

# Taiwan and the Formosan Languages

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## 1.1 Introduction

In this introductory chapter, we begin by presenting an overview of the linguistic setting of Taiwan (§1.2), as a prologue to the central goal of this handbook, namely the systematic and comprehensive coverage of the indigenous languages of Taiwan. In §1.3, we outline the goals and structure of the handbook, the form of which depends as much on its “perceived readership” (Blust 2013, p. xvi) as on the readiness of the assembled task force.

## 1.2 Linguistic Setting of Taiwan

In this section, we briefly describe the geographical, historical, and social context of Taiwan (§ 1.2.1). This sketch is followed by a brief introduction of the Formosan languages within the Austronesian language family, emphasizing their complexity, diversity, fragility, and importance (§ 1.2.2). In § 1.2.3, we present the sociolinguistic dimensions of this heritage and the revitalization attempts to salvage these languages on the verge of extinction.

### 1.2.1 *Geographical, Historical, and Social Context*

#### 1.2.1.1 Geographical Context

Taiwan<sup>1</sup> has an area of 35,981 km<sup>2</sup> and lies across the Tropic of Cancer, at the junction of the East China Sea to the north, the South China Sea to the southwest, the Philippine Sea to the south, and the Pacific Ocean to the east. It faces the Ryuku Islands of Japan in the northeast; it is separated from Luzon in the Philippines by the Bashi Channel and to the northwest from the Fujian Province of mainland China by the Taiwan Strait. Smaller islands and islets include the Penghu archipelago (also known as the Pescadores) to the west, Xiaoliuqiu off the southwest coast, and Green Island and Orchid Island (Botel Tobago) to the southeast. The islands of Matsu and Kinmen (Quemoy) lie along the southeastern coast of the People's Republic of China. Of all these islands and islets, the indigenous peoples of Taiwan and the Formosan languages that they speak are only found on the main island and on the Orchid Island. They represent the northernmost area of the Austronesian language family.

Taiwan is divided by the Central Mountain Range, which serves as the major watershed and covers approximately two-thirds of the island. It extends from Su'ao in the northeast to Eluanbi at the southern tip of the island and forms a ridge of high and dense mountains. Flat and alluvial plains and foothills stretch along the western coast and occupy approximately one-third of the island; parts of these lowlands are highly urbanized and populated, the largest of which is the urban cluster consisting of the capital, Taipei, and New Taipei City, which together make up most of the northern tip of Taiwan. The eastern coast of Taiwan is much more sparsely populated and largely consists of a long valley that runs from Hualien to Taitung. On the west side, the East Rift Valley (or Longitudinal Valley) is flanked by the Central Mountain Range; except

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1 The name "Taiwan" refers to both the country (or the state), officially named the Republic of China (ROC), along with all the islands that it administers, and the main island, formerly known as "Formosa."

for its beginning and end points, its eastern side is separated from the Pacific Ocean by the Hai'an Mountain Range.

#### 1.2.1.2 Historical Context

Prior to the 17th century, Taiwan was mostly inhabited by various indigenous ethnic groups and did not have any central ruling authority. Indigenous peoples are believed to have arrived on the island between 5,000 and 6,000 years ago. Current evidence indicates that “the first Austronesian-speaking peoples in Taiwan found little competition for the land they settled. Archaeological evidence shows that there were other humans on the island before them, but these were small bands of foragers, whose populations were limited by the reliability of food in a world without agriculture, or the dog as a companion of the hunt. Whoever these earlier settlers were, they left little imprint in the archaeological record, and were totally replaced by the incoming Austronesians” (Blust 2021, p. 21). Chinese migrations started first on the island of Penghu toward the late 11th century. In 1367, the Penghu archipelago was attached to Fujian province, but five years later, in 1372, an imperial edict recalled the Chinese population and prohibited immigration because of the dangers created by pirate attacks (Hsu 1980).

The 17th century set in motion a gradual change in the demographic (and linguistic) makeup of the island that took effect over the next three centuries and was driven by a succession of colonial administrations that restricted the political control and the territory of the indigenous population.

The first European colonial power to set foot on Taiwan were the Portuguese, although “no archaeological evidence has been found which could testify to the existence of a temporary Portuguese settlement resembling those of the Dutch and the Spanish” (Heylen 2012, p. 28).

In the 17th century, the Spanish established a settlement near Tamsui, at the northern tip of Taiwan in 1626 but were driven out in 1642 by the Dutch, who founded Fort Zeelandia as their main trading post and ruled southern Taiwan for nearly 40 years (1624–1662). Upon arriving in 1624, the Dutch found a substantial presence of Chinese traders (Shepherd 1995, p. 83) but no established colonists. The Dutch East India Company started to attract Chinese farmers from the nearby Fujien Province to boost agricultural production, and by the end of the Dutch rule, at least 35,000 farmers had settled in southwest Taiwan (Shepherd 1995, p. 86). In the late Ming and early Qing dynasties, this influx of immigrants intensified; Hoklo (or Southern Min) and Hakka people migrated to Taiwan from Fujian and Guangdong, respectively; they regularly fought and feuded over their quest for land and resources with indigenous peoples.

The Qing dynasty took over the control of the island in the late 17th century until the late 19th century, when it was ceded to Japan in the aftermath of the first Sino-Japanese War (1894–1895). The Japanese were the first colonizers to control Taiwan in its entirety; they modernized the island, expanding agriculture, building schools and universities, and developing railways and infrastructure. They were also the first to compile ethnographic and linguistic surveys (such as Ogawa & Asai 1935) that have served as the foundation of modern scholarship. At the same time, the Japanese colonial government also instituted a Japanization movement (Takeshi & Mangan 1997) that imposed the Japanese language on the public and later also private lives of the local Chinese and Austronesian population.

