THE PATTERN OF AUSTRONESIAN LANGUAGE DISPERAL:
ARCHAEOLOGICAL RELATIONSHIPS BETWEEN TAIWAN, THE
PHILIPPINES AND EASTERN INDONESIA

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Abstrak
Bahasa merupakan salah satu indikator yang dapat menentukan keterkaitan antarperadaban yang ditemukan di wilayah geografis yang berbeda. Salah satu bahasa antarperadaban yang digunakan secara luas sejak masa prasejarah sampai saat ini oleh penduduk di Nusantara dan Oseania adalah Bahasa Austronesia. Studi tentang pola persebaran Bahasa Austronesia memungkinkan kita untuk mempelajari gerak perpindahan manusia petutur Bahasa Austronesia dari Asia Daratan ke arah selatan melalui Taiwan, Filipina memasuki wilayah Indonesia bagian timur. Pergerakan bangsa petutur Bahasa Austronesia ini lah yang diduga membawa budaya 'sawah' ke Nusantara dan beberapa artefak yang berasosiasi dengan 'sawah'. Tulisan ini akan memahas data arkeologis pasca 3.000 Sebelum Masehi di Taiwan, Filipina, dan Indonesia bagian timur.

Keywords: Austronesian, language, Yüan-shan, T'ai-yuan, agriculture, red-slipped pottery, Lapita, Borneo

A. Introduction

linguists presume that the Austronesian languages spoken today by the inhabitants of Island Southeast Asia and Oceania share a common origin. Cognate similarities between these languages are assumed by ethnolinguistic prehistorians to reflect common descent from a Proto-Austronesian language that perhaps existed during the Neolithic period. Bellwood (1991; 1997a:6) suggests that during the Neolithic period there was a movement by early Austronesian-speaking people from Taiwan southwards. He explains that the southwards migration was initiated from the Chinese mainland, and continuously moved south through the Philippines and into Eastern Indonesia. Bellwood (1992:102; Figure 1) suggested that the migration of the Austronesian-speaking peoples brought agricultural subsistence into Island Southeast Asia. Unfortunately, only some archaeological artefacts can be associated directly with agriculture, such as ancient carbonised rice and millet grains, and pig and dog bones, particularly when these items occur in regions in which the plants and animals concerned were not native (Bellwood 1997a:201). Nevertheless, by comparing related languages spoken in today's societies the records of settlement and dispersal of the Austronesian-speaking
peoples in each geographical region can be examined.

I agree that some features of the archaeological record in Island Southeast Asia and Taiwan can support the interpretation of a Neolithic migration that led to the initial distribution of the Austronesian-speaking peoples across all of Island Southeast Asia. The archaeological and linguistic records can also illustrate the probable migration patterns in terms of date and geography. This essay thus discusses the post 3000 BC archaeological records in Taiwan, the Philippines, and Eastern Indonesia.

B. Post 3000 BC Archaeological Records in Taiwan, Philippines, and Eastern Indonesia

The Neolithic period in Island Southeast Asia is identified by a continuous development of pottery production (Spriggs 1989:587), along with the manufacture of polished stone tools for forest clearance and cultivation. The oldest Neolithic culture in Taiwan is defined by cord-marked pottery with incised rims, untanged and stepped stone adzes, polished slate spear points and stone barkcloth beaters. This culture is known as the Ta-p’en-k’eng culture (Spriggs 1989:103; 2000:214), dated recently at Nan-

![Figure 1. The Austronesian language dispersal (Bellwood et al. 1995: 18)](image)

kuan-li (near T’ainan) to 3000-2500 BC, where it occurs with notched stone net sinkers. Definite rice cultivation at Nan-kuan-li is evidenced by carbonised rice and millet grains and a large number of reaping knives made of shell (Tsang 2004). Bellwood (1997a, 1997b, 1997c) describes that by 1500 BC the Ta-p’en-k’eng culture had developed into three subcultures, which are the Lungshanoid (west coast), Yüan-shan...
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(northern Taiwan), and T'ai-yuan (eastern Taiwan). However, only the Yüan-shan and T'ai-yuan cultures are likely to have had direct connections with the earliest Neolithic cultures that developed in the Philippines and eastern Indonesia (Bellwood 1997a:217).

Between 2500 and 1000 BC in northern Taiwan, the cord-marked pottery of Ta-p'en-k'eng type was replaced by red-slipped pottery with globular forms, rare incised or punctate decoration, ring feet, and strap handles, all distinguishing the Yüan-shan culture. However, in the Yüan-shan there are Ta-p'en-k'eng artefact forms that continued to be used, such as untangled and stepped stone adzes, slate projectile points, and stone barkcloth beaters. Other specific artefacts found in Yüan-shan assemblages are chipped stone hoes, baked-clay spindle whorls, domesticated dog bones, and pig bones. Slate reaping knives are rare in the Yüan-shan assemblage (Bellwood 1997a:215; 1992:103).

