued that these do not form a group but a number of initial branchings of Austronesian. The relevance of this is that Taiwan is usually accepted as the homeland of Austronesian, whence speakers set off for the colonisation of insular SE Asia. Understanding the classification of Formosan should certainly help clarify the initial stages of this process.

The most recent contribution to the Formosan debate is Blust (in press) which conveniently reviews all the previous classifications. Figure 5 shows the structure proposed by Blust for Formosan, omitting the further branching of Malayo-Polynesian. This is a departure from previous classifications of Formosan but in many ways might be expected; if Taiwan is the original centre of dispersal then the greatest linguistic diversity should be there.

10. PAPUAN

The Papuan languages consist of some 700+ languages spoken principally on New Guinea, parts of the Solomons, Halmahera as well as two isolates in the Lesser Sunda islands. The most significant overviews of Papuan are Wurm (1975, 1982) and Foley (1986). They demonstrate an almost staggering internal diversity and Papuan is best treated as a "geographical" term, and few writers apart from Greenberg (1971 – see further discussion under §12) have been willing to treat these languages as all related. However, a hypothesis that conjoins a large number of Papuan languages, the Trans New-Guinea phylum (TNGP), has recently received new support. The TNGP was first advanced by McElhanon and Voorhoeve (1970), has recently been revived benefiting from an explosion of data made available in the 1980s (Pawley 1995; Ross 1995). Nevertheless, the TNGP is not a phylum comparable to Austronesian; its internal links are more tenuous and require greater jumps to accept the cognacy of some forms. If the TNGP is validated, its internal diversity will remain considerable; it is clear that no body of reconstructed roots comparable even to Pama-Nyungan is likely to become available. Even so, the TNGP does not constitute the whole of Papuan; a large number of languages remain excluded.

Diverse sources of evidence seem to be pointing towards the island of New Guinea as a major centre of agricultural innovation. Some speculation supposes that the
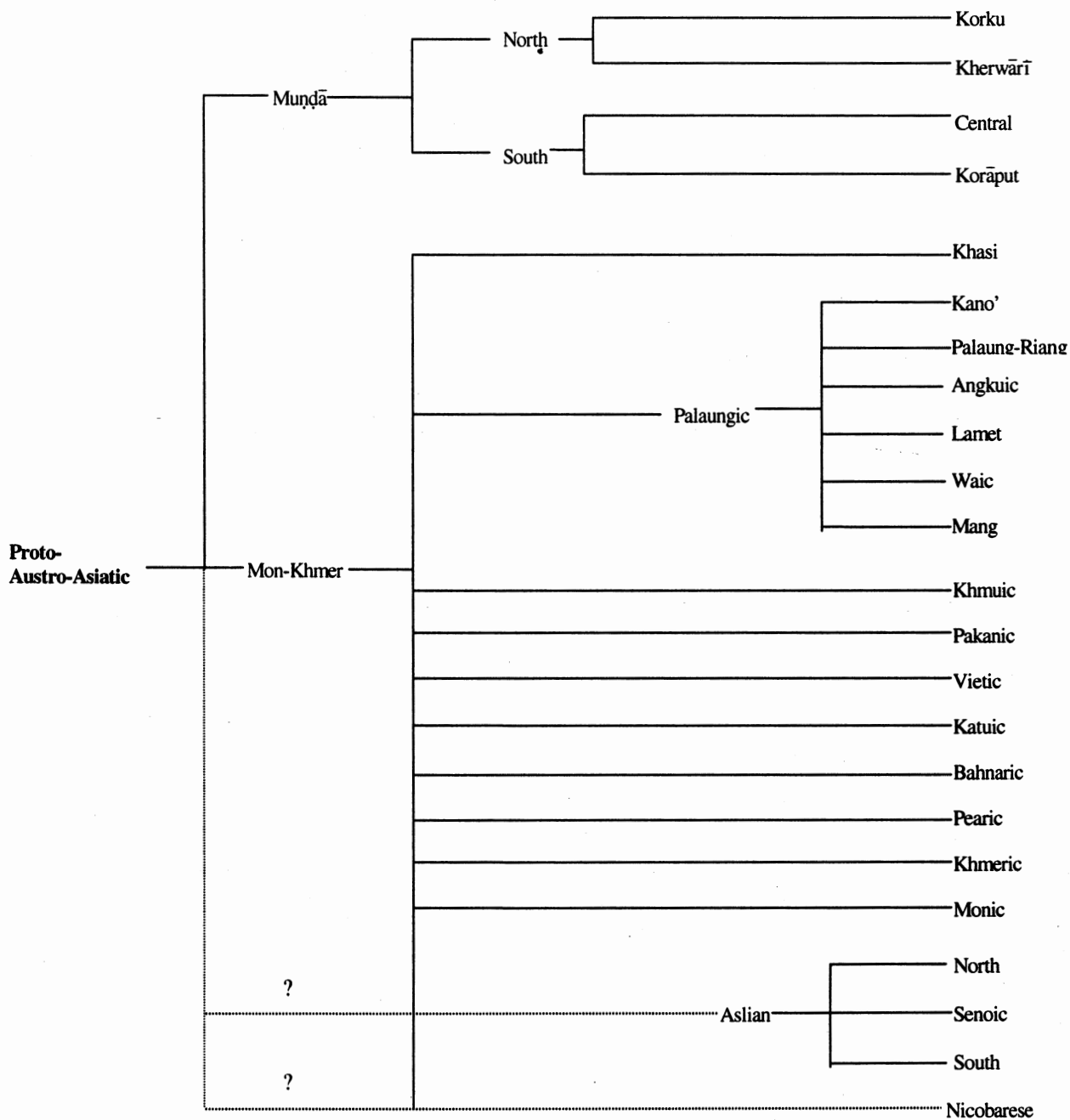
Figure 4. Austrosasiatic.

