Traces of language contact: The Flores-Lembata languages in eastern Indonesia

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CHAPTER 1

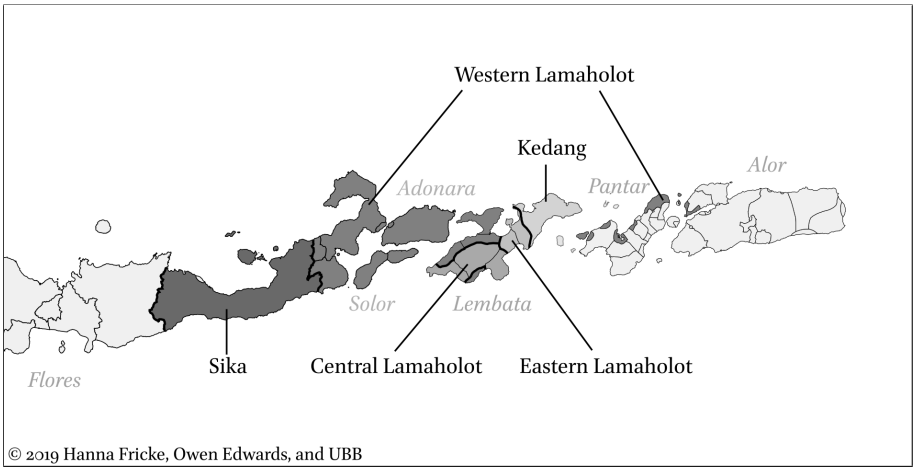
Introduction

> "*Languages have a "story" to tell: it is our job to find these stories and figure them out.*" (Hyman 2001:22)

1.1 Overview

The overall aim of this dissertation is to reconstruct the history of the Flores-Lembata languages including traces of contact-induced change in these languages. The Flores-Lembata languages are spoken in eastern Indonesia and constitute a low-level subgroup within the Austronesian language family. The Flores-Lembata group can be divided into five linguistically defined subgroups. These are: Sika, Western Lamaholot, Central Lamaholot, Eastern Lamaholot and Kedang, as shown on the map in Figure 1.1. Each of these subgroups includes one or more languages. Proposed language boundaries are indicated as lines on the map. A more detailed introduction on the Flores-Lembata languages is §4.1.

Figure 1.1: The Flores-Lembata subgroups



This dissertation is arranged in three parts: Part I Grammatical description, Part II Historical phonology and lexical innovations, and Part III Morpho-syntactic innovations.

Part I fills a gap in the documentation of the Flores-Lembata languages by providing a descriptive grammar of the language Central Lembata which is part of the Central Lamaholot subgroup. In Chapter 2 of Part I, I provide an introduction to this grammar and Chapter 3 constitutes the grammatical description itself. This grammar is the first extensive description of a language belonging to the Central Lamaholot subgroup. In order to be able to carry out the comparative work on the Flores-Lembata family in Part II and Part III of this dissertation, it was essential to add to the description of the Flores-Lembata languages and describe a variety of Central Lamaholot. Also the Eastern Lamaholot subgroup is largely undescribed but the scope of this dissertation only allows for the description of one language. Central Lamaholot was chosen because, based on wordlists collected by Keraf (1978a), this subgroup appeared to be more diverse and innovative, both in lexicon and morphology than Eastern Lamaholot. The other subgroups, Sika, Western Lamaholot and Kedang, are relatively well documented and described (cf. §4.1). The language of Central Lembata within the Central Lamaholot subgroup was targeted because of previously established contacts with speakers of this language which provided an important starting point for field research. Phonologically conservative but innovative in mor-

phology and lexicon, Central Lembata adds considerably to the knowledge about the Flores-Lembata languages which are the object of investigation in the following parts.

Part II concerns the historical phonology and the lexicon of the Flores-Lembata languages. Chapter 4 introduces the dataset and the methodology used for the analysis of phonology and lexicon. Chapter 5 is a historic-comparative study of the Flores-Lembata phonology showing the regular reflexes of Austronesian sounds in the Flores-Lembata languages and revealing the internal structure of the family, as well as the family's higher-level affiliation in the Bima-Lembata subgroup. The results of this study contribute to a more fine-grained understanding of the history of Austronesian languages in eastern Indonesia. Chapter 6 examines the origin of lexical items in the Flores-Lembata languages and provides evidence for a lexical substrate.

Part III examines eight morpho-syntactic features and their origin in contact. These eight features of the Flores-Lembata languages are atypical for Austronesian languages. Chapter 7 is an introduction to the dataset and the methodology used for the detection of contact-induced structural features. In the Chapters 8, 9 and 10, the eight features are described and their potential of being the result of contact with non-Austronesian languages of the area is evaluated.

The ultimate aim of this dissertation is the synthesis of the results from Part II and III in Chapter 11 and the discussion of them against the background of language contact theory.

This dissertation contributes to three fields: (i) to the documentation of the linguistic diversity in Indonesia, (ii) to the reconstruction of the history of the Austronesian languages in eastern Indonesia, and (iii) to the systematic study of morpho-syntactic change due to contact across language families. As such, this dissertation contributes to the field of descriptive and contact linguistics as well as to a reconstruction of the linguistic and social history of eastern Indonesia.

