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Patterns of dispersal and diversification in Island Southeast Asia and Oceania

Marian Klamer, Mily Crevels, and Pieter Muysken

6.1 Introduction: Diversity in the region

It is difficult to summarize all the accumulated evidence about language dispersal in Island Southeast Asia (ISEA) and Oceania here. The following presents some of the main findings and hypotheses.

6.1.1 Languages and language families

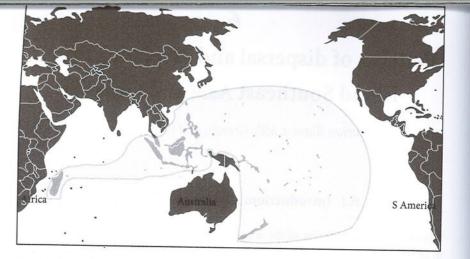
Of the 6,000 languages spoken in the world, a third is spoken in Oceania and ISEA (including the countries of Malaysia, Indonesia, the Philippines, East Timor, and Papua New Guinea). Furthermore, the islands of eastern Indonesia and New Guinea as well as Vanuatu and the Solomon Islands have extremely high linguistic diversity indices. For instance, in Vanuatu, the average speaker population per language is 2,500 (Lynch and Crowley 2005).

This part of the world is home to two large families, a few middle-sized families, and many smaller families and isolates. Comprising about 1,200 languages, the Austronesian family is the largest one, and in terms of its geographical span (ranging from Madagascar off the southeastern coast of Africa to Easter Island in the southeastern Pacific Ocean, see Map 6.1) it is the largest of any language family in the world before the spread of Indo-European in the colonial period.

Austronesian is on a par with Indo-European, Niger-Congo, Afroasiatic, and Uralic as one of the best-established ancient language families. It is generally accepted that Taiwan is the area from which the Austronesian speakers dispersed, and before the Austronesians settled in Taiwan more than 6,000 years ago, they may have come from coastal South China (Bellwood 1997).

The total number of speakers of Austronesian languages is about 270 million (Adelaar 2005a). Well-known Austronesian languages include Indonesian, Malay, and Javanese. These are large languages with a long written tradition, but most of the Austronesian languages are tiny, with only a few thousand speakers, and more than 90% of them do not have a written tradition.

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Map 6.1 Spread of Austronesian languages Source: adapted from http://en.wikipedia.org/wiki/Austronesian_languages

The primary division of Austronesian is into ten subgroups, nine of which are spoken in Taiwan, the Austronesian homeland. The single remaining subgroup, which is labeled 'Malayo-Polynesian' (MP) (Blust 1977), comprises all the Austronesian languages spoken in ISEA and the Pacific. While Austronesian as such constitutes a clearly recognizable family and there is ample evidence for this single Malay-Polynesian subgroup, the internal structure of MP is much debated (see Donohue and Denham, Chapter 10 this volume; and the references cited there). In particular relating to the \sim 650 MP languages spoken in ISEA there is much uncertainty about how their micro-groupings connect to each other into the macro-groupings ('Western MP,' Central Eastern MP,' and 'Central MP') which together constitute the MP subgroup. The historical reconstruction data available at present does not allow us to say that proto-MP branched out in just a few daughter languages like 'Western MP' and 'Central Eastern MP' from which the lower subgroupings of languages in ISEA derived. What we know at the moment is better represented in a rake-like family tree, where proto-MP has dozens of daughter clades in ISEA (Ross 1995, 2005; Adelaar 2005b; Donohue and Grimes 2008). The lower-level language groupings of the Philippines, Malaysia, Borneo, Sulawesi, western and eastern Indonesia cannot be linked to each other at a higher level. This is not trivial: it means that for more than half of the ~1,200 Austronesian languages, historical linguistics is not (yet) in the position to say something about their affiliations and their temporal and spatial relations. One reason for these uncertainties is that many parts of ISEA are linguistically still very much underexplored, so that the data sets on which earlier classifications of languages in this region have been based are often rather narrow. For example,

what is currently considered the major reference work on Austronesian reconstructions, the *Austronesian Comparative Database (ACD)* (Blust and Trussell, n.d.) has samples of less than half of the Austronesian languages; and most of the languages that are represented feature with less than ten words, a quarter with just a single word (Klamer 2019).