Trans-New-Guinea Phylum could be an agricultural expansion somehow similar to Austronesian or Bantu. However, this seems unlikely at first sight, since no single reconstruction for a domesticated plant has yet been proposed. It should remembered that the speakers of Pama-Nyungan managed to convert 90% of Australia to their way of speaking without the benefit of agriculture or indeed any clear cultural or technological advantage; the

```
                              ┌──Atayalic ────────┌──Atayal
                              │                    └──Sediq
                              │
                              ├──East Formosan ───┌──Favorlang
                              │                    └──Saisiat, etc.
                              │
                              ├──Puyuma
                              │
                              ├──Paiwan
                              │
Proto-Austronesian ──────────┤
                              ├──Rukai
                              │                   ┌── Tsou
                              │                   │
                              ├──Tsouic ──────────┤      ┌── Saaroa
                              │                   └──────┤
                              │                          └── Kanakanabu
                              ├──Bunun
                              │
                              ├──Western Plains
                              │
                              ├──Northwest Formosan
                              │
                              └──Malayo-Polynesian
```
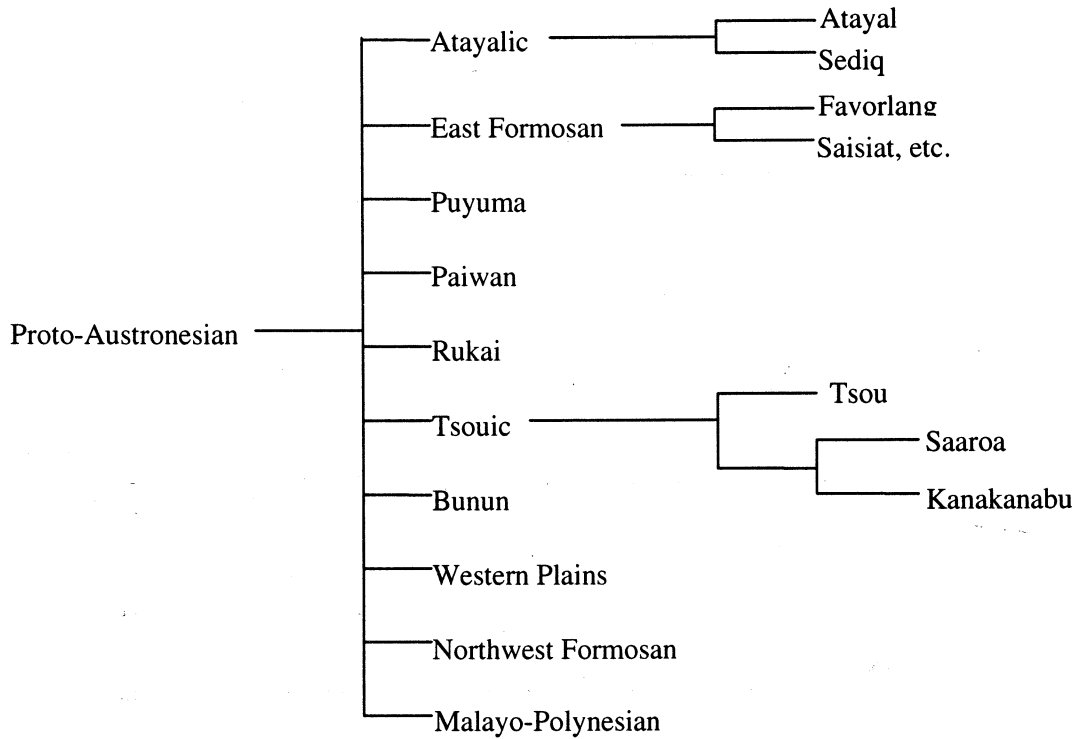
Figure 5. Primary branching of Austronesian proposed by Blust (1999)

TNGP might also be an example of a comparable expansion.

11. AUSTRALIAN

'Australian" represents a convenient cover term for the indigenous languages of Australia, but should not be taken to imply anything about genetic unity. It is widely estimated there were some 400+ languages in Australia prior to European contact, and that of these records remain for at least 280. Grimes and Grimes (1996) estimate that some 230 languages are still spoken although many may now only have one or two old speakers.

Australian languages have generally a large number of typological features in common, notably in the area of phonology and morphology (Dixon 1980). This has been explained via two opposing hypotheses, convergence and common ancestry. However, lexically they show enormous differentiation, often showing lexicostatistical counts as low as values given by random comparisons between any two languages. Although Dixon (1980) puts forward some proposed forms for "proto-Australian" these are not reconstructions based on the classic comparative method. Even on the most optimistic "lumpist"

assessment there are still 12-13 language families [here = phyla] (McConvell and Evans 1997). Some Australianists consider the whole project methodologically impossible. Nonetheless, one of the striking features of Australian is that most of the continent is covered by a single phylum, Pama-Nyungan, with all the remaining languages confined to a corner of the northwest. This tends to suggest that the expansion of Pama-Nyungan is relatively recent and reflects either a technological advantage or a strikingly different social system (McConvell and Evans 1998). It also implies, given the time-depth of human settlement in Australia, that the expansion effectively eliminated a far greater linguistic diversity if the previous situation was anything like the existing non-Pama-Nyungan phyla. Pama-Nyungan has been the subject of a reconstruction project which may eventually recover several thousand common roots (Fitzgerald 1997; O'Grady 1998).

Australia and the island of New Guinea were formerly connected and it is usually accepted that the main body of the Australian population came from New Guinea. Until recently, dates for human settlement in Australia were considered older than New Guinea, but if a relatively few older dates are rejected these would be contemporaneous

(O'Connell and Allen 1998). This connection has stimulated various linguists to seek connections between the languages of the two regions. Foley (1986: 269 ff.) has proposed links between Dixon's "Proto-Australian" and the Eastern Highlands languages. Donohue (1998) in a short field report mentions a possible relation between the Kanum languages of Irian Jaya and Pama-Nyungan. In principle this seems surprising; if it is so difficult to establish convincing links within continents because of high levels of lexical replacement, it seems still less likely that the passage of time implied would not have obscured genetic connections at still greater time-depths. However, assuming that these linguists do offer a convincing demonstration of trans-Torres Strait connections it may be that maritime traffic must be considered. It is now generally accepted that there was Indonesian coasting contact with North Australia as evidenced by Austronesian loanwords in aboriginal languages.