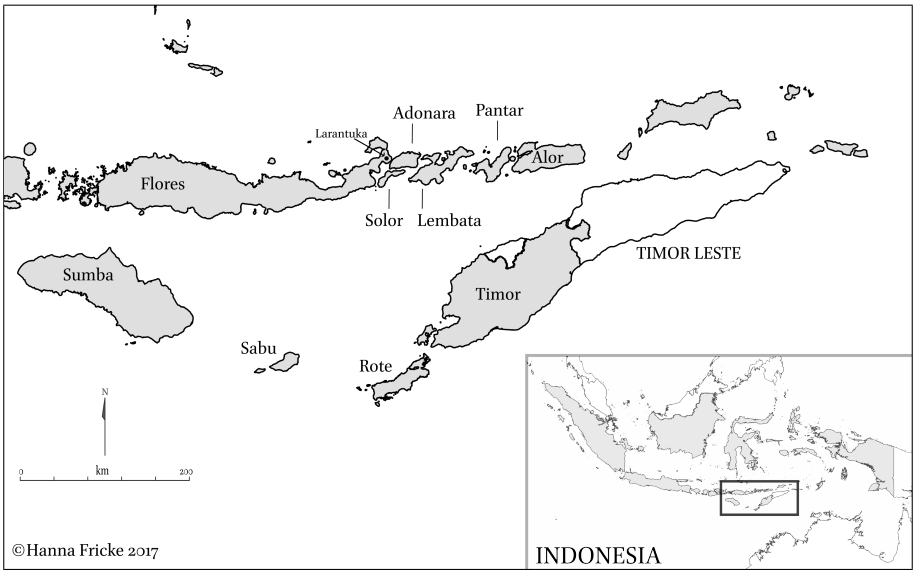
This chapter is a general introduction to this dissertation and is structured as follows. In §1.2, I provide background information on eastern Flores and the Solor Archipelago where the Flores-Lembata languages are spoken. In §1.3, the case study of Flores-Lembata is located within its wider areal and linguistic context. In §1.4, the research questions for this dissertation are laid out and connected to the following chapters.

1.2 Eastern Flores and the Solor Archipelago

1.2.1 Geographic location

The island of Flores and the adjacent Solor Archipelago are part of the Lesser Sunda islands located on the southern hemisphere in island Southeast Asia, north-west of Australia. Politically, Flores and the Solor Archipelago are part of the Indonesian province of Nusa Tenggara Timur which also includes the islands of Sumba, western Timor and several smaller surrounding islands, as shown on the map in Figure 1.2. The country Timor-Leste is located in the eastern part of the island of Timor.

Figure 1.2: The Indonesian province of Nusa Tenggara Timur



The island of Flores extends about 350 km from west to east and only about 50 km from north to south. The Solor archipelago includes three smaller islands, Solor, Adonara and Lembata, which cover a distance of about 100 km from the western tip of Solor to the eastern tip of Lembata. In the west, Flores has high mountains which reach altitudes over 2,000 m, as well as areas of highlands, while in the east of the island the mountains reach altitudes of over 1,500 m. Most of the mountains of Flores, as well as in the Solor

Archipelago, are active volcanoes. The climate in the Lesser Sunda islands is tropical, showing little variation in temperature, but characterised by monsoon winds which bring heavy rain from November to March. The remaining time of the year is mainly dry. Original vegetation consists of dry forest that is less dense than equatorial rain forest (cf. Bellwood 2017:16-17). Nowadays, crop fields have replaced huge parts of forest, but large-scale plantations are still very rare on these islands, probably also due to the mountainous landscape.

1.2.2 Livelihood and beliefs

The cultural features presented in this section and in §1.2.3.3 further below are to a large extent summarised from the answers to a cultural questionnaire I conducted in the Central Lembata speaking village of Lewaji on the island of Lembata. The interviewee Servasius Boli was the headmaster of the local school and native to Lewaji. The questionnaire is archived in the Central Lembata Corpus (Fricke 2019). Most of these cultural features described here are representative for the whole area of eastern Flores and the Solor Archipelago.

Traditionally, inhabitants of eastern Flores and adjacent islands hunt with bow and arrow or by using traps and slingshots. But as the number of wild animals is declining, people more and more rely on animal husbandry with pigs, goats, chicken and dogs. Horticulture, extensive agriculture based on rainy seasons and intensive irrigation agriculture is found throughout the area. Agriculture based on irrigation is more common in flat areas, while extensive agriculture is found in the mountains. The main crops are rice, corn, roots and tubers, such as cassava. Rice is a rather new crop in the area. About 50 years ago, it was not yet the main staple which it has become today. The main fruits and vegetables are papaya, banana, mango, avocado, cassava leaves, eggplant and different kinds of beans. People also plant coffee, cacao, cashew, coconuts and candlenuts and sell them to merchants. In coastal areas, people go fishing or collect sea food at low tides. At specific seasons, whale hunting is carried out by the people of Lamalera (Barnes 1996). Men and women are both involved in farming activities. Hunting is traditionally a male domain, while women are occupied with weaving cloth.

Traditional life is organised around ceremonies and rituals related to farming, birth, marriage and death. Most of these ceremonies and rituals

are kept up until today. Important elements in ceremonies and rituals are betel nuts and palm wine. The traditional creator in the Lamaholot areas of eastern Flores and the Solor Archipelago is *Lera Wulan*, the 'sun-moon' god and the ruler of the sky. His counterpart is *Tana Ekan*, the 'land-soil' goddess and the ruler of earth. Together they symbolise a conceptual dichotomy representing the male and the female side, the sky and the earth (Arndt 1951; Aritonang and Steenbrink 2008:73).[1] Traditional beliefs include ancestor worship by regular offerings of little amounts of food and other valuable things, which is still practised in villages nowadays. Since missionary activities started in the 16th century, Catholicism has spread over eastern Flores and the Solor Archipelago and is now the religion of the majority. However, there are also villages, especially in the coastal areas of Lembata, which have been Islamic for centuries. Protestant Christian minorities are only found in towns.