The lowest major subgroup within Malayo-Polynesian is the Oceanic subgroup. Comprising 450 languages, this subgroup is uncontroversial, and is perhaps the one that is best described (Lynch et al. 2002). A major reference work on the Austronesian family is Blust (2013).

In striking contrast with the Austronesian languages, the languages referred to as 'Papuan' do not derive from a single ancestor. The term 'Papuan' rather refers to at least twenty-five different language families and isolates spoken in New Guinea and surroundings; more conservative estimates mention figures up to fifty families (Foley, Chapter 8 this volume). The island of New Guinea itself is estimated to contain perhaps 1,000 languages, three quarters of which are Papuan; the remaining quarter is Austronesian. The Papuan languages of New Guinea fall into at least eighteem language families, along with several isolates (Pawley 2006). Another six or seven families and several isolates are found on the islands outside of New Guinea, in a region extending from Timor, Alor, Pantar, and Halmahera in eastern Indonesia (Klamer 2017b; Holton and Klamer 2018), to the Solomon islands in the east. About three million speakers speak Papuan languages, and most Papuan languages have fewer than 3,000 speakers. The level of linguistic diversity of Papuan families-whether measured in numbers of languages or in terms of family units that cannot be related to others—is comparable to the entire continent of Eurasia.

Comprising 400 languages, the Trans New Guinea (TNG) family is the largest family of the region, and after Austronesian and Niger-Congo it is the third largest family in the world. Trans New Guinea languages are spoken continuously along the 2,000-km mountain chain that runs along the centre of New Guinea.¹ The great diversity among its subgroups shows that it is a very ancient family. The initial break up and dispersal of TNG is estimated to have taken place between 8,000 and 12,000 BP, as the climate warmed after the last Ice Age. The area from which the family expanded lies in the central highlands of the eastern half of New Guinea, and expansion took place in a westward direction along the central cordillera (Map 6.2). The use of agriculture based on tubers such as taro and bananas may have enabled speakers of TNG languages to establish permanent settlements along the central highlands. At the time of the TNG expansion, areas such as the Sepik

¹ Traditionally, the westernmost outlier of Papuan languages of Timor, Alor, and Pantar are assumed to also belong to the TNG family (see Pawley 2005; Ross 2005). However, recently accumulated evidence does not confirm such a genealogical relationship (Holton et al. 2012; Holton and Robinson 2017).



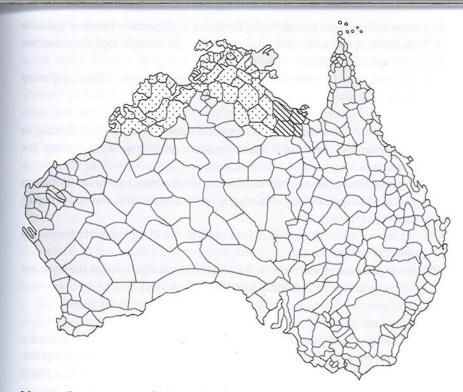
Map 6.2 Spread of Papuan languages, shaded. Dark gray is Austronesian, and the historical range of Australian languages is shown in the dotted area. *Source:* http://en.wikipedia.org/wiki/Papuan_languages by Kwamikagami at English Wikipedia, CC BY-SA 3.0, http://commons.wikimedia.org/w/index.php?curid=5855201

provinces (Foley, Chapter 8 this volume) and the Bird's Head were already dominated by other, much smaller families, some of which are currently still represented there.

Compared to the extraordinary levels of variety in genealogical (sub)groupings and numbers of languages in New Guinea, the situation in Australia is strikingly different. Most of the Australian languages belong to the Pama-Nyungan family, which contains approximately 290 languages and covers almost 90% of the Australian mainland (Map 6.3). The Pama-Nyungan family comprises more than twenty-five subgroups (Bowern and Koch 2004). The time depth of the family is estimated at 5,000 years or less (O'Grady and Hale 2004), but this dating is not yet very secure. There is also a group of languages spoken in northern Australia referred to as Non-Pama-Nyungan, which comprises some twenty language families, among which there are possible higher level affiliations (Evans 2003a).