At the end of World War II in 1945, Japan renounced its sovereignty over the island and ceded Taiwan to China. When the national government (*Kuomintang* or KMT) led by Chiang Kai-shek lost the Chinese Civil War to the communists in 1949, they retreated to Taiwan, taking in their wake waves of Chinese supporters and soldiers, who would become known in Taiwan as mainlanders or *waishengren*. These changed the political and linguistic landscape of Taiwan: the KMT reigned through a period of martial law, and “[d]uring the 1950s and on into the 1970s and 1980s [...] further consolidated its position and power on Taiwan. It also dedicated itself to the promotion of Chinese nationalism” (Simpson 2007, p. 244). This nationalist movement included the imposition of Mandarin Chinese as the national unity language of Taiwan, at the expense of Southern Min, Hakka, and the Formosan languages. The lifting of martial law in 1987 paved the way for the liberalization and democratization of Taiwan. It also spurred an indigenous-rights movement (see Hsieh 1994) that brought renewed attention to the plight of the indigenous peoples of Taiwan, their cultures, and the languages that they spoke.

### 1.2.1.3 Social Context

Today, Taiwan is perceived as a multiethnic, multicultural, and multilingual society, “a phenomenon which has been emerging alongside the democratization and pluralization of the island since the 1980s” (Damm 2012, p. 84).<sup>2</sup> Its cur-

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2 Until the mid- and late 1990s, asserting one’s indigenous identity in Taiwan still necessarily led “to cultural and political stigmatization. Many Taiwanese youth [were] ashamed to admit their Austronesian roots to their Taiwanese friends and colleagues, especially when they [were] in the context of the larger urban centers. For those who [could] “pass” as Taiwanese, that is, those who [were] not racially or culturally “marked” (Kondo 1997, p. 23), it [was] especially convenient to not mention—or even to explicitly deny—this ‘problematic’ aspect of their Austronesian cultural identity” (Anderson 2000, p. 299).

rent population is approximately 24 million, consisting mostly of Hoklo, mainland Chinese, Hakka, indigenous peoples and new immigrants, and mainly brides from Southeast Asia, including Thai, Vietnamese, Indonesian, Filipinos, and Cambodians, as shown in Table 1.1.

TABLE 1.1 Ethnic groups in Taiwan

Ethnic groups	Origin and date of migration to Taiwan	Approximate % of population by ethnic group
<b>Hoklo</b>	Southern Fujian Province, China 17th century onward	70%
<b>Mainlanders</b>	Various provinces, mainland China 1945–1949, following end of Japanese colonial rule (1895–1945) and KMT defeat in Chinese Civil War (1949)	10%
<b>Hakka</b>	Fujian and Guangdong Provinces, China 17th century onward	15%
<b>Indigenous peoples</b>	Asian mainland 4,500–4,000 BCE	> 2%
<b>New immigrant spouses</b>	China, Vietnam, Indonesia, the Philippines, Cambodia 1990s–2000s through cross-border marriages	~ 2%

BASED ON PRICE 2019, PP. XIV–XV

Traditional indigenous societies were (and to an extent still are) quite different from one another, and were certainly not the homogeneous group of like-minded people that popular perception today sometimes makes them out to be (Ferrell 1969, pp. 30–60). The earliest records found in Dutch documents and later descriptions by European travelers show that indigenous peoples used to live in small communities of varying sizes. They interacted with one another through trade and intermarriage, were engaged in warfare, and made alliances against mutual enemies. These societies started to be described in great detail between 1895 and 1945 by Japanese anthropologists who need to be “credited with having identified the focal features of the social system of [nine] of the ethnic groups. These features include the ritual unit (*qutux-gaga*) of the Atayal, the patrilineal descent groups of the Bunun and the Tsou, the

hierarchical social system of the Paiwan and the Rukai, the age-grading system of the Puyuma and the Amis and their matrilineal descent groups and the fishing corporation of the Yami (Tao)" (Chiang 2000, pp. 207–208). Most had a mixed hunter-gatherer and agrarian economy, with a basic division of labor, according to which men hunted and women gathered food and planted (Blust 2013, p. 13, Zeitoun & Lin 2003, Cauquelin 2004).

Culturally, these societies have undergone profound changes since the arrival of the first colonial forces in the 17th century as a result of a combination of factors. The migration of Chinese farmers that was initiated by the Dutch colonial administration and intensified under the Ming and Qing led to the assimilation of many indigenous peoples living in the western plains of Taiwan and pushed other groups out of their lower-lying territories into the Central Mountain Range. This led to a reduction of the traditional territories that indigenous peoples controlled and the slow demise of the Formosan languages spoken in the western plains, such as Siraya and Favorlang.

During the Japanese occupation, a succession of civilian and military administrations tried to quell indigenous insurrections and simplify the rural administration by forcing indigenous groups who were living dispersed in the high mountains to relocate into larger villages, leading to a disruption of their socio-cultural organization and a cultural shift. Indigenous people were also forced to abandon their traditional practices (tattooing, hunting, and weaving) and rituals, and the introduction of Japanese education, and imposition of the Japanese language, weakened the status of the Formosan languages.

The industrialization process initiated in the early 1960s by the nationalist government, the economic growth of the country in the decades that followed, and the development of the education system led to a massive rural exodus that started in the early 1970s and provoked the depopulation of remote villages, so that indigenous peoples now reside all over Taiwan, in their "traditional" habitat and urban areas.