1.2.3 Divisions in the Lamaholot society

1.2.3.1 Overview

In the following sections, I discuss three types of potential socio-cultural lines of division attested especially in the Lamaholot groups. These are (i) a contrast between traditionally weaving and non-weaving communities (cf. §1.2.3.2), (ii) a contrast between native and immigrant clans (cf. §1.2.3.3) and (iii) a division of villages into two groups of socio-political alliances: Paji and Demon (cf. §1.2.3.4). In §1.2.3.5, I conclude that these three binary contrasts do not line up nor do they match with the three linguistic Lamaholot subgroups (cf. §1.1). Nevertheless, this information is interesting for the investigation of language contact in the past, as such divisions might have originated in a division of two linguistically different groups.

1.2.3.2 Weaving and non-weaving communities

The process of producing woven cloth goes from harvesting cotton, spindling threads, producing natural colors to dye threads, often using complex *ikat* techniques, up to weaving the cloth on a wooden loom (cf. Barnes 1989).

[1] The same dichotomy is also found in the mythology of the Tana 'Ai region, the south-eastern edge of the Sika speaking area (Lewis 1988:76).

However, not all areas in eastern Flores and the Solor Archipelago are traditionally weaving areas. Barnes (1987) states that Adonara and east Solor are traditionally non-weaving areas, while eastern Flores and west Solor have strong weaving traditions. On Lembata, it appears that some coastal areas developed strong weaving skills, probably because they were strategically located for trade, while this is not the case in mountain areas. In the Kedang area and on the Mingar peninsular, both on Lembata, weaving was traditionally prohibited. Reasons for this prohibition cannot be retrieved from the sources available (Barnes 1987:21). This division between weaving and non-weaving communities may point to a contrast between Austronesian and non-Austronesian culture, as weaving cloth has been considered as a typical Austronesian cultural feature (Blust 2013:24).

1.2.3.3 Clan systems within a community

Socially, the inhabitants of the region are organised in clans. A community with a common language is composed of several clans. Each clan has its own history of origin which is orally transmitted and distinguishes, on the one hand, native clans, which, according to local legends, emerged out of the earth or the mountains at place, and, on the other hand, immigrant clans coming from overseas (cf. §1.2.4).[2] Clan association is inherited paternally and clan heads are men. Thus, clans are usually patrilineal and patrilocal (woman moves to the village of the husband's family after marriage) but there are a few matrilineal clan structures found in the Tana 'Ai region of Sika (Lewis 1988:111). There are specific rules connected to clan membership and potential marriage partners. Generally, a person is not allowed to marry someone from his or her own clan. People can marry a person from another

[2] For the Western Lamaholot area, Arndt (1938:29) distinguishes native clans that originate from the mountains, called *ilé jadi* 'mountain born', and immigrant clans from other islands. In the Central Lamaholot villages Bakan and Lewaji, I have documented a similar division between native clans that emerged out of the earth and immigrant clans that came from other islands, such as Kroko Puken or Awo Lolon, from where they had to flee due to natural disasters. In Bakan, there are four native clans, i. e. Blikon, Krésaj, Lamak and Ata Uja Wai Lolo, and at least two immigrant clans, i. e. Ata Wuwur and Ata Uja Bat Koti (L3:378-379). In Lewaji, there is just one native clan, i. e. Pewut. Several new clans came from the surrounding villages and from further away to settle with them (L2:5,37-38,45-47). This distinction between native and immigrant clans most likely holds for the whole Lamaholot area, possibly also for Kedang and Sika.

clan of the same village or from a different village.

In the Central Lembata area, a triangular marriage system is found. The clans in a village are grouped into three units with a more or less equal amount of members. This means that big clans may form their own unit, while small clans are grouped together. An example is taken from the village of Lewaji which has the following units: (i) members of the Wawin clan, (ii) members of the Tukan clan, and (iii) members of the Bakeor clan, the Pewut clan and the Lamadua clan. Following the Lewaji marriage rules, Wawin men marry Tukan women, Tukan men marry Bakeor/Pewut/Lamadua women and Bakeor/Pewut/Lamadua men marry Wawin women. This kind of triangular marriage system is also found in other communities with different clans being involved.

The male family members of potential wives (the father or an uncle of the potential wife) are referred to, as well as addressed, using the Central Lembata word *opo* or with the Malay equivalent *om* (< Dutch *oom* 'uncle'). The people addressed as *opo* or *om* are highly respected. Marriages are preceded by negotiations between the two clans of the potential partners. The clan of the groom has to pay a bride price to the bride's family. This is traditionally an ivory tusk. The bride's family gives jewellery and woven cloths to the groom's family in return. If all duties are paid, the wife moves to the husband's family but they will normally build their own house. However, modern times have changed settlement patterns and married couples might choose their place of living more freely, sometimes also moving to a town or another island for work. However, marriage rules about whom to marry are still taken rather seriously and breaking them is considered bad.

1.2.3.4 Socio-political division: Paji and Demon

Throughout the Lamaholot area, the population is divided into two different socio-political groups: Paji and Demon.[3] Each Lamaholot village belongs either to the group of Paji or of Demon. There is neither such division in the Sika area, nor in Kedang (Arndt 1938:11; Barnes 1987:19)

Arndt (1938:29) suggests that the division between Paji and Demon goes very far back in time, but the names Paji and Demon were only given to

[3] Alternative names are Demonara and Pajinara (or Painara in languages that underwent *dʒ > *y*). The word *nara* is Javanese, ultimately Sanskrit nāra 'human' (Arndt 1938:29,35).

these groups under the influence of the Hindu Javanese kingdom of Majapahit in the 14th century. According to origin myths from Adonara and Solor, the Demon-Paji division goes back to a fight between two brothers named Demon and Paji (Arndt 1938:3-5). The Demon-Paji division appears to be mythologically grounded in Adonara and Solor but more political and less mythical on Lembata (Barnes 1987:18). Kedang only became part of this political division when the king of Adonara gained power over Kedang and thus forced Kedang to become part of the Paji alliance (Barnes 1987:19).