12. ANDAMANESE

The Andaman islands, with their Negrito populations, have been the subject both of long speculation by outsiders and an unhappy record of interaction with the outside world. The creation of a penal colony on Great Andaman and the virtually uncontrolled influx of Bengali settlers, combined with extreme restrictions on research imposed by the Indian government for unspecified reasons, means that linguistic data on many of the Andamanese languages is either non-existent or collected in such an amateurish fashion that any far-reaching conclusions would be unwise. All the available data on the languages of the Andamans has been reviewed by Zide and Pandya (1989) which also contains an exhaustive bibliography[3].

On Great Andaman, the majority of languages have become extinct with only minimal records remaining; A-Pucikwar may have a few speakers (Wurm and Hattori 1981-3) or Jeru (Zide and Pandya 1989) although the forms they reproduce may confound now disappeared lects. Little Andaman (=Onge), Sentinelese and Jarawa are still spoken but Onge, at least, is severely threatened. No data on Sentinelese has ever been recorded and the islanders are officially classified as "hostile" so classifications of the language are mere speculation. Some authors (e.g. Radcliffe-Brown 1914; Greenberg 1971) have speculated that Great Andamanese and Little Andamanese are connected, but Manoharan (1983) has presented a list of cognates supporting this hypothesis. The most comprehensive "tree" of Andamanese languages is given in Figure 6.

Andamanese plays a key role in a classification, ironically rejected by most scholars, Greenberg's (1971) "Indo-Pacific" hypothesis, which links together Andamanese, Papuan and Tasmanian and gives a name to this culture-historical area. This hypothesis, originating with Gatti (1906-9), has a crypto-racial element since it links together the curly-haired "Negrito" populations of the Indo-Pacific region. Although accepted and promulgated by Ruhlen (1991) and reproduced in a number of archaeological publications, it has garnered little support from linguists working on these languages. The Tasmanian element, in particular, has been rejected with withering scorn (Crowley and Dixon 1981). Ruhlen (1991: 180-183) compiled opinions that have been expressed about the validity of Indo-Pacific. Even though some links between the westernmost Papuan languages and Andamanese cannot be ruled out, the difficulties linking all the Papuan languages together (§10) would appear to exclude Indo-Pacific from serious consideration.

13. ELAMO-DRAVIDIAN

To call this phylum "Elamo-Dravidian" is to accept a controversial hypothesis, the relation between the ancient language of Iran, Elamitic, and the modern-day Dravidian languages. Dravidian languages, of which Tamil is the most well-known, are spoken principally today in south India, although one, Malto, is found in NE India and another, Brahui, in Pakistan and Afghanistan (Steever 1998). Surprisingly for a well-known and much-researched group, there are a large number of languages whose Dravidian status is uncertain (see list in Steever 1998:1) as well as "dialects" that may well turn out to be distinct languages.

Dravidian divides into either three groups (Zvelebil 1997) or four (Steever 1998) since Zvelebil amalgamates Steever's two Southern groups. Figure 6. Phylogenetic tree of Andamanese (after Manoharan 1983) shows a tree of Dravidian based on these recent classifications.

The hypothesis that Elamitic is connected to Dravidian goes back to 1856 (Caldwell 1913) but it is found in its most complete form in McAlpin (1981). Although Steever (1998:37) rejects this out of hand, recent work by Blažek (1999), using new data on Elamitic, has produced substantially more cognates with Dravidian and it is unlikely this hypothesis should be rejected out of hand.

14. INDO-EUROPEAN

14.1 Indo-Aryan

The Indo-Aryan languages can be compared with Sinitic in terms of regional dominance and numbers of speakers. The major languages, such as Hindi and Bengali have hundreds of millions of speakers and have become lingua francas throughout their region. Masica (1990) represents
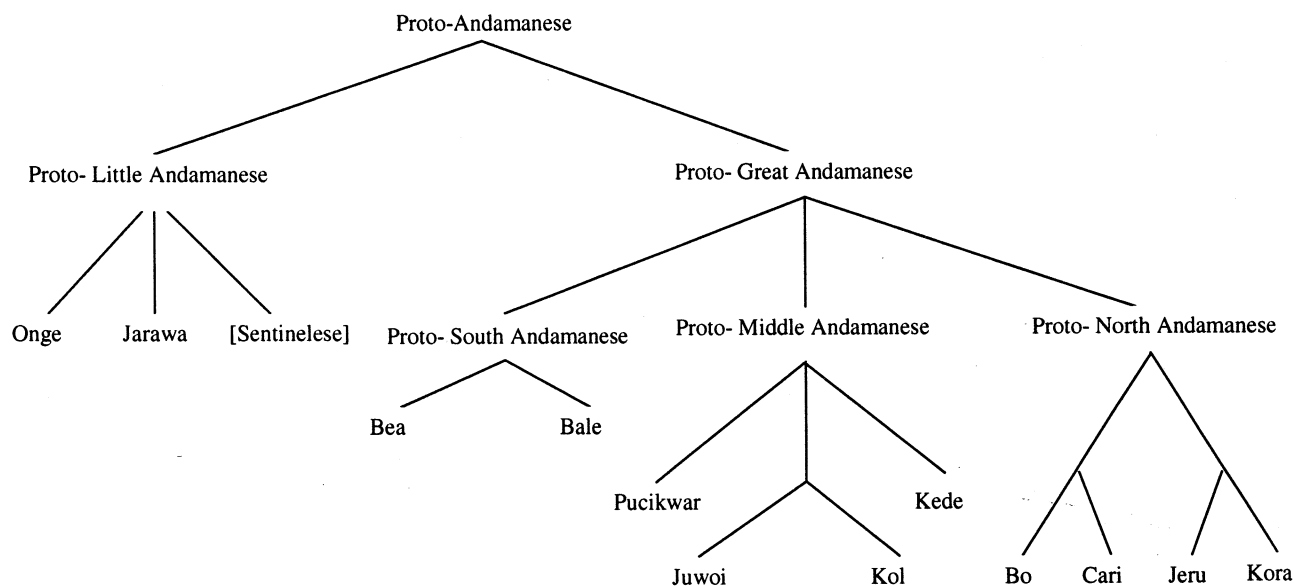
Figure 6. Phylogenetic tree of Andamanese (after Manoharan 1983)