Whether the Non-Pama Nyungan may be included in the Pama-Nyungan group is uncertain, but there is increasing acceptance that all languages spoken by Aboriginal people in Australia are ultimately related (Evans, Chapter 7 this volume).

Australian languages have been claimed (in Dixon 2002 and earlier work) to be so exceptional that comparative methods used elsewhere in the world do not work for this continent, on the assumption that massive borrowing and structural convergence have obliterated any phylogenetic structure that may have existed. However, work by Alpher and Nash (1999) and Bowern (2010) demonstrates that rates of lexical borrowing in Australian languages were actually quite low. In addition, Bowern and Atkinson (2012) show that a method of Bayesian phylogenetic inference based on cognate lexical items (which has also been used for



Map 6.3 Pama-Nyungan (light gray) and non-Pama-Nyungan (diagonal lines and dotted areas) languages in Australia

Source: adapted from http://commons.wikimedia.org/wiki/File:Pama-Nyungan_languages.png by Kwamikagami at English Wikipedia, CC BY-SA 3.0 http://creativecommons.org/licenses/by-sa/3.0

Bantu and Austronesian) can be successfully used to reconstruct the internal structure of the Pama-Nyungan language tree in more detail.

6.1.2 Typological features

6.1.2.1 Austronesian

In terms of typological features, it is difficult to generalize across Austronesian languages. The family is so large and so internally diverse that few if any features characterize it as a whole.

While the Oceanic languages share many typological characteristics (for a detailed overview, see Lynch et al. 2002, Chapter 3), the non-Oceanic Austronesian languages, spoken in Asia and Madagascar, are very diverse.

Negative structural characteristics of Austronesian include the almost universal absence of tonal contrast, the absence of plural affixes on nouns, and the absence of tense marking on verbs. Positive features shared among the non-Oceanic Austronesian languages include reduplication, the distinction between inclusive and exclusive pronouns, and the presence of morphological causatives (Himmelmann 2005: 110).

At the same time, the non-Oceanic Austronesian languages differ along many dimensions, such as:

- (i) word order (verb-initial vs. verb-second or final; possessors following or preceding the possessed noun; negators preceding or following the predicate);
- (ii) the morphological expression of voice alternations (elaborate in Taiwan and the Philippines, less elaborate in western Indonesia, and simplified or absent in the east);
- (iii) the use of numeral classifiers (not used in the Philippines but frequently used everywhere else);
- (iv) the expression of alienable vs. inalienable possession (rare in the west, but frequent in eastern Indonesia, as well as in Oceanic).²

6.1.2.2 Papuan

To characterize the typological profile of Papuan languages is even harder. Overviews of typological features in Papuan languages are given in Foley (1986, 2000); Pawley (2006); Aikhenvald and Stebbins (2007); Klamer et al. (2008); Klamer and Ewing (2010); Klamer (2017a). Here we list some of the features mentioned in these sources.

Phonologically, many Papuan languages have only a single liquid phoneme, and tone or pitch accent contrasts are fairly common, e.g. in the Trans New Guinea family. Syntactically, Papuan languages are overwhelmingly head-final (with OV constituent order, final negations, final conjunctions, and postpositions). Notable exceptions to this are the Torricelli family, the East Bird's Head family, and some West Papuan languages spoken in Halmahera (Holton and Klamer 2018). Many Papuan families exhibit sophisticated noun classification systems, e.g. in the Torricelli and Sepik-Ramu families; and masculine/feminine gender is commonly marked, while case marking is less common. Most Papuan languages have nominative-accusative alignment, involving at least one personnumber affix or clitic on the verb. A feature regularly mentioned as typical for Papuan syntax is clause chaining, often with a concomitant switch reference system, and a morphological contrast between 'medial' and 'final' verbs (Pawley 2005: 91). In the nominal domain, many Papuan languages make a formal distinction between alienable and inalienable possession, but they typically do not encode clusivity in their pronominal paradigms. Many Papuan languages use serial verb constructions but there is huge variety in the structural and semantic features of serial verbs. Papuan languages also show a wide variety of numeral systems, including quaternary, quinary, vigesimal, and various body part systems (Pawley 2006: 168; Schapper and Klamer 2017). On the other hand, numeral classifiers are virtually absent in Papuan languages, and in regions where they are attested, they likely arose through contact with Austronesian (Klamer 2014).

