

Digital Atlas for the Dispersal of a Language Family: A Case Study of Formosa

Paul Li
Academia Sinica

1. Introduction

There are some twenty ethnic groups of the Formosan aborigines. There was virtually no written record for them until 400 years ago. I shall trace the dispersal of each Formosan tribe and show it on a map, as based on linguistic, ethnological, archaeological, and various other information, such as the oral history of the natives and written documents in Dutch, Chinese and Japanese.¹ I shall indicate the directions and stages of the dispersal of each tribe. Mostly only rough migration routes and dates can be given at this stage of knowledge. They will be modified when more information is available. Another map shows the Austric dispersal, including the pre-Austronesian migration from continental Southeast Asia to Taiwan, as based on studies by Reid (1994) and Blust (1996a). Still another map shows the Batanic dispersal, including the Yami people on the Orchid Island.

The Formosan tribes include Atayal, Saisiyat, Bunun, Tsou, Rukai, Paiwan, Puyuma, Amis, Kavalan, Basay, Kulon, Taokas, Papora, Babuza, Hoanya, Pazeh, Thao, Siraya and Qauqaut in early twentieth century. A fewer higher order subgroups include Basaic, Atayalic, Western Pepos (or Plains Tribes), Tsouic, Sirayaic, and East Formosan.

Written documents in Dutch, Spanish and Chinese have become available since early 17th century. Precise dates were recorded for the migration of some plains tribes, such as western pepos, Sirayaic

¹An earlier version of this paper was presented at the 2000 Pacific Neighborhood Consortium Annual Conference, Berkeley, January 13-15, 2000. I have benefited greatly from Toichi Mabushi's (1953-54) earlier study. But I have expanded the scope and time depth of the dispersal of various ethnic groups, including all mountain and plain tribes in Taiwan. I'd like to thank Shigeru Tsuchida and Stanley Starosta for their comments.

and Kavalan, especially in the past two centuries.

When precise dates are unavailable, approximate dates will be given if possible. For example, the Atayal people started to disperse to the northern part of Taiwan about mid-18th century, namely around 1750AD. The massive migration of Bunun to the south and east started about 300 years ago, 1700AD, which was about 50 years before that of the Atayal people. Both Atayal and Bunun were still located in the central parts of Taiwan 300 years ago. Down south the Paiwan people started to disperse southward at the beginning of the 17th century, around 1600AD, which is about 100 years before that of Bunun (Mabuchi 1953).

More often, only relative dates can be inferred, as based on comparative studies in linguistics. For example, the Tsouic group first split into northern Tsou and southern Tsou, say about 2000 years ago. The northern Tsou migrated to the west from Yushan areas, while the southern Tsou moved to the south. Then the latter further split into Kanakanavu and Saaroa at a much later period, about 800BP. The linguistic distance between Kanakanavu and Saaroa is not large, as they are more or less mutually intelligible to each other. All these dates are very tentative in nature.

2. The Austric Dispersal

The genetic relationship between the Austronesian language family and Austroasiatic language family has been firmly established by Lawrence Reid (1994) only in the past few years. Subsequently Blust (1996) proposed that the Austric homeland be in the northernmost Burma about 8000BP, and that the Austronesian people dispersed along Jinsha Jiang-Yangtze Jiang all the way to the mouth of the river (7000BP) and then southward along the east coast of China before they reached Taiwan about 6000BP, while the Austroasiatic people dispersed in three different directions along three different rivers: towards the south along Nu Jiang-Salween River, towards the southeast along Lancang Jiang-Mekong River, and towards to the west along Yalucangbu Jiang-Brahmaputra in northeastern India.

3. The Dispersal of the Formosan Aborigines

3.1 The Atayalic Group

The Atayalic group is comprised of two main subgroups, Atayal and Seediq. They share about 45~49% cognacy in the 200 basic vocabulary wordlist. Thus they are estimated to have split off from each other about 1,600 years ago, as based on lexicostatistics (Li 1983:16, Note 19). About mid-eighteenth century, the Atayal subgroup started to disperse to the north and the Seediq subgroup dispersed to the east. Those who dispersed to the north became the Ts'ole' subgroup of Atayal. The Ts'ole' subgroup arrived at the upstream of Hoping River about 1750. The latest wave of Atayal dispersal was the Squliq subgroup of Atayal, which arrived at the midstream of Hoping River, Fushing county and finally Wulay county around 1820~1850 (Mabuchi 1954).