a recent summary of available information about Indo-Aryan languages. It is usually assumed that Indo-Aryan represents a relatively recent expansion into India from the Northwest and that Dravidian "islands" such as Brahui and Malto are relics of a process that largely assimilated the languages already in place (there is also evidence for assimilation of Muṇḍā and Tibeto-Burman languages). Nonetheless, it is a curious aspect of Indo-Aryan that there are many languages with small numbers of speakers whose exact classification is speculative and whose lexicon is larded with words of unexplained origin. It may be that although there was indeed a movement into NE India, not all the Indo-Aryan languages can be classified together.

14.2 Iranian and Tokharian

Northwest China also represents a significant region of Indo-European outliers, notably in the case of Tajik (Sarikoli) and the Wakhi, Iranian languages spoken around Xinjiang. These are relatively recent intrusions, relics of the "Silk Route" trade. Most famously, however, China is the source of "Tokharian', a language attested in manuscripts found in the Taklamakan desert. The classification of Tokharian has remained controversial because its linguistic features link it with Western Indo-European languages, rather than the Indo-Iranian languages that would seem immediately more likely. The debate has recently

been given a new impulse by the revelation of details about mummies first uncovered in Xinjiang in 1988. Mummies have been recorded at three sites, Hami, Loulan and Cherchen, all representing linked but distinct historical layers, dating back to 4000 bp (Barber 1999). The features of the mummies are surprising by any standards, since the figures are up to 2m in height, with European features including marked beards, wearing cloths apparently woven in plaid patterns and with women wearing tall conical hats. Needless to say, this hardly squares with nationalist ideologies about Chinese origins, contributing to delays in publication and the present prohibition on further excavations. However, these images have also sparked a bout of nationalist speculation from the European side, with wandering Celtic tribes setting up camp in northwest China, bringing all good things to inner Asia.

The controversy is likely to continue while so little is known about the archaeological context of these striking figures. But while the connections are undoubtedly real, both probably reflect survivals at the periphery of traits common to a highly mobile early Indo-European culture. The question for linguists, however, is whether these mummies can be reliably connected with the records of the Tokharian language which date from a much later period. While making such a link is immediately tempting, without further excavation data any such alignment remains merely speculative.
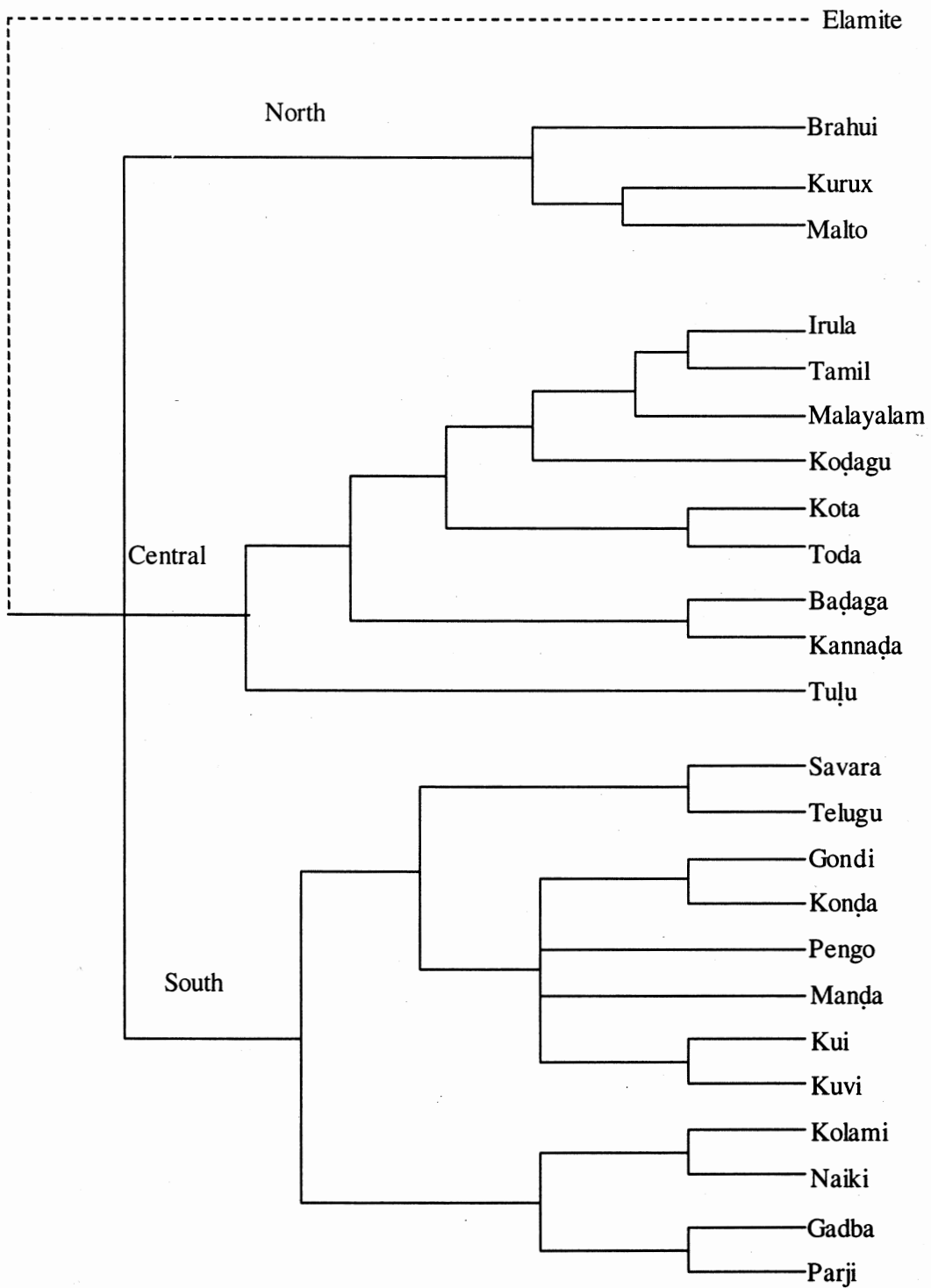
Figure 7. Genetic classification of the Dravidian languages