Natural disasters have also led to the relocation of many indigenous populations from mountain villages into the plains, where they lived together with different ethnic groups, weakening their cultural and linguistic cohesion. Taiban (2013), taking the case of the Rukai village of Haocha as an example, demonstrates that in the past century, governments typically carried out relocation policies without taking into consideration the needs of the indigenous people, who, once removed from their ancestral living space and traditional territory, have difficulties maintaining their lifestyles, relocation not only affecting "space, productivity and social structure," but also having an effect on "cultural preservation" and leading to "social disintegration" (pp. 73–74).

### 1.2.2 *The Formosan Languages*

#### 1.2.2.1 The Formosan Languages as Part of the Austronesian Family

More than 20 indigenous languages are spoken in Taiwan. Since the mid-1990s, they have conventionally been referred to as the “Formosan languages,” in contrast to “Taiwanese,” a term commonly referring to Southern Min, one of the dominant Sinitic languages spoken on the island (Ross 1995, p. 728).

All indigenous languages belong to the Austronesian family, which consists of more than a thousand languages spoken in an area stretching west to east in the southern hemisphere including parts of Southeast Asia and most of the Pacific, with the exception of Papua New Guinea (where Papuan languages are dominant, alongside a sizeable group of Austronesian languages) and Australia (where Australian languages are spoken). The western edge of the Austronesian territory includes Madagascar, Indonesia, parts of Vietnam and Burma, the Malay Archipelago, the Philippines, and Taiwan. In the east, Austronesian languages are spoken from the Pacific islands of Melanesia (coastal New Guinea and adjacent islands, the Admiralty Islands, New Ireland, New Britain, the Solomons, Santa Cruz, Vanuatu, New Caledonia, and the Loyalty Islands), Micronesia (the Marianas, Palau, the Caroline Islands, the Marshalls, Nauru, and Kiribati), and Polynesia (Tonga, Niue, Tahiti, Wallis and Futuna, Samoa, Tuvalu, Tokelau, Pukapuka, the Cook Islands, the Society Islands, the Marquesas, up to Hawai‘i, Easter Island, and New Zealand) (Blust 2013, p. 1).

Clark (1987, pp. 903–904) mentions that “the existence of the Austronesian family was first recognised in the seventeenth century when the earliest Polynesian wordlists collected by Dutch explorers were compared with Malay, which was already known to many Europeans as the lingua franca to the East Indies [...] The connection of Malagasy with Malay was noted at about the same time and the major languages of Indonesia and the Philippines were readily seen to belong to the same family, as were Tongan, Hawaiian, Maori and the other Polynesian languages that became known to Europeans during the eighteenth century. Many Melanesian and Micronesian languages, however, had undergone such extensive phonological and lexical changes that their Austronesian origins were much less apparent and it was not until the early 20th century that the full extent of the family was understood.” Klaproth (1822)<sup>3</sup> was the first to identify the Formosan languages as Austronesian, with reflexes of PAN \*zalan ‘road’ given in Table 1.2 as an example.

3 Klaproth (1822, p. 196) states the following: “[J]e l’ai dépouillé entièrement et j’en ai extrait tous les mots propres à la comparaison de cette langue, avec d’autres dialectes du sud-est de l’Asie et avec ceux de l’Océanique. Cette comparaison démontre que les habitants de Formose appartiennent à la grande souche malaise, qui est répandue depuis la presqu’île de Malacca,

TABLE 1.2 Reflexes of PAN \*zalan 'road'

Taiwan		The Philippines		Indonesia	
<i>daran</i>	(Pazeh)	<i>raxan</i>	(Itbayaten)	<i>dalan</i>	(Javanese)
<i>lalan</i>	(Amis)	<i>dalan</i>	(Ifugao)	<i>jalan</i>	(Balinese)
<i>djalan</i>	(Paiwan)	<i>daan</i>	(Tagalog)	<i>lalan</i>	(Tae', Sulawesi)
<i>dalan</i>	(Puyuma)	<i>lalan</i>	(Maranao)	<i>raran</i>	(Kowiai, W. Papua)
Papua New Guinea		Solomon Islands		Micronesia	
<i>jala</i>	(Manam)	<i>tala</i>	(Kwaio)	<i>chalan</i>	(Chamorro)
<i>dala</i>	(Motu)	<i>hala</i> [ <i>utu</i> ]	(Nggela)	<i>rael</i>	(Palauan)
<i>zaala</i>	(Mbula)	<i>tara</i>	(Arosi)	<i>aan</i>	(Chuukese)
				<i>ahl</i>	(Pohnpeian)
East Melanesia		Polynesia			
<i>hal</i>	(Ambrym)	<i>hala</i>	(Tongan)	<i>ala</i>	(Samoan, Hawaiian)
<i>sala</i>	(Fijian)	<i>sala</i>	(Rotuman)	<i>ara</i>	(Maori)

W. HUANG 2014

The total population of the family is estimated at more than 430 million, with the largest part being in Indonesia (248.6 million), followed by the Philippines (103.7 million), Malaysia (29.2 million), and Madagascar (22 million) (Blust 2013, p. 39), while the total Austronesian population in Taiwan is only half a million at present, about 0.125% of the total population of Austronesian peoples (Blust 2013, Ebehard et al. 2020).

#### 1.2.2.2 Linguistic and Governmental Classifications

From a linguistic perspective, 23 Formosan languages<sup>4</sup> were recognized in the early 20th century, with the earliest written documents translated from Dutch

jusqu'aux îles de Sandwich, les Marquises et la nouvelle Zélande." [I went through [the whole vocabulary list] and extracted all the words proper to the comparison of this language [Siraya] with other dialects of Southeast Asia and with those of Oceania. This comparison demonstrates that the inhabitants of Formosa belong to the great Malay stock, which is widespread from the peninsula of Malacca, to the Hawaiian Islands, the Marquesas and New Zealand.]