3.2 Bunun

The massive migration of Bunun started around the turn of the 18th century, i.e. about 300 years ago. The Bunun tribe was originally settled in the midwest of Taiwan, all in Shinyi county. It dispersed to the south and east. The first subgroup to migrate was Takopulan, which had been resettled to the south of Tsou by the mid-18th century. Then there were two main waves of dispersal: The first to the south and southeast, and the second to the west and southwest, including Isbukun, Takivatan and Takbanuaz subgroups. The latest migration was the northern subgroup, including Takituduh and Takibakha.

3.3 The Tsouic Group

The Tsouic group used to occupy a fairly large area in the southwestern parts of central Taiwan. Due to the invasion of the other tribes and contagious diseases, it shrank to the relatively small areas as today.

The oral tradition says that the Tsouic group originated in Yushan. About 2000 years ago, the group split into two, northern Tsou and southern Tsou. Northern Tsou moved down along Nanzishian River to the west, while Southern Tsou moved down along Laonong River. The latter further split into two, Kakanavu and Saaroa about 800 years ago.

3.4 The Rukaic Group

The Rukai tribe was originally located to the north of the northwestern part of its present settlement. The first split was the Mantauran, which may have taken place more than a thousand years ago. It was geographically adjacent or close to Saaroa, a Southern Tsouic subgroup, as evidenced by the heavy borrowing between Mantauran and Saaroa. The second stage of split was the Maga-Tona subgroup which dispersed to the northwestern part about 1000 years ago. The third stage of split was to disperse to the south. This subgroup further split into two, one to the south to Budai county, and the other to the east. Later on, the latter further split into Taromak (Tanan) and Labuan. The Taromak subgroup eventually migrated all the way to Tanan, Taitong, while Labuan moved southward to join the Budai subgroup.

3.5 Paiwan

The Paiwan tribe was originally settled along Ailiao River, near the foot of mountains. At the beginning of the 17th century, Paiwan gradually dispersed to the south. A subgroup moved to the east and eventually crossed over the Central Mountains. Paiwan distribution during the Dutch period (1624-1662) was already roughly the same as it is today. According to the oral tradition of Paiwan, there had been other settlers in the area of southern Taiwan before Paiwan arrived (Mabuchi 1954).

3.6 Puyuma

Between Paiwan dispersal to the south and the arrival of the Dutch, a subgroup of Puyuma dispersed to the southern tip of Taiwan in early 17th century. They dominated over the Paiwans in the area and became ancestors of some Eastern Paiwans. The second wave of Puyuma migration was from Zhihben to the north, called Nanwang today (Mabuchi 1954).

3.7 Amis

The most diversified Amis dialects are in the northern and central parts of the Hualian-Taitung Plain. The dispersal of the Amis must have taken place from the north to the south. When the Bunun and Atayal tribes expanded their territories to the east more than 200 years

ago, the Amis in the northern and central parts were forced to migrate to the south. Under the pressure of the Puyumas, the Amis in the south were forced to migrate to the north. Thus there were both directions of their migration. Some Amis moved to the west and crossed over the Central Mountains (Mabuchi 1954).

3.8 The Basaic Group

The Basaic group is comprised of Basay, Luilang, Nankan, and Puting. After the Basay people landed in the northeastern coast of Taiwan about 2000BP, it dispersed to the west along the northern coast and then to the south to reach the mouth of Tamshui River. It then went on to Nankan and Puting (about 1000BP). Some of the Basay people went up Tamshui River and then reached Banchiao areas to establish the Luilang villages. Later on (about 400BP), a group of Basay people from the northeastern coast went down south to I-Lan to establish Trobiawan and Linaw.

3.9 Saisiyat and Kulon

Saisiyat, which used to occupy a much larger geographical area before the expansion of the Atayal people, is linguistically closest to Kulon, which was located in Taoyuan prefecture during the Ching dynasty (Tsuchida 1985). Saisiyat and Kulon are coordinate with the five western plains tribes and form the Northwestern subgroup of Formosan languages (Li 1985a). The most likely origin of these seven language was somewhere between Dadu River and Dajia River not far from the coast. The Pazeh tribe has remained more or less in the same area around Fengyuan. About two thousand years ago, the Saisiyat and Kulon subgroup split off from the Pazeh area and dispersed to the north. About a thousand years later, Kulon split off from Saisiyat and moved further north to Taoyuan, while Saisiyat dispersed to the mountain areas in the northeast.