15. PROBLEMATIC LANGUAGES

Many of the language isolates of Siberia are sufficiently well-known for their isolate status to be generally accepted. However, languages which have come under heavy influence from surrounding languages have often been consigned to a classificatory limbo, pending the identification of ancient loanwords. This is particularly the case in India and China, where millennia of bilingualism with other languages have resulted in complex mixtures, where the "basic" language is sometimes difficult to determine. Four languages are given here, but others may surface, especially in China, where linguistic research is proceeding apace.

15.1 Bai [=Minjia]

The Bai language, spoken in Yunnan province in China by some 1,130,000 people. Although officially classified as Tibeto-Burman, evidence for this is problematic because of the complex layers of ancient loans from Chinese and other languages. The notion that Bai is somehow co-ordinate with Sinitic would have to be squared with the new understanding of the place of Chinese in the Tibeto-Burman "tree'. Only much more detailed lexical work is likely to uncover the final affiliation of Bai.

15.2 She [=Ho Nte]

The She language, spoken in Zheijang, Fujian and Guangdong provinces in China by some 370,000 people, appears to have links to the Miao-Yao languages, but its precise affiliation is far from certain and it is quite geographically remote from these people.

15.3 Nahali [=Nihali?]

The Nahali language is spoken by some 5000 people in Madhya Pradesh in India mainly around Temi (Tembi) village in Nimar District, Jalgaon Subdistrict. Its exact affinities have long been the subject of speculation, since some varieties seem to resemble Munda languages and others nearby Indo-European languages. These lexical similarities form a pattern of ancient loans rather than resulting from genetic affiliation, and Nahali may be an isolate. Attention was first drawn to this language by the Linguistic Survey of India (Konow 1906) but a recent overview of the lexicon and its affinities is given in Mundlay (1996) in an issue of *Mother Tongue* which casts a wide net in seeking the external affinities of Nahali.

15.4 Kusunda

Kusunda is a language spoken in Nepal by a group of former foragers commonly known as the "Ban Raja". It was first reported in the mid-nineteenth century (Hodgson 1857) but has become known in recent times through the work of Johan Reinhard (Reinhard 1969, 1976; Reinhard and Toba 1970). The language was disappearing in the 1970s, so its present status is somewhat doubtful. It appears to be isolated from the languages surrounding it; but the so far sketchy lexical and morphological data does not exclude the possibility that it will eventually be linked to a known language phylum.

16. UNUSUAL THEORIES

16.1 General

This paper has attempted to try and draw together the threads of mainstream views of the classification and affinities of languages in the Indo-Pacific region. However, it would be disingenuous not to record that, as elsewhere in the world, hypotheses have been advanced that are at best extreme and at worst near crackpot. A list of these would be long indeed, some more humorous than others, such as the proposed relationship between Ainu and Welsh. Ruhlen (1991) gives an extensive bibliography of "Genetic links between families", macrophyla hypotheses in the terminology of this paper. Most had best remain the province of the specialised scholar but some of the most influential deserve a brief description.

A fruitful perpetrator of these was Paul Benedict, apparently liked and respected by almost everyone in the field, whose theories have been rejected *in toto*[4]. His main contributions were Austro-Thai (§6) and the Japanese-Austronesian hypothesis (§3 and 9).Greenberg's Indo-Pacific hypothesis, discussed in §12, has regretfully to be similarly consigned to the dumpster of history. Further into Central Asia, ex-Soviet scholars, born in the hothouse of the Lenin library and unable to carry out fieldwork, generated a series of theories which have not found widespread acceptance, such as "Sino-Caucasian", linking Sino-Tibetan with North Caucasian and the more extreme "Dene-Caucasian" conjoining Basque, Sino-Tibetan, North Caucasian, Burushaski, Nahali, Yeniseian and Na-Dene [Haida, Athabaskan, Navajo etc.]. For summaries of these proposals see Ruhlen (1991) and Shevoroshkin (1992) that emerged from the first major conference to expose to the outside world Soviet scholarship on genetic linguistics.

17. CONCLUSION

The opening up of Russia and access to Soviet scholarship as well as the potential to work in China and peace in SE Asia have made possible a major expansion of linguistic research throughout the region. Many outstanding problems are now on their way to solution and a greater consensus is emerging on many classificatory issues. Controversies such as the membership of Macro-Altaic are unlikely to be comprehensively "solved" because the problem is no longer fragmentary data but rather fundamental disagreements as to the nature of language interaction. Moreover, in interpretative terms, it hardly matters whether Japanese is a remote outlier of Altaic or an isolate. Deep typological parallels with other languages in the region, combined with its distinctiveness pointing to a very long period of independent development provide the significant information required for archaeological and historical interpretation. Similar observations apply in the case of Papuan or Australian; if some hypothetical proto-language were to be constructed for these proposed phyla its content would be weak and its elements controversial.