Despite these observations, it must be stressed that the Papuan languages are structurally as diverse as they are genealogically. Moreover, all the comparative statements in the literature are based on data from a very small sample of languages: for most of the Papuan languages spoken today, data are yet lacking.

6.1.2.3 Australia

Compared to the typological variation found in Austronesian and Papuan, the typological patterns found in Australia are much more homogeneous. The features listed by Austin (2006) and Blake (2006) include the following:

The phonological systems of Australian languages across the continent are quite similar; striking features include the lack of fricatives and affricates and the lack of a voicing contrast for stops, while most of them only have three (cardinal) vowels.

Word roots are generally disyllabic and start with a single consonant. Pama-Nyungan languages are entirely suffixing, and often dependent-marking, while non-Pama-Nyungan languages are both suffixing and prefixing and tend to be head-marking.

Nominals in Pama-Nyungan typically show rich systems of case marking, and make up an alignment system that is split according to animacy: pronoun forms reflect nominative-accusative case marking; other nominals have forms showing ergative-absolutive case marking. Instead of nominal case marking, non-Pama-Nyungan languages typically have pronominal elements for subject and object prefixed to the verb, agreeing with the verbal arguments.

As grammatical relations are encoded either by nominal case marking or verbal agreement morphology, constituent order can be relatively free in many Australian languages. Word order is regulated by pragmatic principles rather than grammatical rules, so that e.g. focused (emphasized) constituents often take the initial sentence position. Despite the widespread use of ergative case marking, ergative syntax is not common in Australia.

Furthermore, all languages also have affixes that encode discourse status, evidentiality, and other pragmatically marked meanings. Over much of central and northern Australia, sign language is used as an alternative to speech. Sign language is traditionally used in rituals, during periods of mourning when speech is proscribed, in communicating over long distances, or in hunting, where silence is important.

² See Klamer (2002); Himmelmann (2005); Klamer et al. (2008); Klamer and Ewing (2010); and references.

6.2 History of the study of the languages of the region

The remarkable similarities between Malay as spoken in the East Indies and the languages thousands of kilometers away in the Pacific Ocean triggered the first comparative study of Austronesian languages by the Dutchman Adriaan Reland (1708), a vicar's son from a village just north of Amsterdam. Reland used word lists that had been collected a century before, by two other Dutchmen, the explorers Willem Schouten and Jacob Lemaire. However, until Schmidt (1899) invented the term Austronesia (*austro* 'southern', *nesia* 'islands'), the Austronesian languages were referred to as Malayo-Polynesian (Bopp 1841), after the language Malay and its relatives in the west, and the Polynesian languages in the east. In the twentieth century, comparative work on the family was carried out by Otto Dempfwolff in the 1930s, Isodore Dyen in the 1950s, and Robert Blust from the 1970s onwards. (For further information and references, see Crowley 2006; Ross 2006.)

The term *Papooa* was already used by Portuguese explorers in the early sixteenth century and can be found on world maps of the time (e.g. the Oost ende West-Indische Spieghel, 1621). It was originally used to refer to a group of islands located north of the Bird's Head of New Guinea. The term is likely to be a shortened, corrupted form of the expression (*sup i*) *papwa*, literally 'land of down/ below', i.e. 'land where the sun goes down, land in the west' in a dialect of Biak, an island close to the Bird's Head of New Guinea (Sollewijn Gelpke 1993). People from Biak have played a very dominant role in the Bird's Head region, and from the perspective of their homeland, the islands named Papooa are indeed located in the west.