The T'ai-yuan culture developed down the eastern coast of Taiwan and is related to a use of stone-slab graves for burials, and red or brown-slipped pottery. The highlight of the T'ai-yuan culture is the site of Peinan, dated between 1500 and 800 BC, that has produced 1500 burials and 50 house foundations associated with plain and red-slipped pottery, baked-clay spindle whorls, stone barkcloth beaters, and other grave goods. New features appeared in the T'ai-yuan culture, such as tubular beads, bracelets, penannular earrings of "ling-ling o" type and anthropomorphic earrings, all made of jade, together with perforated projectile points and figurines of dogs and pigs (Bellwood 1997a:217 citing Lien 1991:350).

One specific red-slipped pottery style illustrates the early Neolithic period in the Philippines. Most pottery in this style is plain or red-slipped, but a few sites also have the addition of rare incised and dentate-stamped pottery. The plain and red-slipped pottery has been discovered in three regions of the Philippines: northern Luzon (Rabel, Musang, Arku and Laurente Caves, and the open sites of Dimolit and Andarayan, dated loosely to the second millennium BC); Visayas (Masbate [Bagumbayan] and Negros [Edjek]; and the Sulu Archipelago (Sangasanga [Balobok]). The decorated forms have been found in northern Luzon (Magapit, Nagasbaran and Irigayen) and Masbate (Batungan Mountain), in sites dated between 2000 and 800 BC. Bellwood (1997a:221) describes this stamped pottery as having close parallels in decoration, especially dentate stamping, with pottery of the Lapita culture (1350 to 750 BC) developed in the Melanesian and western Polynesian islands lying approximately 5000 kilometres to the east of the Philippines. However, it is interesting that at Duyong Cave on Palawan in the southern Philippines, a burial with stone and shell adzes and shell ornaments is claimed to date from 3300 BC (Spriggs 1989:602) with no association with pottery (Bellwood 1992:105; 1997a:222).

Archaeological assemblages found in Eastern Indonesia present a chronology ranging from 1500 to 900 BC. The Neolithic layers in Leang Tuwo Man'e rock shelter on Karakellang Island (Kep. Talaud) provide plain and red-slipped pottery with thin walls, globular forms, and everted rims associated
with shell midden and chert stone tools (Bellwood 1997a: 227; Tanudirjo 2001). The date of c.1500 BC for this site is similar to that for early pottery from Ulu Leang shelter in South Sulawesi, where it associated with continuing Toalian industry of small blade-like flakes, microliths and Maros Points. However, the pottery in Ulu Leang was unslipted.

Pottery of similar red-slipped type to that from Leang Tuwo Mane‘e is found in the northern Moluccas, in Uattamdi rock shelter on Kayoa Island to the west of Halmahera, where it is dated c.1300-500 BC. The Uattamdi pottery has no incision (Bellwood et al 1998: 257). Associated artefacts found at Uattamdi were shell ornaments and tools, a stone chisel, a stone adze and chips, and bones of cuscus (a marsupial), dogs and pigs. In southern Halmahera, red-slipped pottery with incised decoration has been found in Siti Nafisah Cave, but here it seems to postdate the Neolithic and may date to AD 1-500. Pottery of contemporary date to that from Leang Tuwo Mane‘e and Ulu Leang has been discovered in caves in eastern Timor, along with remains of shell one-piece fishhooks, shell beads, and shell bracelets.

C. Interisland relationship based on the archaeological records

It was mentioned previously that early Austronesian migration was connected with the expansion of an agricultural economy in Island Southeast Asia, and related also to the production of pottery. Pottery production in the Philippines and eastern Indonesia seems to have developed harmoniously along with the chronological stream of migration from Taiwan, showing characteristic plain or red-slipped types derived from northern and eastern Taiwan cultures, with globular vessel forms, everted rims, ring feet, and occasional strap handles, dated generally between 2000 and 500 BC. However, between 2000 and 800 BC in the northern and central Philippines there developed red-slipped pottery with dentate-stamping that resembled the pottery of the Lapita culture. The red-slipped pottery tradition in eastern Indonesia was replaced before the end of the first millennium BC by Metal Age pottery with heavily incised decoration.

Nevertheless, pottery characteristics alone cannot be considered for the interpretation of cultural relationships between the three regions, since we should also look at other records related to forest clearance and cultivation. Artefacts of the Yüan-shan culture comprise untanged and stepped stone adzes, slate projectile points, stone barkcloth beaters, chipped stone hoes, and baked-clay spindle whorls. Other related evidence marking the sedentary lifestyle of the Austronesians includes the Peinan houses, remains of domesticated dogs and pigs, remains of cultivated rice and millet, and some sickle-like knives.