What can be said is that the Indo-Pacific region is exceptional in world terms for the high density of languages, the high number of isolates and the diversity even within accepted phyla. This is striking and can be contrasted with Africa, which has few isolates and large phyla which are relatively closely knit (Blench 1999). Assuming the "out of Africa" hypothesis is accepted this is surprising; Africa might well be expected to have more linguistic diversity in the way that it shows genetic diversity (Blench in press). This suggests that Africa has undergone significant expansions of language phyla in the last ten thousand years and that the sort of diversity characteristic of Papuan has simply been eliminated. Indeed, Niger-Congo is often compared to Austronesian, with its trans-continental similarities and repertoire of common roots. The assimilation of what must once have been extremely diverse hunting-gathering populations in West Africa can be compared to the virtual disappearance of similar foragers throughout insular SE Asia. In both regions, however, the task remains the same; having brought preliminary order into a vast congeries of languages, to then make sense of this in terms of the historical and archaeological data.

NOTES

1. I would like to thank Roger Green, Waruno Mahdi and George van Driem for their valuable comments on the first draft of this paper.

2. "*The Kennewick Homicide*" Equinox, Channel 4, United Kingdom. Broadcast 6 October 1998.

3. Although the obscurity of some items meant that the authors only saw a proportion of their references, and notably were unable to access the Man collection in the Royal Anthropological Institute in London.

4. I never met Paul, although we had some correspondence prior to the World Archaeological Congress in New Delhi in 1994, but the admiration he seemed to command despite the widespread failure to accept his theories is a tribute to his personality.

REFERENCES

Abondolo, D. (ed.) 1998. *The Uralic Languages*. London: Routledge.

Barber, E.W. 1999. *The Mummies of Urumqi*. London: Macmillan.

Bellwood, P. J.J. Fox and D. Tryon (eds) 1995. *The Austronesians*. Canberra: Dept Anthropology RSPAS, Australian National University.

Benedict, P.K. 1975. *Austro-Thai: Language and Culture, with a Glossary of Roots*. New Haven: HRAF Press.

Benedict, P.K. 1990. *Japanese/Austro-Tai*. Ann Arbor: Karoma.

Blažek, V. 1999. Elam: a bridge between Ancient Near East and Dravidian India? In Blench, R.M. and M. Spriggs (eds) *Archaeology and Language Volume IV: Language Change and Cultural Change*, pp. 48-87. London: Routledge.

Blench, R.M. 1999. The languages of Africa: macrophyla proposals and implications for archaeological interpretation. In Blench R.M. and M. Spriggs (eds) *Archaeology and Language Volume IV: Language Change and Cultural Change*, pp.20-47. London: Routledge.

Blench, R.M. in press. Are the African pygmies an ethnographic fiction? In Biesbrouyck, K., G. Rossel and S. Elders (eds) *Hunter-gatherers of Equatorial Africa*. Leiden: Centre for Non-Western Studies.

Blust, R.A. 1999. Subgrouping, circularity and extinction: some issues in Austronesian comparative linguistics. In E. Zeitoun and P. J-K. Li (eds), *Selected Papers from the Eighth International Conference on Austronesian Linguistics*, pp. 31-94. Taipei: Institute of Linguistics, Academia Sinica.

Bradley, D. 1997. Tibeto-Burman languages and classification. In Bradley, D. (ed.) *Tibeto-Burman Languages of the Himalayas*, pp. 1-72. Pacific Linguistics A-86. Canberra: Australian National University.

Breton, R. J-L. 1997. *Atlas of the Languages and Ethnic Communities of South Asia*. New Delhi: Thousand Oaks and London: Sage Publications.

Caldwell, R. 1913 [1856]. *A Comparative Grammar of the Dravidian or South-Indian Family of Languages*. London: Kegan Paul, Trench, Trubner.

Collinder, B. 1965. *An Introduction to the Uralic Languages*. Berkeley: University of California Press.

Comrie, B. 1981. *The Languages of the Soviet Union.* Cambridge: Cambridge University Press.

Crowley, T. and R.M.W. Dixon 1981. Tasmanian. In Dixon, R.M.W. and B.J. Blake (eds) *Handbook of Australian Languages, Volume 2,* pp. 394-427. Canberra: Australian National University Press.

Diffloth, G. 1997. Austroasiatic. *Encyclopaedia Britannica,* Macropaedia Vol. 22, pp. 701-704. Chicago: Encyclopaedia Britannica.

Dixon, R.M.W. 1980. *The Languages of Australia.* Cambridge: Cambridge University Press.

Dixon, R.M.W. 1997. *The Rise and Fall of Languages.* Cambridge: Cambridge University Press.

Doerfer, G. 1978. Classification problems of Tungus. Beiträge zur nordasiatischen Kulturgeschichte. *Tungusica* 1:1-26.

Donohue, M. 1998. The languages of Wasur: archivists and activists. *Ogmios* 10:16-17.

van Driem, G. 1995. Black Mountain conjugational morphology, Proto-Tibeto-Burman morphosyntax, and the linguistic position of Chinese. In Nishi, Y., J. Matisoff and Y. Nagano (eds), *New Horizons in Tibeto-Burman Morphosyntax,* pp. 229-259. Senri Ethnological Studies 41. Osaka: National Museum of Ethnology.

van Driem, G. 1998. Neolithic correlates of ancient Tibeto-Burman migrations. In Blench R.M. and M. Spriggs (eds) *Archaeology and Language II,* pp. 67-102. London: Routledge.

van Driem, G. in press. *Languages of the Himalayas: an Ethnolinguistic Handbook.* Handbuch der Orientalistik. Leiden: Brill.

Dutton, T. 1976. Magori and similar languages of Southeast Papua. In Wurm, S. (ed.) *New Guinea Area Languages and Language Study. Volume II. Austronesian Languages,* pp. 581-636. Pacific Linguistics C-39. Canberra: Australian National University.