4 Two things should be noted. First, the exact number of Formosan languages spoken before



in Favorlang and Siraya by missionaries dating to the 17th century:<sup>5</sup> Amis, Atayal, Basay/Trobiawan, Bunun, Favorlang (or Babuza), Hoanya, Kanakanavu, Kavalan, Kulon, Luilang, Makattao/Siraya/Taivoan, Paiwan, Papora, Pazeh-Kaxabu, Puyuma, Rukai, Saaroa, Saisiyat, Seediq, Taokas, Thao, Tsou, and Yami. Eight of these languages (Basay/Trobiawan, Favorlang (or Babuza), Hoanya, Kulon, Luilang, Makattao/Siraya/Taivoan, Papora, and Taokas) are now extinct. They “were once found in the better agricultural lands of the western plains and in the Taipei or [Y]ilan basins, and their extinction (or cultural absorption) can be attributed directly to competition for land between their speakers and the incoming Taiwanese, with most of the destructive consequences of contact taking place during the period 1660–1870” (Blust 2013, p. 49). Siraya is considered “dormant”: it became extinct in the 19th century and is now being revived as a heritage language; it is no longer spoken as a mother tongue, but is currently taught in 17 primary schools and 3 junior high schools in and around Tainan (Adelaar, this handbook, Chapter 57). Fourteen Formosan languages are still spoken today to various degrees: Kavalan, Pazeh-Kaxabu, Thao, Atayal, Saisiyat, Bunun, Tsou, Saaroa, Kanakanavu, Rukai, Paiwan, Puyuma, Amis, and Seediq. A fifteenth Austronesian language, Yami, is spoken on Orchid Island. It is usually included as a Formosan language in the linguistic literature because it is located geographically within Taiwanese jurisdiction, even though it linguistically belongs to the Batanic group, which is a Philippine subbranch (Western Malayo-Polynesian).

The linguistic situation depicted above contradicts the governmental classification, which has itself a complex historical origin. Until the late 1990s, the Taiwanese government officially recognized only nine ethnic groups and languages: Atayal, Saisiyat, Bunun, Tsou, Rukai, Paiwan, Puyuma, Amis, and Yami. This division was based on earlier classifications made by the Japanese (e.g., Ogawa & Asai 1935, Asai 1936) and ignores all sinicized ethnicities and languages. Today, sixteen languages are officially recognized by the national government: Amis, Atayal, Bunun, Kanakanavu, Kavalan, Paiwan, Puyuma, Rukai, Saaroa, Saisiyat, Sakizaya, Seediq, Thao, Truku, Tsou, and Yami.<sup>6</sup> A further three

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the beginning of the Dutch occupation is unknown. A related problem concerns the genetic relationship between two (or more) close communities and whether their speech is dialects of the same language or languages within the same group. Second, the name of each language is also that of the ethnic group and follows conventional appellations devised under the Japanese occupation.

5 To date, materials supposedly compiled on Basay (probably spoken in the area of Tamsui) by Spanish missionaries have never been retrieved.

6 Thao was officially recognized as the tenth indigenous ethnic group of Taiwan on September 22, 2001, followed by Kavalan as the eleventh on December 25, 2002, Truku as the twelfth

languages are recognized by local governments: Siraya in Tainan and Fuli, Makatao in Pingtung and Fuli, and Taivoan in Fuli. For sociopolitical reasons, this classification considers Truku and Sakizaya distinct languages, when they are dialects of larger languages from a linguistic perspective. Truku is linguistically best analyzed as a dialect of Seediq, alongside two other dialects: Tgdaya (or Paran) and Toda. The Sakizaya must originally have constituted a distinct ethnic group in eastern Taiwan but were forced to hide themselves among Amis and Kavalan speakers after losing a number of battles against Qing troops in the late 19th century. This handbook, being concerned with linguistic description over ethnic and political divisions, treats Truku as a dialect of Seediq and Sakizaya as a dialect of Amis.

The government's recognition of Seediq and Truku as distinct ethnic and linguistic communities has had an impact on the ecology of the Formosan languages; other groups that are at the time of writing considered to be speaking a single language, such as the communities speaking different Rukai dialects, are now trying to gain recognition as different ethnic groups, each with their own officially recognized language.

Some languages consist of two or more dialects, which might exhibit only very few phonological or lexical distinctions, as in the case of Saisiyat, Tsou, Pazeh-Kaxabu, and Paiwan; others may be rather distinct, such as Atayal and Puyuma, even to the point where they are not mutually intelligible (as in the case of Rukai, for instance). Depending on the classification adopted (linguistic or governmental), 42 to 44 dialects are currently recognized, as shown in Table 1.3. Some languages, such as Kananavu and Saaroa, allegedly consisted of a number of dialects, but at present only one dialect remains, and if others existed, they were never documented before they disappeared forever. In the case of other languages, certain dialects have only been superficially documented. For instance, the lack of in-depth linguistic information on Taai Saisiyat does not allow us to understand how divergent it is from Tungho Saisiyat. Most dialects are "contained" or spoken in the same village (Mantauran Rukai) and/or area (e.g., Tungho Saisiyat), but because of population migrations in the past two or three centuries, the expansion of certain populations over large territories (e.g., Atayal, Seediq, and Bunun) have led to dialect variants (see L. Huang 1995 for a comparison of Wulai and Mayrinax Atayal, Li 1997, and L. Huang 1997 for two descriptions of Isbukun Bunun in Tumpu (Nantou County) and Namasia (formerly Sanmin Township) in Kaohsiung).