3.10 The Western Plain Tribes

Four tribes in the coastal western plains of Taiwan: Taokas, Papora, Babuza and Hoanya are most closely related to each other (Tsuchida 1982:9-11, Li 1985a). Linguistically the most diversified area is at Dadu River. It can be inferred that the center of dispersal for the four tribes is also in that area. About 1000 years ago, this language

group split into two, Hoanya and the rest. Hoanya dispersed to the south while the other subgroup, which can be named "Baburan," dispersed to the west. At a later stage, Baburan split into Papora and another subgroup. At a still later stage, the other subgroup further split into two, Babuza and Taokas. The Taokas moved to the north of Papora probably by the sea, as the interior area was occupied by Pazeh, which is more distantly related and hostile to the four western plains tribes.

3.11 East Formosan

The East Formosan group, which is comprised of Basay, Kavalan, Amis and Siraya, was originally situated in the southwestern part of Taiwan, and may have split off about 3000 years ago. The first split is the Basay-Kavalan subgroup, which migrated to the east coast in Hualian areas by sea via the Green Island (called "Sinasy" in their oral traditions), so the oral history goes. The second split is Amis, which took place about 2500BP also to the east coast. Perhaps due to the pressure of the Amis people, the Basay people moved on to the north in Taipei areas about 2000BP. Another thousand years elapsed before the Kavalan people moved to Yilan, the northeast coast of Taiwan about 1000BP (Li 2001).

3.12 Thao

Among all the Formosan ethnic groups, Thao is more closely related to the four western plains tribes, as based on phonological and lexical evidence (Blust 1996, Li 1998). However, there are less than ten exclusively shared lexical innovations between Thao and the four tribes. The lexical evidence indicates that Thao must have had close contact with Babuza and Taokas since it split off from the others about 2000 years ago. Based on the linguistic evidence and oral history of Thao (Li 1999), the Thao tribe was probably settled in the area of Zhuoshui River. Perhaps under pressure from the other tribes, it migrated to the east to the mountain areas. About 800 years ago it moved north to the Sun-Moon Lake areas, including present Yuchi and Shuili counties.

3.13 The Sirayaic Group

During the Zheng Dynasty (1661-1683) of Taiwan, some Siraya

people in the Jianan Plains started to retreat to Jiashian, Liugui and Muzha areas at the foot of mountains in the east until around 1722. This Siraya migration displaced the Taivuan people in the interior area and, from 1736 on, the latter were forced to move from the mid-stream of Zengwen River to Nanzi and Laonong rivers (Chang 1951). Similarly from 1722 on, the Makatau people in Pingdong were forced to retreat to the foot of mountains in the east or to the south in Hengchun areas.

There were three routes for Sirayaic migration to the east coast of Taiwan (Chang 1951):

- 1.The northern route: to cross over the Central Mountains from Laonong River to Shinwulu coast;
- 2.The central route: from Fangliao to Pilam (Penan) via Dawu;
- 3.The southern route: from Hengchun to Pilam along the southern coast of Taiwan.

3.14 Qauqaut

Based on the oral traditions of various Atayal villages, Qauqaut was originally settled in the mid-stream of Takiri River (Liwushi in Chinese). Due to the pressure of Atayals in the expansion of their territories in mid-18th century, Qauqaut started to move down the Takiri to the east coast. Later Qauqaut moved north to Langsu in Nan'ao before they moved to Nanfang'ao and then to the north of Su'ao. (Mabuchi 1931).

3.15 Migration of the Western Plains Tribes to the East

In 1804, more than a thousand people from five western plains tribes (Taokas, Papora, Babuza, Paze and Hoanya) crossed over the Central Mountains and moved to Wuwei (Yilan City), north of Nanyang River in Yilan. A few years later they were defeated and compelled by the Chinese from Zhangzhou and evacuated to Luodung and Dongshan, south of Nanyang River (Yao 1829:71).

From 1823 to 1840s, five western plains tribes migrated to Puli in central Taiwan (Chang 1951, Appendix II).

3.16 Kavalan Migration to the South

In 1840, the Kavalan people from Kalewan village started to migrate to the south via Su'ao by the sea. They first settled near Milun Mountain in Hualian. Later they expanded along the east coast further down south close to Penan (Chang 1951, Appendix II). Some people (Blundell, p. c.) believe that they also took an inland route in Hualian-Taitung.