Arndt (1938:10,22) suggests that Paji and Demon were not brothers but unrelated groups of people. The following features of Paji and Demon are collected from orally transmitted stories and described by Arndt (1938). The Paji, also called Beda or Pati by the Demons in some myths, do not show pride in themselves but they rather seem to be without courage and are depressed (Arndt 1938:3). They are a mix of different people (Arndt 1938:40). They lived on Kroko Puken but also in eastern Flores (Arndt 1938:5). In eastern Flores they lived in big numbers, initially outnumbering the incoming Demon (Arndt 1938:10). Nowadays in eastern Flores, the Paji have almost completely been replaced by Demon. They mainly live at the island's edges, such as Tanjung Flores, and also in the southwest and northeast of Adonara, east Solor, the Minggar peninsular on Lembata, the Lerek peninsular on Lembata, and on the Lewotolo peninsular (= Ile Ape) on Lembata (Arndt 1938:39; Barnes 1987:16). It is said that they do not give offerings to the Earth, neither have a village temple (*korke*) or that they build their temples poorly compared to the Demon (Arndt 1938:19,22,28).

The Demon, also called Pagong, speak proudly of themselves but degrade the Pajis (Arndt 1938:3). They lived on Kroko Puken together with Paji and got into a fight. Then they left to eastern Flores, where they took the land from the Paji and the Paji had to flee (Arndt 1938:9-10). They had a village temple (*korke*), music, songs and dances (Arndt 1938:22).

When the new religions Islam and Christianity began to compete in the Solor Archipelago about the time of the 16th century, the Paji, living in coastal areas, converted to Islam and had contact with Javanese traders. Later they became allies of the Dutch who were the competitors of the Portuguese. The Demon lived more in the interior and were open to Christianity which made them allies of the Portuguese. This choice of religion and political alliances reinforced the antagonism between the two groups (Aritonang and Steenbrink 2008:77).

At the end of the 16th century, the enmity became even more political when both sides joined a different local king. Despite conflicting evidence about the details of the story, it can be concluded that Igo, the king of Larantuka, a town at the eastern edge of Flores, got into a fight with his younger brother Enga. Eventually, Enga joined the Paji and became king of the Paji in Adonara and Igo stayed the leader of the Demon in Larantuka (Arndt 1938:26,44-47).

This strong enmity between the two groups led to many fights and victims on both sides. Some myths connect this to the god Lera Wulan (cf. §1.2.2) who asked for human skulls as offerings. If he did not receive them, the rain would not come (Arndt 1938:9). During the past decades, the enmity has lost ground and nowadays people live together peacefully although each village still recalls to which side they belonged.

Barnes (1987:21) describes an association of Demon affiliation with *ikat* weaving and use of red dye, and an association of Paji affiliation with little or no *ikat* weaving, the use of black dye and weaving restricted to coastal areas and done predominantly for trade. However, there are several exceptions to this binary association. Especially on Lembata but also in eastern Flores, as well as in small areas of Solor and Adonara, the association above does not hold.

The beginning of the division of Paji and Demon is difficult to connect to historic dates. From Portuguese documents, it is known that in 1624 the division was already in place on the island of Lembata (Barnes 1987:18). As the Paji-Demon division appears to be more mythologically grounded on Solor and Adonara, but less on Lembata, it is likely that it did not originate from Lembata. If the division was already in place in the early 17th century, its origins must lay further back in time. In fact, the politicisation of the division due to a fight between the royal brothers Iga and Enga in the kingdom of Larantuka has been dated to the end of the 16th century. This means that the division must have its roots in times earlier than that. As Arndt (1938) suggests that the current labels Paji and Demon came with the Hindu-Javanese influence but that the division into two groups is much older, it must go back to time before the 14th century. However, this hypothesis is impossible to prove with the current data available.

1.2.3.5 Conclusions

A socio-political division such as the Paji-Demon distinction could have originated in an ethnic-linguistic division between incoming speakers of Austronesian languages (=Demon and weaving) on the one hand and speakers of native non-Austronesian languages (=Paji and non-weaving) on the other hand. However, this remains difficult to prove for the Lamaholot case for the following reasons. The sources on the history of the Paji-Demon distinction are mythical origin stories and there is no evidence for a fundamental linguistic division between the groups. People belonging to both, the Paji and Demon group, are spread over all three subgroups in the Lamaholot area. This could only be explained when assuming that the Paji adopted the Austronesian language of the Demon, and only after that this language diversified into the three subgroups of Lamaholot. An additional complication for the Paji/non-Austronesian/native versus Demon/Austronesian/immigrant hypothesis is that none of the two groups declares themselves as being entirely native or immigrant, a distinction in origin prominently found in clan origin stories throughout the whole area (cf. §1.2.3.3 and §1.2.4). Among the native clans, some belong to the Paji and others to the Demon (Arndt 1938:33). Again, one could suggest that the distinction between native and immigrant clans is younger than the Paji-Demon distinction. Among the immigrant clans, there are some that say the Paji-Demon distinction already existed on the island of Kroko Puken from where they fled before arriving in the Solor Archipelago (Arndt 1938:9). Nevertheless, the Demon-Paji division, in addition to the weaving-non-weaving division (Barnes 1987) and the native-immigrant clan distinction mentioned earlier, can be regarded as another piece of evidence for a socio-cultural divide in the history of the Lamaholot people.

1.2.4 History

1.2.4.1 Overview

In this section, I provide an overview of the history of eastern Flores and the Solor Archipelago drawing from oral and written sources. The first two sections concern migration histories and the last two section concern colonial history and the role of the Malay language and later the Indonesian

language in the area.