Coming to the eastern part of Indonesia, there is a much stronger continuation of preceramic stone tool types into the Neolithic than is seen in Taiwan or the northern Philippines. Such continuity can be seen in the chert industry found in Leang Tuwo Mane‘e and the Toalian industry found in Ulu Leang. This continuity suggests incorporation of the local preceramic
D. Patterns of Austronesian Language Dispersal

It is true, as Bellwood has said (pers.comm. 2003), that the archaeological record alone cannot explain the pattern of language dispersal of the Austronesians. The archaeological record itself shows intriguing phenomena of continuity and discontinuity in the development of Austronesian artefact characteristics in each geographical area. It suggests that around 2000 BC the Austronesians began to migrate southwards from Taiwan into the Philippines, bringing their mental templates of tool manufacture and language. They settled for around half a millennium and then continued to migrate farther southwards into eastern Indonesia. However, artefacts found in Sulawesi and the Moluccas show that not all of the early Austronesian classes of technology were sustained in the new areas, especially the stone barkcloth beaters and baked-clay spindle whorls. Changing environments prompted the Austronesians to produce distinctive types of tools compatible only in specific areas, and to lose other types possibly as a result of founder effects (for instance, pottery throughout Polynesia in post-Lapita times, plus weaving in most of Oceania).

Approximately 1100 BC, early Austronesian people continued their journeys eastward into western Polynesia, as far as Tonga and Samoa (Bellwood and Koon 1989:614). At approximately the same time as this colonisation of the western Pacific was occurring, evidence is found in the northern Philippines (Luzon and Masbate) and northern Borneo (Bukit Tengkorak, Sabah) of pottery with Lapita-related red-slipped and dentate-stamped features. Another specific feature of Lapita discovered in Bukit Tengkorak was a presence of Talasea obsidian obtained from New Britain in the Bismarck Archipelago, east of New Guinea. Because of these discoveries, the origin of the Lapita culture is assumed by many to have its forebears located somewhere in the eastern regions of Indonesia or the Philippines (Bellwood 1997a: 234), although disputes about this continue. Linguistically, it is assumed that the immediate Lapita antecedents can be traced around the Moluccas and western New Guinea. However, instead of Papuan languages from New Guinea spreading with agriculture through the Pacific, we find instead that the migrations occurred with Austronesian-speakers whose ultimate forebears were located far north of the Moluccas and West New Guinea.

Based on prehistoric pottery forms and decoration, it can be assumed that the agricultural lifestyle characteristic of most Austronesian populations developed along a migration route from Taiwan through the Philippines to eastern Indonesia, and then Oceania. The pattern of Austronesian language dispersal occurred along similar lines (Blust 1995). Comparatively, although Lapita pottery and associated cultural forms show a likely mixture of indigenous Melanesian and introduced Austronesian features, the populations who settled the western Pacific used Austronesian rather than Papuan terms for their agricultural systems, crops and domestic animals. This
gives a strong indication of the ultimate source of agriculture in the Pacific region, beyond New Guinea (where early Holocene agriculture was certainly an independent development, in the interior highlands).

E. Conclusion

Archaeological records alone cannot provide information directly relating to the geographical and chronological patterns of Austronesian language dispersal. However, the migration stream recognisable from the archaeological record, of artefacts, crops and domestic animals, shows that an initial Neolithic expansion began in Taiwan, moving southwards between 2500 and 2000 BC to reach the Philippines and eastern Indonesia after 2000 BC. This migration conveyed an early agricultural tool template that was in an immediate way derived from northern or eastern Taiwan. By the time the Austronesian colonisation process had progressed eastwards, during the mid second millennium BC, to reach the western Pacific, a blend of indigenous Melanesian and Austronesian characteristics produced the Lapita culture.

It is assumed that the pattern of Austronesian language dispersal proceeded in the same manner as that of the early agricultural communities. Chronologically, the early Austronesian languages separated first into the Formosan (Taiwan) and Malayo-Polynesian (all regions outside Taiwan) subgroups, possibly around 3000 BC. Malayo-Polynesian then separated into Western Malayo Polynesian (Philippines, western Indonesia and Sulawesi), Central Malayo-Polynesian (Nusa Tenggara) and Eastern Malayo-Polynesian (Maluku Utara and Oceania), perhaps around 1000 BC if we rely on archaeological dating (Spriggs 1989:608). The spread of Proto-Oceanic, the foundation Austronesian language of Oceania, is usually equated with the Lapita culture.

Archaeological records relating to a presence of early agriculture are found in Taiwan, the Philippines and Eastern Indonesia. They provide information on the technologies and artifact forms developed in each specific geographical area. However, these archaeological records cannot comprehensively explain the pattern of Austronesian language dispersal since language and archaeological distribution patterns do not necessarily overlap with complete precision in time or space. Therefore, the comparative linguistic study of Austronesian language dispersal is essential, and the results need to be understood by archaeologists.

References