Edmondson, J.A. and D.B. Solnit (eds) 1988. *Comparative Kadai: Linguistic Studies beyond Tai.* Dallas: Summer Institute of Linguistics and the University of Texas at Arlington.

Edmondson, J.A. and D.B. Solnit (eds) 1997a. *Comparative Kadai: the Tai branch.* Dallas: Summer Institute of Linguistics and the University of Texas at Arlington.

Edmondson, J.A. and D.B. Solnit 1997b. Introduction. In Edmondson, J.A. and D.B. Solnit (eds) *Comparative Kadai: the Tai branch,* pp. 1-32. Dallas: Summer Institute of Linguistics and the University of Texas at Arlington.

Fitzgerald, S.A. 1997. *Velar-initial Etyma and Issues in Comparative Pama-Nyungan.* Unpublished Ph.D. thesis. University of Victoria.

Foley, W.A. 1986. *The Papuan Languages of New Guinea.* Cambridge: Cambridge University Press.

Greenberg, J. 1971. The Indo-Pacific hypothesis. In Sebeok, T.A. (ed.) *Current Trends in Linguistics, Volume VIII - Linguistics in Oceania,* pp. 807-871. The Hague: Mouton.

Greenberg, J. 1987. *Language in the Americas.* Stanford: Stanford University Press.

Grimes, J.E. and Grimes, B.F. 1996 *Ethnologue Language Family Index (13th edition).* Dallas: Summer Institute of Linguistics.

Hamp, E.P. 1976. On Eskimo-Aleut and Luoravetlan. In E. P. Hamp (ed.) *Papers on Eskimo and Aleut Linguistics,* pp. 81-92. Chicago: Chicago Linguistic Society.

Hodgson, B. 1857. Comparative Vocabulary of the Languages of the broken Tribes of Népál (inc. "Comparative Vocabulary of the Kiranti Language'). *Journal of the Asiatic Society of Bengal,* XXVI: 317-371.

Janhunen, J. 1992. Das Japanische in vergleichender Sicht. *Journal de la Société Finno-Ougrienne* 84:145-161.

Janhunen, J. 1993. The teens in Jurchen and Manchu revisited. *Mémoires de la Société Finno-Ougrienne* 215:169-184. [Festschrift für Raija Bartens].

Janhunen, J. 1994. Additional notes on Japanese and Altaic [1 and 2]. *Journal de la Société Finno-Ougrienne* 85:236-240 and 256-260. Helsinki.

Janhunen, J. 1998. Ethnicity and language in prehistoric Northeast Asia. In Blench R.M. and M. Spriggs (eds) *Archaeology and Language II,* pp. 195-208. London: Routledge.

Johanson, L. and E. A. Csato (eds) 1998. *The Turkic Languages.* London: Routledge.

Konow, S. 1906. Nihali. In Grierson G. (ed.) *Linguistic Survey of India, Volume 4,* pp. 185-189. Calcutta: Government Printing Office.

Lorimer, D.L.R. 1935-38. *The Burushaski Language.* 3 vols. Oslo: Instituttet for Sammenlignende Kulturfoskning.

Lynch, J. 1998. *Pacific Languages.* Hawai'i: University of Hawai'i Press.

Mallory, J.P. and D.Q. Adams (eds) 1997. *Encyclopaedia of Indo-European culture.* London and Chicago: Fitzroy Dearborn.

Manoharan, S. 1983. Subgrouping Andamanese group of languages. *International Journal of Dravidian Linguistics,* XII(1):82-95.

Martin, S.E. 1991. Recent research on the relationships of Japanese and Korean. In S. Lamb (ed.) *Sprung from Some Common Source,* pp. 269-292. Stanford: Stanford University Press.

Masica, C. 1990. *The Indo-Aryan Languages.* Cambridge: Cambridge University Press.

Matisoff, J.A., S.P. Barton and J.B. Lowe 1996. *Languages and Dialects of Tibeto-Burman.* STEDT Monograph Series, 2. Berkeley: University of California Press.

McAlpin, D.W. 1981. *Proto-Elamo-Dravidian: The Evidence and its Implications*. Philadelphia: Transactions of American Philosophical Society 71/3.

McConvell, P. and N. Evans (eds) 1997. *Understanding Ancient Australia. Perspectives from Archaeology and Linguistics*. Melbourne: Oxford University Press.

McConvell, P. and N. Evans 1998. The enigma of Pama-Nyungan expansion in Australia. In: R.M. Blench and M. Spriggs (eds) *Archaeology and Language II*, pp. 174-191. London: Routledge.

McElhanon, K.A. and Voorhoeve, C.L. 1970. *The Trans-New Guinea Phylum: Explorations in eep Level Genetic Relationships*. Canberra: Pacific Linguistics Series B no. 16.

Menges, K.H. 1995 [2nd ed.]. *The Turkic Peoples and Languages*. Wiesbaden: Harrassowitz.

Miller, R.A. 1979. Old Japanese and the Koguryo fragments: a re-survey. In Bedell, G., E. Kobayashi and K. Murashi (eds), *Explorations in linguistics: Papers in Honor of Kazuko Inoue*, pp. 348-368. Tokyo: Kenkyusha.

Miller, R.A. 1980. *Origins of the Japanese Language*. Publications on Asia of the School of International Studies 34. Seattle and London: University of Washington Press.

Miller, R. A. 1994. Old loanwords in Japanese and "Omnicomparativismus". *Journal de la Société Finno-Ougrienne* 85:221-236.

Miller, R.A. 1996. *Languages and History: Japanese, Korean and Altaic*. Bangkok: White Orchid Press.

Mundlay, A. 1996. The Nihali language. *Mother Tongue*, II:5-47.

O'Connell, J. F. and J. Allen 1998. When did humans first arrive in Australia and why is it important to know? *Evolutionary Anthropology* 6(4):132-146.