The history of this area is characterised by migrations of local groups of people and shifting power relations of external forces from Java and Europe. All over the area, oral history reports that there are native clans that emerged out of the ground or out of the mountains and immigrant clans that have come from other islands (cf. §1.2.3.3). §1.2.4.2 introduces the Alorese, a Western Lamaholot group that migrated to the east and settled in the Alor Archipelago which is adjacent to the Solor Archipelago. §1.2.4.3 discusses the migration from the islands Lepan and Batan to the Solor Archipelago which reoccurs in origin stories of clans and in legends. §1.2.4.4 is about the establishment of European settlements, mainly Portuguese, with the aims of Christianisation, trade and gaining political power. §1.2.4.5 describes the more recent influence of the national language Indonesian since the country became independent in 1945. §1.2.4.6 is a summary of the topics discussed in this section on history.

The information on the history of Flores and the Solor Archipelago is collected from published sources and from my own recordings made on Lembata. My own records are indicated with citation codes pointing to recordings in the Central Lembata Corpus (cf. §2.4). A list of citation codes used in the corpus and in this dissertation is given in the list of abbreviations on page xxii.

1.2.4.2 Alorese migration to Alor and Pantar

Speakers of Alorese (a Western Lamaholot language) have been settled since the 14th century in coastal areas of Pantar and Alor which are located to the east of the Solor Archipelago (Stokhof 1975:8; Klamer 2011:8-15; Wellfelt 2016:248-249). Shared sound changes and innovations between Alorese and other Western Lamaholot varieties shown in Chapter 5 of this dissertation confirm that the Alorese language is clearly part of the Western Lamaholot subgroup (cf. §4.1.3).

Oral history of the Alorese on Pantar tells about the arrival of Javanese on Pantar and their establishment of kingdoms in the 14th century (Moro 2018:180). It remains unclear whether the founder of the Alorese kingdoms were actually Javanese or if these founders were the Western Lamaholot people coming to Pantar and Alor. There are two possible scenarios. First, the Western Lamaholot people came to Pantar in the 14th century and foun-

ded kingdoms based on legends relating to Javanese kings. This is not unlikely as at that time the whole area was influenced by the Hindu-Javanese kingdom Majapahit and there is no doubt of legends emerging from there. Second, it could also be that there were actually people related to Majapahit coming to Pantar and initiating the foundation of kingdoms among the Alorese in the 14th century. These Majapahit people were not necessarily ethnically Javanese but may have been allies of the Majapahit kingdom which had its centre on Java. This scenario would presuppose that the Alorese themselves had been already on Pantar in coastal areas before that time and recognised the newcomers as their leaders. This would also mean that the new leaders adapted to the Alorese language rather than introducing their own language. The number of Alorese speakers might have been higher than the number of incoming speakers of other languages, or Alorese could have been already a lingua franca in the Alor Archipelago used by speakers of Alor-Pantar languages as a second language to communicate with people on the coast. Thus, Alorese became the language of the kingdoms in the coastal areas as well as on smaller off-shore islands.

1.2.4.3 Migration from Lepan Batan

Many clans in the Solor Archipelago trace their origins back to the island Kroko Puken, also called Lepan Batan, from where they had to flee due to a natural disaster about 500 years ago (Vatter 1932:9-10; Barnes 1982). These immigrant clans are also referred to as *téna mau* lit. 'boat float' (Ataladjar 2015:10-11).[4] Lepan and Batan are two small islands located towards the east of the Solor Archipelago, in the strait between Lembata and Pantar (Ataladjar 2015:17). The inhabitants of these two islands fled from a flood, maybe caused by a tsunami or a volcanic eruption. In most myths about how this disaster came about a *naga* snake is involved. People fled with boats to Alor, Pantar, Lembata, Adonara, Solor and Flores, some even to Timor (Ataladjar 2015:21-22). Some of these boats became stones according to the legends, and are still there, such as the *watu téna* 'stone boat' on a beach of southern Lembata (L1, Ataladjar 2015:32-34).

The core clans from Lamalera, a village on the south coast of Lembata, even relate their history further back to Seram Goram in the Moluccas and

[4] Ataladjar (2015:8) does not provide the meaning of *mau* but according to Pampus (1999) *mao* means 'float' in WL-Lewolema.

Luwuk on Sulawesi. They came as allies of the Hindu-Javanese kingdom of Majapahit which extended its power over most parts of present-day Indonesia at its peak between 1350 and 1389, including Flores and the Solor Archipelago (Aritonang and Steenbrink 2008:73; Barnes 2013:39-40; Ataladjar 2015:10,12-13). According to oral history, the ancestors of the clans from Luwuk came as people of Gajah Mada, the prime minister of the Majapahit empire at that time, to Seram Goram and then further to Lepan Batan. In the legend, it is said that Gajah Mada himself came to Lepan Batan together with the people from Luwuk. When the clans from Luwuk came to Lembata, they found people there and they started to live with them together peacefully.

The Nagarakertagama chronicles of Majapahit written in 1365 suggest that the places of origin, such as Luwuk and Seram Goram, transmitted by oral history are plausible. The chronicles provide a list of Majapahit dependencies in eastern Indonesia, among others these are Solor, Pantar (there called Galiyao), Timor, Seram (also: Seran) and Gorom (also: Gurun, Goran) in the Moluccas and Luwuk on Sulawesi (Pigeaud 1960:34; Pigeaud 1962:34; Barnes 1982; Hägerdal 2012:22; Ataladjar 2015:9-10).