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on January 14, 2004, Sakizaya as the thirteenth on January 17, 2007, Seediq as the fourteenth on April 23, 2008, and Saaroa and Kananavu as the fifteenth and the sixteenth, respectively, on June 26, 2014.

TABLE 1.3 Formosan languages/dialects and their current location in nonurban areas

Languages	Distribution	
<b>Amis</b>		
– 1. Sakizaya	Hualien County	Hualien City, Guofu District Ji'an Township Fenglin Township Shoufeng Township Juisui Township Fengbin Township
– 2. Northern Amis	Hualien County	Sin Chen Township Ji'an Township Shoufeng Township
– 3. Tavalong-Vata'an	Hualien County	Guangfu Township
– 4. Central Amis	Hualien County	Juisui Township Fengbin Township
	Taitung County	Changbin Township Donghe Township
– 5. Southern Amis	Taitung County	Taitung City Chihshang Township Guanshan Township Donghe Township Luye Township Beinan Township Taimali Township
	Pingtung County	Manjhou Township Mudan Township
<b>Atayal</b>		
– 1. Squaliq	New Taipei City Taoyuan City Hsinchu County	Wulai District Fuxing District Wufeng Township Jianshi Township Guanxi Township
	Miaoli County	Taian Township Nanchuang Township
– 2. C'uli' (= Ts'ole')	Taichung City Nantou County Miaoli County Taichung City	Heping District Ren'ai County Taian Township Heping District

TABLE 1.3 Formosan languages/dialects and their current location in nonurban areas (*cont.*)

Languages	Distribution	
	Nantou County	Ren'ai Township
	Yilan County	Datong Township Nan'ao Township
<b>Bunun</b>		
Northern – 1. Takituduh	Nantou County	Ren'ai Township Xinyi Township
– 2. Takibakha	Nantou County	Xinyi Township
Central – 3. Takbanuaz	Nantou County	Xinyi Township
	Hualien County	Wanrong Township
– 4. Takivatan	Hualien County	Wanrong Township
Southern – 5. Isbukun	Nantou County	Xinyi Township
	Taitung County	Yanping Township Haiduan Township
	Kaohsiung City	Taoyuan District Namasia District
<b>Kavalan</b>		
	Hualien County	Sin Chen Township Fengbin Township
	Taitung County	Changbin Township
<b>Kanakanavu</b>		
	Kaohsiung City	Namasia District
<b>Pazeh-Kaxabu</b>		
– 1. Pazeh	Nantou County	Puli Township
– 2. Kaxabu	Nantou County	Puli Township
<b>Paiwan</b>		
– 1. Northern, Western	Pingtung County	Sandimen Township Majia Township Taiwu Township Laiyi Township
– 2. Southern, Eastern	Pingtung County	Chunri Township Shizi Township Mudan Township
	Taitung County	Jinfeng Township Taimali Township Daren Township Dawu Township

TABLE 1.3 Formosan languages/dialects and their current location in nonurban areas (*cont.*)

Languages	Distribution	
<b>Puyuma</b>		
– 1. Nanwang	Taitung County	Taitung City, Nanwang District
– 2. Katripul Kasavakan	Taitung County	Taitung City, Chihpen District
– 3. Western Puyuma Ulivivek Tamalakaw Rikavung Pinaski Alipay	Taitung County	Beinan Township
<b>Rukai</b>		
– 1. Budai		Wutai Township
	Pingtung County	Majia Township Sandimen Township
– 2. Labuan	Pingtung County	Wutai Township
– 3. Tanan	Taitung County	Beinan Township
– 4. Maga	Kaohsiung City	Maolin District
– 5. Tona	Kaohsiung City	Maolin District
– 6. Mantauran	Kaohsiung City	Maolin District
<b>Saaroa</b>		
	Kaohsiung City	Tauyuan District Namasia District
<b>Saisiyat</b>		
– 1. Taai	Hsinchu County	Wufeng Township
– 2. Tungho	Miaoli County	Nanchuang Township Shihtan Township
<b>Seediq</b>		
– 1. Tgdaya (= Paran)	Nantou County	Ren'ai Township
– 2. Toda	Nantou County	Ren'ai Township
	Yilan County	Datong Township Nan'ao Township
	Hualien County	Zhuoxi Township
– 3. Truku	Nantou County	Ren'ai Township
	Hualien County	Ji'an Township Wanrong Township Siou Lin Township

TABLE 1.3 Formosan languages/dialects and their current location in nonurban areas (*cont.*)

Languages	Distribution	
		Zhuoxi Township
<b>Thao</b>		
	Nantou County	Yuchi Township
<b>Tsou</b>		
– 1. Tapang̃	Chiayi County	Alishan Township
– 2. Tfu <sup>h</sup> ya	Chiayi County	Alishan Township
– 3. Duhtu	Nantou County	Xinyi Township
<b>Yami</b>		
	Taitung County	Lanyu Township

### 1.2.2.3 Complexity and Diversity of Formosan Languages

In all their complexity and diversity, the phonology, morphology, and syntax of the Formosan languages, many features of which remain unclear, present major challenges to linguistic theory. Kaxabu, for instance, is one of the 80 languages around the world for which degrammaticalization (Viti 2015, p. 382) has been reported (Lim & Zeitoun 2023).