Although the term Papua has been used for centuries, the Papuan languages remained almost completely unknown to linguists until the second half of the nineteenth century. The European colonial administration during that time brought missionary scholars carrying out linguistic research to the island of New Guinea, a situation which continued until the end of World War II. In the 1960s and 1970s linguists from Australia and the Netherlands carried out surveys in New Guinea, resulting in preliminary classifications based on lexicostatistic and structural information, such as those published in the works by Wurm and Hattori (1981-1983). The most extreme proposal in the field of Papuan linguistics was forwarded by Greenberg (1971), who suggested that all Papuan languages belonged to one Indo-Pacific group. This claim was generally met with extreme skepticism from Papuanists as it was based on a too flimsy chain of resemblances. From 1980 till today, research in Papuan languages is mainly done by researchers from the Summer Institute of Linguistics (who have undertaken work on more than 200 Papuan languages), research groups in Australia (mainly working in Melanesia and southern New Guinea) and researchers in the Netherlands (mainly working in the Bird's Head, south-west New Guinea,

Halmahera, and Timor Alor Pantar). The Center for Endangered Languages Documentation (CELD) in Manokwari, Papua, is an example of recent developments where documenting endangered languages of a region involves non-Western native speaker researchers.

The Papuan and Austronesian region is the least well-known linguistic area of the world. For large parts of the region, written historical records (as well as archeological and ethnographic data) are yet lacking. In such circumstances the study of relationships between languages through their lexicon is a unique tool for making inferences about human (pre)history and tracing population movements. However, for many of the languages we still have no record at all, or just a small word list collected during the colonial times by a non-linguist. For some 20% of the Austronesian and Papuan languages a (short, simple) grammar is available (Hammarström and Nordhoff 2012). Recently, various online lexicons of Papuan and Austronesian languages have been published, assembled from both published and unpublished sources (Greenhill et al. 2008; Greenhill 2017; Kaiping and Klamer 2018).

In contrast, for almost all of the Australian indigenous languages records exist, and grammatical information is available for approximately a hundred of them. Most of these materials have been collected since the early 1960s (Capell 1956; O'Grady, Voegelin, and Voegelin 1966; O'Grady, Wurm, and Hale 1966; Dixon 1980; Bowern and Koch 2004), but there are some older sources, due to missionaries, as well. Hale (1964, 1966) was the person who proposed the Pama-Nyungan family. Bowern (2016) is a lexical database of Australian indigenous languages.

6.3 Early history of the region

During the Pleistocene period, which lasted from 60,000-10,000 BP, the landmasses of Australia and New Guinea were joined in a single continent on the Sahul shelf (see Map 7.1 in Evans, Chapter 7 this volume). Mainland Southeast Asia, Malaysia, Borneo, Java, and Sumatra were joined in a single continent called Sunda. In between the Sunda and Sahul shelves, there was a water division. Between 12,000-10,500 BP, during the early Holocene period (from 12,000 BP till present) the last Ice Age ended. With the global rising of temperatures and melting of ice, sea levels started to rise dramatically. With the rise of sea levels, earlier coastal occupations in ISEA were obliterated (Galipaud, Chapter 9 this volume), Insular South East Asia was created, Tasmania to the south of Australia, was cut off from the mainland about 14,000 BP ago, and New Guinea and Australia were separated from each other by 8,000 BP.

It has been proposed that during the Pleistocene period, between 75,000-60,000 BP, modern humans migrated out of Africa to other regions of the world, and

6.4 Current issues of research

ultimately into Australia by 50,000 BP. Birdsell (1977) hypothesized that Sahul was populated at times that the sea levels allowed relative easy crossing of the water divisions between Sunda and Sahul, in several migration waves, the first of which took place approximately 50,000 BP. Evans (Chapter 7 this volume) reviews more recent work on the early settlement of Australia.

Another effect of the global warming at the end of the Pleistocene was the change in climate and vegetation, the increase of biodiversity and the subsequent shift of hunter-gatherer societies to a more mixed, agricultural economy based on domesticated cereal (in China) and tubers (banana, taro, and yam) in the New Guinea region. The higher global temperatures led to natural changes and an easier access to resources which fostered dramatic changes in social structures, settlement patterns, technical innovations, and a demographic boom referred to as the Neolithic revolution (after 10,000 BP) (see references in Galipaud, Chapter 9 this volume).