In the 16th century, the islands of Lepan and Batan are mentioned in the records of European sailors. The islands were located on the route of trade ships from Europe to Timor and Moluccas and it is known that Magellan's ship "Victoria" passed Lepan Batan on 9 January 1522 (Ataladjar 2015:19). Francisco Albo, the helmsman on Magellan's ship Victoria, writes in his dairy about their travel through the Alor Archipelago in January 1522.[5] He mentions two little islands in between Pantar and Lembata which have been identified as Lepan and Batan by Le Roux (1928:12). Albo writes in Spanish *y son habitadas* 'and (they) are inhabited'. Le Roux (1928:14) doubts that his statement is related to the islands of Lepan and Batan but claims that Albo meant the islands of Pantar and Lembata which Albo also mentions in the same sentence. This assumption by Le Roux is based on the fact that Lepan and Batan were no longer inhabited at the time when Le Roux was writing, thus in the early 20th century. However, we know from oral history

[5] At that time Magellan himself had already died in a fight on an island of the Philippines. Only one of his five ships, the Victoria, finally completed the journey around the world. The Victoria was under the commando of Juan Sebastian de Elcano and the diaries of Antonio Pigafetti in Italian and of Francsico Albo in Spanish have become the most important documents on the journey of this ship (Le Roux 1928:1).

that people had to flee from these islands due to a natural disaster, so it is likely that Lepan and Batan were still inhabited when the "Victoria" passed in 1522. Ataladjar (2015:36) uses Albo's statement as a basis to assume that the disaster must have happened after 1522.[6] In the history of Larantuka, people from Lepan Batan are mentioned. These people were already there when Sira Napang became king of Larantuka in 1525 (Ataladjar 2015:37). From this, Ataladjar (2015:37) concludes that the disaster of Lepan Batan must have happened between 1522 and 1525. Nowadays, Lepan is a coral island below sea level, whereas Batan is about 250 m above sea level and its land is fertile, although neither of the islands has any fresh water source. On Batan, there is still an old ruined village which points to past inhabitance.

In the stories, Lepan Batan is described as fertile and having a safe harbor called Leffo Hajjo. The people had a good life on Lepan Batan and they had trade connections to Munaseli and Pandai on Pantar (Ataladjar 2015:15-16). According to stories from Lembata, crucial elements of the present-day Lamaholot culture were found on Lepan Batan (Ataladjar 2015:18). The people of Lepan Batan already believed in the god Lera Wulan Tana Ekan (cf. §1.2.2), built a *korke* and had *nubanara* stones. The *korke* is a temple to worship Lera Wulan Tana Ekan ('Sun-Moon Land-Soil') and the ancestors (cf. §1.2.2). The *nubanara* stones are an important element in rituals.

The people on Lepan Batan could have been a group of Western Lamaholot speakers similar to the Alorese that have settled in the coastal areas of Pantar and Alor, close to the island Lepan and Batan, since at least the 14th century (cf. §1.2.4.2). This does not exclude the possibility that there was an additional minority of people from the Moluccas as reported by Lamalera's oral history. If indeed the people on Lepan Batan were descendants of Western Lamaholot speakers, this could explain why the immigrants from Lepan Batan have integrated so well with the Lamaholot in the Solor Archipelago. Clans that claim to originate from Lepan Batan are linguistically not distinct from other clans in the Lamaholot area. Linguistic boundaries rather follow village boundaries and do not mark clan distinctions.

[6] Vatter (1932:9-10) had suggested mid or end of the 17th century as the date for the Lepan Batan disaster which was based on traditional counting of generations. On the other hand, Barnes (1982:411) suggested 1450 also based on generation counting.

1.2.4.4 Colonialism and Christianisation

In the middle of the 16th century, Dominican priests from Portugal, followed by Portuguese traders and soldiers, came to the Solor Archipelago via Malacca where they had settled earlier (Aritonang and Steenbrink 2008:75). The Dominicans established their first settlement on the island of Solor in 1561. Portuguese priests, but also laymen marrying local women, started to christianise the local population (Abdurachman 2008). When the Dutch conquered the Solor fortress in 1613, some Portuguese and christianised locals moved to Larantuka. An additional influx of Christian people to Larantuka came in the 17th century when Portuguese, Christian Malays and Christian Chinese fled, via Makassar, from Malacca which had been conquered by the Dutch in 1641 (Aritonang and Steenbrink 2008:87). These migrants from from the west are also known as *sina jawa malaka* or *lau wai* 'from the water' (Ataladjar 2015:10-11). After the fall of Malacca in 1641, Larantuka gained more and more importance and additional settlements of incoming Christians were established in Wureh on Adonara and Konga in eastern Flores.

At this time the Malay variety of the town Larantuka started to develop as the people from Malacca spoke a variety of Malay. Malay became the main language of the mixed population of Larantuka, including indigenous Lamaholot, migrants from Rote, Sabu, Sulawesi and Ternate, as well as Portuguese marchants, solidiers and priests. Over time, this language developed into its own variety of Larantuka Malay (Steinhauer 1991:181). The speakers themselves call their language Nagi (Paauw 2008:66). Larantuka Malay is also reported to be spoken in several villages around Konga bay in eastern Flores and in the village Wure on Adonara (Steinhauer 1991:180; Paauw 2008:69). The strong influence from Portuguese and the direct descendance from Peninsular Malay (Malacca) makes the history of Larantuka Malay fundamentally different from the history of other Malay varieties in eastern Indonesia, such as Alor Malay or Kupang Malay (Paauw 2008:11). In the wider Solor Archipelago, the local languages of the Flores-Lembata family were the main means of communication. Larantuka Malay was not used much, as Portuguese missionaries experienced difficulties in communicating with people from the villages (Aritonang and Steenbrink 2008:76). Other varieties of Malay were not used either until a variety of Malay, different from Larantuka Malay, was introduced in primary education in the first half of the 20th century (Aritonang and Steenbrink 2008:244).