The diversity among Formosan languages is much higher than that among other Western Malayo-Polynesian languages (Li 2008, p. 523). With the exception of Rukai and Paiwan, the Formosan languages have no more than 20 consonants, with many back consonants. The number of vowels usually ranges from three to five—Saisiyat is rather unique in having six vowels—and many preserve the original four PAN vowels \*a, \*i, \*ə, and \*u. Li (1978) has shown that there are a number of isoglosses, with fricatives /β/ and /ɣ/ in the north of Taiwan (Atayal, Seediq, and Saisiyat); implosive stops (sometimes described as preglottalized stops) /b/ and /d/ in the center of the country (Tsou, Bunun, and Thao); and retroflexes /t/, /d/, and /l/ in the south (Rukai, Paiwan, and Puyuma). Most Formosan languages are disyllabic, with a preference for CVC and CV basic syllables. Tsou, Thao, and Maga Rukai are the only three known languages to have a #CCV(C) syllable structure. The Formosan languages are toneless, and in most, stress falls on the last syllable, as in Atayal and Saisiyat, or the penultimate syllable, as in Tsou and Paiwan. The morphological processes of the Formosan languages, which are synthetic-agglutinative, include affixation, reduplication, compounding, and incorporation, with the first being the most productive and the last being the least studied and understood. Formosan languages are generally predicate-initial, the only exceptions being Saisiyat,

Thao, and Kaxabu, which have evolved into subject-initial languages. Nominal arguments may be marked by case markers that also encode semantic distinctions, the most common of which is that between common and personal nouns, e.g., Mudan Paiwan *t⟨em⟩ekel ti kaljalju tua zaljum* [*⟨AV⟩*drink NOM.PN Kalalu OBL.CN water] ‘Kalalu drank water’. With the exception of Rukai, which exhibits an active–passive dichotomy, Formosan languages have a Philippine-type voice system, in which the morphological marking on the verbs cross-references with the subject of the sentence. There are generally four voices: actor voice (AV), undergoer voice—patient (UVP), undergoer voice—location (UVL), and undergoer voice—circumstance (UVC). In some languages, voice distinctions are marked differently depending on whether the clause is indicative and/or affirmative and negative clauses.

1.2.2.4 The Importance of Formosan Languages

The value of Formosan languages to linguistics lies not only in their diversity but also in their position in the Austronesian language phylogeny, in which they constitute primary subgroups. Their archaic Austronesian features, reported in early the 1930s by the Japanese linguists Naoyoshi Ogawa and Erin Asai, most notably include the retention of PAN \*S, as shown in Table 1.4, and the distinctions between \*t and \*C and between \*n and \*N. This led linguists and archaeologists in the second half of the 20th century to recognize Taiwan as the homeland of the Austronesian language family (Blust 1984–1985, Bellwood 1997).

TABLE 1.4 PAN and PMP ‘two’ and ‘four’ and reflexes of in Formosan languages

PAN *Sepat	Atayal <i>spa⟨ya⟩c</i>	Seediq <i>sepac</i>	Tsou <i>suptu</i>	Kan <i>supt-a</i>	Saaroa <i>paatu</i>	Rukai <i>sepate</i>	Bunun –	Paiwan <i>sepajtj</i>	Puyuma <i>pat</i>
Thao <i>shpaat</i>	Saisiyat <i>shepat</i>	Pazeh <i>supat</i>	Kavalan <i>spat</i>	Amis <i>sepat</i>	Papora <i>spat</i>	Hoanya <i>supat</i>	Siraya <i>xpat</i>	Basay <i>sepat</i>	PMP *epat
PAN *duSa	Atayal <i>rusa’</i>	Seediq <i>daha</i>	Tsou <i>ruso</i>	Kan <i>cusa</i>	Saaroa <i>suua</i>	Rukai <i>drusa</i>	Bunun <i>dusa</i>	Paiwan <i>drusa</i>	Puyuma <i>drua</i>
Thao <i>tusha</i>	Saisiyat <i>rosha’</i>	Pazeh <i>dusa</i>	Kavalan <i>zusa</i>	Amis <i>tusa’</i>	Papora –	Hoanya –	Siraya –	Basay –	PMP *duha

BASED ON BLUST & TRUSSELL 2020

The major migrations of the Austronesian people started about 5000 BP. They can be schematically summarized as follows (Bellwood 1997, Blust 1999):

- The earliest Austronesian people reached Taiwan from the Chinese mainland around 5000–6000 BP.
- Around 4000 BP, one group migrated from the southern part of Taiwan toward the northern Philippines and slowly expanded through the Philippine islands. Around 2500 BP, that population started to spread out westward and eastward.
- One group went westward and settled in Borneo, Sulawesi, Sumatra, Java, Malaysia, Vietnam, and Cambodia. Another group left Borneo around 1300 BP and sailed toward Madagascar. The Austronesian people now found in the Philippines, Borneo, and farther west in Madagascar form the so-called Western Malayo-Polynesian group.
- Another group went eastward, toward northern Sulawesi, and split into two subgroups. One went southward through Sulawesi and into Timor; the other went southeast to South Halmahera and Irian Jaya. Some of its descendants now occupy the coast of Papua New Guinea. They form the Central and Eastern Malayo-Polynesian groups.
- Later migrations led the Austronesian populations into the Pacific, first to Melanesia, then to Micronesia, and finally to Polynesia. They form the Oceanic group within Eastern Malayo-Polynesian.

Blust (2013, this handbook, Chapter 33) provides an overview of the early society of indigenous peoples, as it can be reconstructed through the PAN lexicon, and this aspect will not be further detailed here.