Some three to four thousand years ago, the first Austronesians arrived through the Philippines in the Moluccan and New Guinea area and moved beyond into the Pacific (Bellwood 1997: 123). The archeological record contains dates of human settlement at various locations in the Moluccas of more than 30,000 years ago (Bellwood 1998) and 26,000 years from the Bird's Head Peninsula (Pasveer 2003), which shows that ISEA was inhabited many millennia before the Austronesians arrived, although there is no evidence that all the islands were inhabited. The dispersal of the pre-Austronesians was most likely not a single event, just as the dispersal of the Austronesians was not.

Much work on the Austronesian dispersal has taken the view that the history reflected in the linguistic data largely corresponds to the histories revealed by the archeological record and by the human genetic record (Bellwood 1997; Diamond 2000, 2001, reviewed in Donohue and Denham 2010). Given that the linguistic data indicate that the Austronesians came from Taiwan in a north-south, west-east direction, it is assumed that evidence from archeology and genetics show the same direction of dispersal. However, recent research indicates that the spread of contemporary language families such as Austronesian is not associated with a significant change in the genetic composition of the human populations across ISEA, which in fact largely reflects the Pleistocene colonization. The lexical and structural diversity of the Austronesian languages suggests multiple migrations of different groups, at different points in time, in many different directions (Klamer 2019), including a language spread that is almost opposite to that inferred from the human genetic phyleography (HUGO Pan-Asian consortium 2009; Donohue and Denham 2011). Debate is ongoing on the importance and details of Austronesian expansion in Island Southeast Asia, but there is consensus that evidence from language history, archeology and human genes in ISEA show different histories (Donohue and Denham, Chapter 10 this volume; Galipaud, Chapter 9 this volume).

The linguistic complexity of New Guinea and surroundings creates special problems for attempts to classify languages into families, as well as attempts to reduce the large number of families and isolates by grouping some of them together into higher-order groupings. Under these circumstances, these languages have provided a particularly important testing ground in recent years for new methods which aim to 'break the time barrier' of the classical comparative method, by drawing inferences from the signal in assemblages of typological traits rather than simply in the sound-meaning pairings of the lexicon and grammatical morphology. Though still controversial (see references in Reesink and Dunn 2012), such methods are here to stay as a supplement to the comparative method in the area of ISEA.

Of particular interest here are the attempts to account for the mechanisms of spread of the Austronesian language family, an issue that will be taken up in the contributions in this volume. In particular, the 'Farming/Language Dispersal Hypothesis' (Bellwood and Renfrew 2002a) will be critically reviewed in several of the chapters.

6.5 Contributions in this section

Nicholas Evans (Chapter 7) traces diversification and dispersal in a continent of hunter-gatherers. The special characteristics of Australia pose numerous challenges and puzzling questions for our attempts to understand ancient patterns of linguistic diversification and contact. As the only continent solely occupied by hunter-gatherers, and as the only continent exclusively occupied by languages from a single language family, it offers us special opportunities to study the sorts of processes of diversification and dispersal characteristics of small huntergatherer groups who typify most of our human past. Enough of the traditional linguistic culture of these groups have survived in parts of Australia that we can observe the dynamics of multilingual contact, diversification, and complexification in regions like Arnhem Land whose polyglot, cosmopolitan, and metalinguistically aware language ecologies are a useful corrective to visions of small, isolated ancient groups. In the first part of the chapter the author surveys some of the sociolinguistic processes which have emerged from studies of languages still maintaining traditional multilingual ecologies in such areas. In the second part they take a deeper-time perspective and summarize some of the main findings, unsolved puzzles, and challenges for understanding the processes of diversification and dispersal that have left their modern linguistic footprint on the distribution of languages across the Australian continent.