The decline of the Portuguese and the rise of the Dutch as colonial powers in eastern Indonesia during the 18th and 19th century reduced the Dominican influence on Flores and in the Solor Archipelago. In the early 20th century, Catholic missionaries from the Societas Verbi Divini (SVD), mainly German, started to become active in the area and cooperated with the Dutch colonial government in developing Flores and the Solor Archipelago (Aritonang and Steenbrink 2008:94,244). The first primary schools in the area with Malay as language of instruction were established by SVD missionaries. Since then bilingualism in local languages and Malay started to spread to wider parts of the society.

Nowadays the languages of the colonial powers, Portuguese and Dutch, are no longer used in eastern Flores and the Solor Archipelago, but loanwords, such as Central Lembata *kédéra* 'chair' from Portuguese *cadeira* [kaˈdejra] 'chair' or *bal* 'ball' from Dutch *bal* 'ball' remain. These words are different from the corresponding Indonesian words *kursi* 'chair' and *bola* 'ball', which are also loans but with different histories.

1.2.4.5 The Indonesian national language

In 1945 Indonesia declared independence. With the independence movement in the first half of the 20th century, Malay was chosen to become the national language and since then, under the name 'Indonesian', the language was standardised further and developed into a full national language for administration and education (Sneddon 2003). In this dissertation, I use the term 'Indonesian' to refer to the local variety of Indonesian that people speak in eastern Flores and the Solor Archipelago. This variety diverges in various respects from Indonesian that is spoken in the west of the country, such as on Java, as well as from written Indonesian. It also diverges from Larantuka Malay (cf. §1.2.4.4). The local variety of Indonesian used in eastern Flores and in the Solor Archipelago has not yet been studied in particular.

Initially, Indonesian was a second language that was only acquired when children started to go to school. Nowadays, Indonesian, or more precisely its local variety, is an additional first language next to the local languages, even the only first language for many children. Code-switching between Indonesian and local languages is common practice and many loan words from Indonesian have been added to the lexicon of the local languages. According to the results of a cultural questionnaire that I conducted in the village

Lewaji on Lembata (cf. §1.2.2), couples with different local language background either use the language of the husband or Indonesian as their family language. In case the couple lives in the village of the husband, the wife will learn the local language of the village. However, when they live somewhere else, they may rather use Indonesian as their family language. Nowadays, some couples with different language backgrounds, even though living in the village of the husband, may chose Indonesian as their family language. Indonesian is continuing to gain more and more importance, while the local languages become more marginalised. During the political period of the New Order, in the 1960ies to the 1990ies, local languages were forbidden at schools with the aim of strengthening the new national language Indonesian. These days, local languages are not suppressed anymore. Nevertheless, local languages are used less and less due to the fact that they are only useful in the context of traditional village life. If asked, people usually agree that it is a pity that the local languages are used less by younger people.

1.2.4.6 Summary

The eastward migration of the Alorese speakers to the islands of Alor and Pantar in the 14th century is the earliest migration movement known for the region of eastern Flores and its adjacent islands. Further, oral history tells that in the 16th century a devastating natural disaster forced a large number of people to flee from the small islands Lepan and Batan located between the island of Pantar and the island of Lembata. These people settled throughout the Solor Archipelago and until today, they trace back their clan origin to Lepan Batan. Also in the 16th century, the first Catholic priests from Portugal arrived in the Solor Archipelago and began their missionary work. In the 17th century, the town of Larantuka became a center of Christianity and settlement for migrant groups from different parts of Island Southeast Asia, such as from Malacca. The 17th and 18th century were characterised by a rise of Dutch colonial power. In the 20th century, a new Catholic order, the Societas Verbi Divini (SVD), began their missionary work in the area. Until today, SVD is the most wide-spread Catholic missionary order in eastern Flores and the Solor Archipelago. Since independence in 1945, the Indonesian national language, a variety of Malay, has gained more and more importance due to its use in administration and education. This has also caused a decline in use of local languages.

1.3 The wider areal context

1.3.1 Linguistic diversity

The Flores-Lembata languages of eastern Flores and the Solor Archipelago are located in eastern Indonesia, an area of linguistic diversity and contact. Eastern Indonesia is characterised by the presence of Austronesian languages and languages of non-Austronesian ('Papuan') families which have co-existed and influenced each other for about 3,500 years.[7] This contact has led to linguistic features diffusing between languages regardless of their genetic affiliation (Klamer et al. 2008:10,136; Ewing and Klamer 2010a). This contact zone of Austronesian and non-Austronesian languages has been studied as a linguistic area labelled East Nusantara (Klamer et al. 2008; Ewing and Klamer 2010b; Holton and Klamer 2017). A slightly smaller linguistic area has been named Wallacea (Schapper 2015). Both proposed areas are characterised by a specific set of linguistic features that have diffused over language family boundaries and are attested in Austronesian as well as non-Austronesian languages.