### 1.2.3 *Sociolinguistic Situation*

The Formosan languages were spoken and passed on orally for about 300 years after the first encounters of indigenous peoples with foreigners, even though “[t]he arrival of the Dutch on Taiwan in 1624 is a critical juncture in the development of Taiwan’s sociopolitical institutions and its contemporary sociolinguistic profile” (Price 2019, p. 80). Their arrival marks the beginning of the written transcriptions of the Formosan languages and the encounter of Austronesians with foreign populations, since the arrival of the Dutch and the Spanish was coupled with that of the Chinese. In the western and northern plains, the Sinitized languages were down to their last speakers in the first part of the 20th century, except for Thao, Kavalan, and Pazeh-Kaxabu. Blust (2013, p. 52) mentions that “in general, the largest and most vigorous Formosan languages are those that are located in the least desirable lands. The Amis occupy a long and very narrow strip along Taiwan’s east coast, where the mountains meet the sea with little land between, the Atayal occupy the rugged mountains of northern



Taiwan, and the Bunun the mountains of much of central Taiwan, where wet agriculture is difficult to practice (Chen 1988, pp. 17–18). Except for the Yami, smaller groups for the most part live in areas where they are in competition with the Taiwanese for local land and resources.” Until the early 1980s, the extant Formosan languages were still spoken fluently in mountainous areas, but since the 2000s,<sup>7</sup> the disappearance of the Formosan languages has noticeably accelerated.

The sociolinguistic situation of the Formosan languages is complex. During the 17th century, Dutch and Spanish had little if any influence on Formosan languages, because they were represented by only a small number of speakers, who only stayed in Taiwan for a very short time. The various Formosan languages spoken in the western and northern plains of the island were first threatened by the influx of Chinese speakers to Taiwan just before and during the Qing dynasty (1661–1895). During the centuries that followed, they were gradually replaced by Southern Min. In the late Japanese period (1822–1945), the “Kōminka” (total assimilation) policy accelerated the use of Japanese as a lingua franca among all ethnic groups (including Hoklo and Hakka). Nonetheless, with the exception of Yilan Creole, Japanese had little influence on the languages of Taiwan, besides the borrowing of cultural-material terminology. It is generally believed that it was the national language policy imposed by the nationalist government since 1945 with the overriding dominance of Mandarin Chinese that pushed most of the native languages to the verge of extinction. Currently, among the fifteen extant Formosan languages of Taiwan, five can be characterized as vulnerable (Amis, with the exception of Sakizaya, Atayal, Bunun, Paiwan, and Truku Seediq), six are critically endangered (Puyuma, Rukai, Saaroa, Saisiyat, Tsou, and Yami),<sup>8</sup> and four are moribund (Kanakanavu, Kavalan, Pazeh-Kaxabu, and Thao), based on the measures established by the UNESCO (2003). We witness the decrease of the number of competent speakers, a loss of language proficiency, and the erosion of parts of the linguistic systems of these languages. To date, there is only one detailed psycholinguistic study of Truku Seediq (Tang 2011, 2021) that shows an intergenerational decline, characterized by linguistic reduction or simplification in language use, and there are conflicting reports on the vitality of Kavalan (Blust 2013, pp. 52–53) as well as other languages.

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7 It has become easier to spot changes in the last decades because of the examination system that has been established, according to which linguists and natives work together to prepare exam sheets for all officially recognized Formosan languages. Between the 1980s and 1990s, not enough data exist to understand how much languages had deteriorated at the time.

8 Sakizaya Amis and Tgdaya/Toda Seediq are considered critically endangered.

Language activism and awareness of the precarious situation of the Formosan languages began to emerge in the late 1980s after the lifting of the martial law in 1987, when the rights of Taiwan's indigenous people, and the importance of their cultures and languages, started to be recognized (see Hsieh 1994 for an early account). The resulting transition of Taiwan to a democratic nation prompted a number of social movements, among others the ten-year "Indigenous Peoples' Name Rectification movement" (1984–1994) (Chiu et al. 2012, pp. 530–531). Various linguistic policies for all Formosan languages and dialects have been implemented since the early 1990s, initially by the ministry of education, later in cooperation with the Council of Indigenous Peoples, which was founded in December 1996. Revitalization programs have been proposed to slow down the rate of language loss, with varying success. Initiatives have included the compilation of textbooks, the editing of online dictionaries, the training of language teachers, and the standardization of indigenous-language exams. Indigenous people have also been encouraged to use their native language at home, in their speech communities, and in nonofficial meetings.

### 1.3 Goals and Structure of This Handbook

#### 1.3.1 *Goals*

The goals of this handbook are twofold. First, it intends to make available a collection of reference papers on a variety of topics related to Formosan linguistics. These chapters are introductory surveys of important linguistic aspects of Formosan languages and of theoretical issues that are considered important in the field of Formosan linguistics, and they include key references and up-to-date bibliographies. These surveys were written in such a way that they should be typologically rich and informative. They are meant to give the reader a good idea of the issues at hand and could serve as a starting point for further research on specific topics related to Formosan linguistics. Second, it aims at offering the grammatical sketches of 19 Formosan languages and their dialects. They hopefully will provide a good overview of the current state of knowledge of these languages and the solid empirical foundations necessary to continue exploring these languages while there is still time.

The target readership of this handbook is all researchers, including undergraduates, graduates, and postgraduates, with an interest in Formosan languages and linguistics and scholars in related disciplines, such as anthropologists, sociologists, and historians. We hope that it will be an invaluable reference to Formosanists, Austronesianists, typologists, and any interested linguist.