3.17 Yami of the Batanic Group

The Batanic group, which is comprised of Yami, Itbayat, Ivatan (including Ivasay and Isamorong subdialects) and Babuyan, may have been settled on the Batanes for four or five thousand years. It started to split into two subgroups about a thousand years ago: Yami and the rest. The main group remained on Batan Island, while Yami moved to the north to Itbayat Island. About seven hundred years ago, Yami from Itbayat moved further north to Lanyu (Orchid Island). At about the same time, a group from Batan Island moved north to Itabayat. A few hundred years later, still another group moved down south to Babuyan Island.

References

Blust, Robert. 1996a. Beyond the Austronesian homeland: The Austric hypothesis and its implications for archaeology. In Ward H. Goodenough, ed., *Prehistoric Settlement of the Pacific Transactions of the American Philosophical Society* 86.5:117-137. Philadelphia: American Philosophical Society.

_____. 1996b. Some remarks on the linguistic position of Thao. *Oceanic Linguistics* 35.2:272-294.

Borao, Jose Eugenio. 1993. The aborigines of northern Taiwan according to 17th century Spanish sources. *Newsletter of Taiwan History Field Research* 27:98-120.

Chang, Yao-chi (張耀錡). 1951. 《平埔族社名對照表》 [A comparative name-list of Peipo-fan's villages through the historical

ages]。文獻專刊，第二卷第一、二期別冊 [Wenshien Zhuankan, 2.1/2]。台北。

Li, Paul Jen-kuei (李壬癸). 1983. Types of lexical derivation of men's speech in Mayrinax. *BIHP* 54.3:1-18.

_____. 1985a. The position of Atayal in the Austronesian family. In Andrew Pawley and Lois Carrington, eds., *Austronesian Linguistics at the 15th Pacific Science Congress*, 257-280. *Pacific Linguistics*, C-88.

_____. 1985b. Linguistic criteria for classifying Atayalic dialect groups. *BIHP* 56.4:699-718.

_____. 1988. A comparative study of Bunun dialects. *BIHP* 59.2:479-508.

_____. 1995. 〈台灣南島語言的分布和民族的遷移〉 [The language distribution and migration history of the Formosan natives]。曹逢甫、蔡美慧編 [Tsao, Feng-fu, Mei-huei Tsai, eds.]，〈第一屆台灣語言國際研討會論文集〉 [Papers from the First International Symposium on Languages in Taiwan]，1-16。台北：文鶴 [Taipei: The Crane]。

_____. 1998. 〈邵族的地位—兼評白樂思 (Blust 1996) 的邵族地位說〉 [On the position of Thao—Some remarks on Blust's (1996) 'Some remarks on the linguistic position of Thao']。平埔族群與台灣歷史文化學術研討會 [Paper presented at the Symposium on the Plains Tribes and History of Taiwan]，1998年5月16-17日。

_____. 1999. 《臺灣原住民史—語言篇》 [The History of Formosan Aborigines—Linguistic Perspectives]。南投 [Nantou]：臺灣省文獻委員會 [The Historical Commission of Taiwan Province]。

_____. 2001. 〈巴賽語的地位〉 [The linguistic position of Basay]. *Language and Linguistics* 2.2.

Mabuchi, Tôichi (馬淵東一). 1931. 〈研海地方 於 先住民話〉，《南方土俗》1.3。

_____. 1953-4. 〈高砂族 移動及 分布〉 [Migration and distribution of the Formosan aborigines (Part 1)]。《民族學研究》*Minzokugaku Kenkyu* 18.1/2:123-154, 18.4:23-72。

Reid, Lawrence A. 1994. Morphological evidence ofr the Austric. *Oceanic Linguistics* 33.2:323-344.

Tsuchida, Shigeru (土田滋). 1982. *A Comparative Vocabulary of Austronesian Languages of Sinicized Ethnic Groups in Taiwan. Part I: West Taiwan*. 166 pp. 東京大學文學部研究報告 7，語學・文學論文集。[Memoirs of the Faculty of Letters, University of Tokyo, No. 7].

_____. 1983. Austronesian languages in Taiwan (Formosa). In S.A. Wurm and Shirô Hattori [服部四郎], eds., *Language Atlas of the Pacific Area*. Pacific Linguistics C-69. Canberra: The Australian National University.

_____. 1985. Kulon: Yet another Austronesian language in Taiwan? *Bulletin of the Institute of Ethnology* 60:1-59.

Yao, Ying (姚瑩). 1829. 《東槎紀略》。台灣文獻叢刊 7 種 (1957 年重刊)。台北：台灣銀行經濟研究室。