William Foley (Chapter 8) studies language diversity, geomorphological change, and population movements in the Sepik-Ramu basin of Papua New Guinea. The island of New Guinea is unique in that intensive contact by its indigenous people with the colonizing world was largely contemporaneous with serious modern scientific documentation of their languages and cultures. Elsewhere in the world, serious cultural disruption due to colonization or slaving and often consequent catastrophic demographic collapse or centralized control through state formation occurred before any extensive modern documentation had begun. This makes New Guinea a crucial region for the study of prehistory as a key witness for a pre-contact situation before colonial disruption and/or state formation. It is well-known that the New Guinea region is the most linguistically diverse on Earth, but even within it the Sepik-Ramu basin region takes diversity to an extreme without parallel anywhere. In a land area of under 90,000 square kilometers are spoken languages of nineteen genetically distinct language families. The bulk of this area is occupied by a mere four successfully expanding language families; the other fifteen are squeezed into an area of less than a quarter of these 90,000 square kilometers.

The chapter traces the likely causes of this linguistic diversity, looking at geomorphological changes in the region in the last 8,000 years due to rising sea levels and inundation of the low lying land, which force populations to withdraw to the foothills and highlands to the south of the basin, all of which led to massive population displacements. Later, as the basin gradually filled in again by sediment brought down by the rivers from higher ground, there was a remigration of new peoples into reclaimed land. Further, indigenous belief systems with regard to language ideology and a wide range of language codes to select from, include trade languages, even in a single village have led to widespread mixing and even shifting of languages as economic advantages and political alignments altered. It argues that the diversity of the basin is due to 1) these forces that have led to the extensive linguistic shifting and reshuffling, and 2) the retention of languages in more isolated residual zones less affected by population displacements.

Jean-Christophe Galipaud (Chapter 9) provides an archeological perspective on the dynamics of human expansion and cultural diversification in ISEA and Oceania during the Neolithic. Human origins in mainland Southeast Asia are very ancient and result from successive waves of migration from the north and west over the millennia. First crossing of large water gaps is attested by 40,000 BPand probably earlier with the successful colonization of Sahul.

During the Holocene, intensification of human movements, possibly correlated with new economic development, supports the settlement of all Melanesian and western Polynesian islands up to Tonga and Samoa, from Island Southeast Asia. This period of human exploration of the Pacific is known as Lapita. Because of its visibility in the archeological record, but also because of the obvious link between the Lapita diaspora and the introduction of Austronesian languages into remote Oceania, the Lapita period has often been perceived as representative of the Austronesian diaspora. Human movements into and between the Southeast Asian islands are less visible and still not well documented but of similar importance to understand the dynamics of language shift and cultural transformation which led to contemporary cultures.

Archeological reconstruction attests to the rapid spread of innovative farming economies and their associated cultural development from 12,000 BP in China and along the main watercourses towards the south. Well established farming cultures interact with coastal fishing communities by 6,000 BP leading to the development of extensive maritime networks into the islands of Southeast Asia. Archeological evidence of cultural interactions between the South Asian mainland and the Southeast Asian islands as well as among the islands themselves supports the results of recent genetic studies on cultivated crops and commensal animals. The picture which emerges today is a complex one which calls for a reassessment of the generally used 'out of Taiwan' linguistic and archeological model.

Mark Donohue and Tim Denham study language, population and culture spreads and contact in Island Southeast Asia. The spread of modern humans into and across Indo-Malaysia and the Pacific represents the earliest confirmed dispersal of humans across a marine environment, and involved numerous associated technologies that indicate sophisticated societies on the move. Rather than revolutions that swept earlier 'stages' of settlement history away, we see layers building on earlier traditions and being combined to produce multi-stratal linguistic and social histories for the region.

The later spread of Austronesian over the region shows language replacement on a scale that is more reminiscent of the period of European colonization than of a social landscape more than three millennia old, and yet the Austronesian family presents the least stable typological profile of any large family. These observations require further investigation. The chapter examines the disciplinary dimensions that offer separate, but intertwined, histories of the region. The authors point out a number of ways in which the dispersal of Austronesian languages, originating in Taiwan, should not be portrayed as a technological and demographic steamroller. This involves discussion of the nature of pre-Austronesian society and language in the south-west Pacific, and the degree to which it has and has not changed following 'Austronesianization.' There are many possible scenarios why and how MP languages could have become dominant in much of the region, including economic or technical (e.g. sea faring) superiority, cultural elite dominance; or marriage practices where unions between couples of different linguistic backgrounds led to the generational transfer of only one of the languages.