The achievements accomplished in the field of Formosan linguistics within the past century and even more so since the 1990s (corresponding to the political, cultural, and sociolinguistic pluralization mentioned in §1.2.1) are considerable and are in part explained by the increasing number of linguists engaged in the study of Formosan languages (see Table 1.5). This handbook could not have been compiled without their efforts and accomplishments. It is thanks to them that this handbook can cover such a wide range of topics, some of which have never been investigated before, while others have never been discussed in such depth and breadth. It thus symbolizes the maturity of the linguists that have been trained since the early 1990s and celebrates the emergence of a class of specialists for whom the primary focus is the research and the teaching of languages threatened with extinction.

TABLE 1.5 Linguistic research on Formosan languages between 1931 and 2020

<b>Number of linguists actively engaged in the study of Formosan languages</b>							
1931–1990		1991–2000		2001–2010		2011–2020	
6		20		30		40	
<b>Number of MOST projects</b>							
1931–1990		1991–2000		2001–2010		2011–2020	
N/A		56		106		181	
<b>Number of MA theses and PhD dissertations</b>							
1931–1990		1991–2000		2001–2010		2011–2020	
MA	PhD	MA	PhD	MA	PhD	MA	PhD
9	8	26	11	116	24	122	33
<b>Number of publications</b>							
1931–1990		1991–2000		2001–2010		2011–2020	
293		303		414		291	

### 1.3.2 *Structure of This Handbook*

This handbook contains 60 chapters. While the organization of the handbook is arranged in such a way that there is a relative progression in the reading of the chapters, each is self-contained, though cross-reference to other chapters in the handbook is made whenever necessary. The handbook is divided into three main parts, organized as follows:

- The five introductory chapters that follow the present introduction outline the historiography of Formosan languages spanning the past 400 years, from the documentation of the very first languages to the emergence of a linguistic field. The first three chapters are divided into different periods and include an overview of (i) the Dutch and Spanish period of the 17th century, (ii) the late Qing and Japanese period up to the post-World War II period, and (iii) the period following the lift of martial law (from 1990 onward). The next chapter provides an overview of word lists and dictionaries that have been compiled for Formosan languages since the 17th century in an attempt to explain the contexts in which they were compiled or published. Chapter 5 presents a comprehensive review of the writing systems that have been devised, which the indigenous people of Taiwan have adopted in writing their own languages.
- The second part is the largest and includes 35 chapters, among which 21 are dedicated to cross-linguistic studies of phonetics and phonology (5 chapters), morphology (2 chapters), and syntax (14 chapters) of Formosan languages. They are followed by two chapters that discuss the contributions of Formosan languages to linguistic theories and to models of sentence processing. The five chapters that follow focus on historical linguistics, including the classification of Formosan languages within Austronesian, Proto-Austronesian phonology, Proto-Austronesian morphology, and Proto-Austronesian lexicon and grammaticalization. In relation to historical linguistics, three chapters concentrate on language contact in general and in missionary work in the 17th century and since the Qing dynasty. Finally, four chapters discuss miscellaneous topics such as numerals; taboos, euphemisms, and metaphors; and linguistic policies through the implementation of various actions (language teaching, proficiency tests, edition of textbooks, etc.) since the 1990s and the evaluation of such policies.
- The last 19 chapters present comprehensive sketches of the 15 extant Formosan languages, and 4 chapters are dedicated to Yilan Creole, Basay, Favorlang, and Siraya. In addition to providing an overview of the documentation of each language, these chapters describe their major characteristics and phonological and morphosyntactic features.

### 1.3.3 *Editorial Matters*

In creating this handbook, 36 authors have participated, representing a variety of research backgrounds, preferred theoretical frameworks, writing habits and style, and assumptions. For clarity, we have made every effort to use as consistent a terminology and marking apparatus as possible. For instance, we have tried to homogenize glosses for voice markers and other grammatical phenomena, which might have been labeled differently in previous studies.

While Formosanists usually share similar views on the structure of particular languages, at times, they might use different terminologies or concepts. For instance, certain elements occurring before the main verb might be treated as adverbials or adverbs by some but as auxiliary verbs by others. Whenever possible, we have tried to reduce such discrepancies so that the reader can get a good grasp of the languages under study and easily compare the information in different chapters. We have also tried to adhere as strictly as possible to the Leipzig Glossing Rules, only adding new abbreviations whenever necessary.

The transcription of Formosan language data follows the orthographic systems promulgated in December 2005 for each language by the Ministry of Education and the Council of Indigenous Peoples, unless mentioned otherwise. This means that quite often, a single phonemic segment is represented by two letters. For instance, *ng* stands for the velar nasal /ŋ/ and *th* for the interdental voiceless fricative /θ/. In some cases, different letters have been used, for instance, the retroflex /ɭ/ is represented by *l* in Paiwan and Katripul Puyuma but by *lr* in Rukai and Nanwang Puyuma; the dental-alveolar /ʎ/ is transcribed as *lr* in Katripul Puyuma but as *l* in Nanwang Puyuma;<sup>9</sup> the interdental voiced fricative /ð/ is rendered *z* in Bunun, Thao, and Saisiyat and *dh* in Rukai (in contrast to *z* /z/); *e* stands for a schwa /ə/ in most Formosan languages, except Atayal and Tgdaya Seediq, where it represents a front mid vowel /e/. Hanyu pinyin is adopted for transliterations of Mandarin words, except when the most common transliteration is Wade-Giles, e.g., Kaohsiung instead of its Hanyu pinyin equivalent, Gaoxiong and Tamsui for Danshui.

We understand that some of these decisions might not be to the liking of some readers, or even authors. However, we hope that they can understand that our primary considerations in making these choices have been to make this handbook as comprehensible and useful as possible.

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9 In the chapter on Puyuma, the same orthographic symbols are adopted in Nanwang in order to make the comparison possible with Katripul Puyuma.

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