O'Grady, G.N. 1998. Towards a Proto-Pama-Nyungan Stem List, Part I: Sets J1-J25. *Oceanic Linguistics*, 37(2):209-233.

Parkin, R. 1991. *A guide to Austroasiatic Speakers and their Languages*. Honolulu: University of Hawaii Press.

Patrie, J. 1982. *The Genetic Relationship of the Ainu Language*. Oceanic Linguistics Special Publication 17. Honolulu: The University Press of Hawaii.

Pawley, A. 1995. C.L. Voorhoeve and the Trans New Guinea Phylum hypothesis. In Baak, C. M. Bakker and D. van der Meij (eds), *Tales from a Concave World: Liber Amicorum Bert Voorhoeve*, pp. 83-123. Leiden: Department of Languages and Cultures of South-East Asia and Oceania, Leiden University.

Purnell, H.C. Jr. 1970. *Towards a Reconstruction of Proto-Miao-Yao*. Unpublished Ph.D. thesis. Cornell University.

Radcliffe-Brown, A.R. 1914. Notes on the languages of the Andaman Islands. *Anthropos*, 14:36-52.

Reid, L. A. 1996. The current state of linguistic research on the relatedness of the language families of East and South-East Asia. *Bulletin of the Indo-Pacific Prehistory Association* 15:87-91.

Reinhard, Johan G. 1969. Aperçu sur les Kusundâ, peuple chasseur du Népal. *Objets et Mondes, Revue du Musée de l'Homme* IX (1): 89-106.

Reinhard, J. G. 1976. The Ban Rajas, a vanishing Himalayan tribe. *Contributions to Nepalese Studies — Journal of the Centre for Nepal and Asian Studies, Tribhuvan University, Kîrtipur, Nepal,* 4 (1): 1-21.

Reinhard, J.G., and T. Toba (= Toba Sueyoshi). 1970. *A Preliminary Linguistic Analysis and Vocabulary of the Kusunda Language*. Kathmandu: Summer Institute of Linguistics. Typescript. 31pp.

Ross, M. 1984. Maisin: a preliminary sketch. In (no named editor) *Papers in New Guinea Linguistics No. 23*, pp. 1-82. Pacific Linguistics A-69. Canberra: Australian National University.

Ross, M. 1995. The great Papuan pronoun hunt: recalibrating our sights. In Baak, C. M. Bakker and D. van der Meij (eds), *Tales from a Concave World: Liber Amicorum Bert Voorhoeve*, pp. 139-168. Leiden: Department of Languages and Cultures of South-East Asia and Oceania, Leiden University.

Ruhlen, M. 1991 [revised edition]. *A Guide to the World's Languages. Volume I.* Stanford, CA: Stanford University Press.

Shevoroshkin, V. (ed.) 1992. *Nostratic, Dene-Caucasian, Austric and Amerind*. Bochum: Brockmeyer.

Shibatani, M. 1990. *The Languages of Japan*. Cambridge: Cambridge University Press.

Shoji, H. and J. Janhunen (eds) 1997. *Northern Minority Languages: Problems of Survival*. Osaka: National Museum of Ethnology.

Steever, S.B. (ed.) 1998. *The Dravidian Languages*. London: Routledge.

Thurgood, G. 1994. Tai-Kadai and Austronesian: the nature of the relationship. *Oceanic Linguistics* 33(2): 345-368.

Tiffou, É. and J. Pesot 1989. *Contes du Yasin. Introduction au Bourouchaski du Yasin avec Grammaire et Dictionnaire Analytique*. Leuven: Peeters.

Vovin, A. 1993. *A Reconstruction of Proto-Ainu*. Brill's Japanese Studies Library 4. Leiden: Brill.

Vovin, A. 1994. Genetic affiliation of Japanese and methodology of linguistic comparison. *Journal de la Société Finno-Ougrienne*, 85:241-256.

Wang F. 1994. *Reconstruction of the Proto-Miao Language*. [In Chinese and English] Tokyo: Institute for the Study of the Languages and Cultures of Asia and Africa.

Werner, H. 1994. *Das Klassensystem in den Jenissej-Sprachen.* Veröffentlichungen der Societas Uralo-Altaica, Band 40. Wiesbaden: Harrassowitz.

Werner, H. 1995. *Zur Typologie der Jenissej-Sprachen.* Veröffentlichungen der Societas Uralo-Altaica, Band 45. Wiesbaden: Harrassowitz.

Werner, H. 1997a. *Das Jugische (Sym-Kettische).* Veröffentlichungen der Societas Uralo-Altaica, Band 50. Wiesbaden: Harrassowitz.

Werner, H. 1997b. *Die Ketische Sprache.* Tunguso-Sibirica 3. Wiesbaden: Harrassowitz.

Werner, H. 1997c. *Abriß der kottischen Grammatik.* Tunguso-Sibirica 4. Wiesbaden: Harrassowitz.

Wurm, S.A. (ed.) 1975. *New Guinea Area Languages and Language Study. Volume I: Papuan Languages and the New Guinea Linguistic Scene.* Pacific Linguistics C-38. Canberra: Australian National University.

Wurm, S.A. 1982. *Papuan Languages of Oceania.* Tübingen: Gunter Narr.

Wurm, S.A. and K. McElhanon 1975. Papuan language classification problems. In S.A. Wurm (ed.), *Papuan Languages and the New Guinea Linguistic Scene*, pp. 145-164. Pacific Linguistics C-38. Canberra: Australian National University.

Wurm, S.A. and S. Hattori 1981-3. *Language Atlas of the Pacific.* Canberra: Australian National University.

Zide, N. and V. Pandya 1989. A bibliographical introduction to Andamanese linguistics. *Journal of the American Oriental Society,* 109(4):639-651.

Zvelebil, K.V. 1997. Dravidian languages. *Encyclopaedia Britannica*, Macropaedia Vol. 22, pp. 697-700. Chicago: Encyclopaedia Britannica.