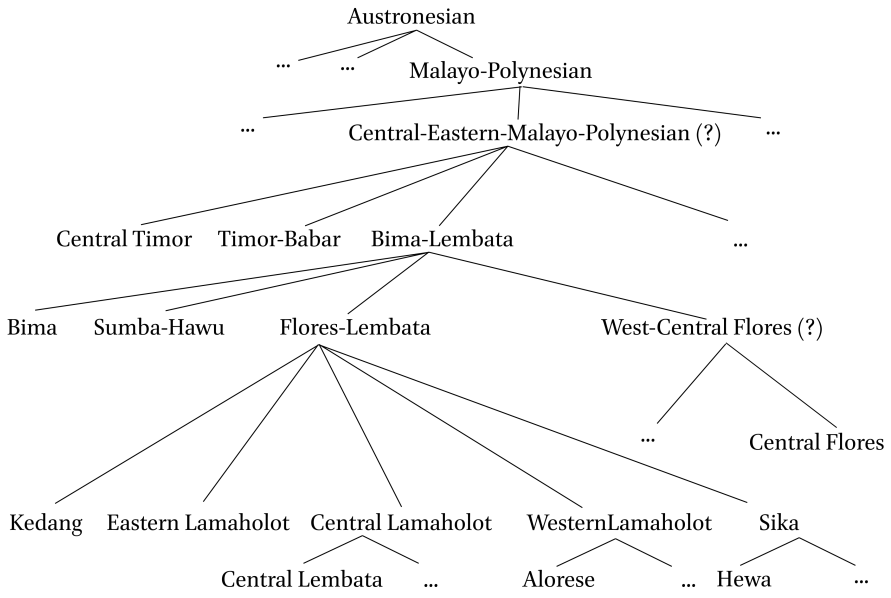
The area studied in particular for this dissertation is part of this contact zone and covers the province of Nusa Tenggara Timur (NTT) and the country of Timor-Leste (cf. Figure 1.2 on page 4). This area has been chosen as it covers the Flores-Lembata languages and its western as well as eastern neighbours of both Austronesian and non-Austronesian language families. In the area studied for this dissertation, there are languages of two language families: Austronesian languages and Timor-Alor-Pantar (TAP) languages which are Papuan.[8]

[7] The non-Austronesian language families of this area are often referred to by the cover term 'Papuan' although they do not form a genealogical unit with a common ancestor. The term 'Papuan' has been used because most of the non-Austronesian language families are found on the island of New Guinea and in its vicinity. The western part of New Guinea belongs to Indonesia and is called (West) Papua, while the eastern part of the island constitutes the country Papua New Guinea. In this dissertation, the term 'Papuan' is used interchangeably with 'non-Austronesian' as it refers to all languages of the region that do not belong to the Austronesian languages family.

[8] The Timor-Alor-Pantar languages are now the western-most non-Austronesian languages spoken in eastern Indonesia. Until 1815, the now extinct Tambora language was spoken on Sumbawa island which is located further west than TAP. This language was probably not related to either the Austronesian or Timor-Alor-Pantar (Donohue 2007).

The Austronesian (AN) language family is, in terms of number of languages and geographic spread, one of the biggest language families worldwide. The 1,200 Austronesian languages are spoken from Taiwan in the north to New Zealand in the south, and from Madagascar in the west to the Easter Islands and Hawai'i in the east. Virtually the whole area in between these points is populated by speakers of Austronesian languages, with the exception of the island of New Guinea and Australia (Blust 2013:1-3). The AN languages spoken in the area of study, displayed in Figure 1.3, are part of the subgroup of Malayo-Polynesian which includes all AN languages outside of Taiwan, the homeland of the Austronesian language family (Blust 2013:30).

Figure 1.3: The AN languages of the area: current stage of classification



Further subgrouping within Malayo-Polynesian is still debated (Blust 1993; Donohue and Grimes 2008; Blust 2009; Klamer 2019). This includes the putative AN subgroup Central-Eastern-Malayo-Polynesian (CEMP) which is supposed to include the area of study for this dissertation and all Austronesian languages further north and east, excluding only the island of Sulawesi.

This dissertation provides evidence for a Bima-Lembata subgroup encompassing the languages of Sumba, Sabu, Bima, Western Flores, Central

Flores and Flores-Lembata (cf. §5.5). Within the Bima-Lembata subgroup Sumba-Hawu (Blust 2008), Central Flores (Elias 2017b) and Flores-Lembata (§5.4) have been identified as innovation-defined subgroups. Further likely subgroups within Bima-Lembata are Bima and West-Central Flores (*Flores Barat* in Fernandez 1996). The details of the internal structure of Bima-Lembata remain to be investigated.

Two further low-level subgroups within (CE)MP can be established on the island of Timor: Central Timor and Timor-Babar (Edwards 2018b; Edwards 2019). Central Timor encompasses the languages Welaun, Tokodede, Mambae and Kemak on the island of Timor. Timor-Babar includes the remaining AN languages of the island of Timor as well as languages further to the east.

The languages of the Timor-Alor-Pantar (TAP) family are spoken on the islands of Alor and Pantar, as well as in East Timor (Klamer 2017; Schapper 2014b). Several hypotheses about the relation of the TAP languages to other non-Austronesian language families in the wider area have been proposed but none of these has yet been demonstrated on the basis of enough evidence to draw definite conclusions (Holton and Robinson 2017b). At the current stage of research, the TAP languages are most likely either an isolate family or are related to the languages of West Bomberai (Holton and Robinson 2017b:183-184). Within the TAP languages, the Alor-Pantar languages of the islands of Alor and Pantar form a clear subgroup excluding the TAP languages of Timor (Holton and Robinson 2017a). Subgroupings of the Timor-Alor-Pantar languages have been proposed in Holton et al. (2012), Schapper et al. (2012); Schapper et al. (2017) and Kaiping and Klamer (to appearb).

1.3.2 Genetic diversity

Archaeology and population genetics reveal two major waves of modern human (*homo sapiens*) migration into island Southeast Asia: an earlier arrival of non-Asian populations and a later influx of Asian populations (Hudjashov et al. 2017:2447).[9] Descendants of the earliest wave of migrants are still living on New Guinea highlands and in Australia. But also in parts of the Philippines and eastern Indonesia a high degree of ancestry from this

[9] Other human species, *homo erectus* and *homo floresiensis*, have been attested in island Southeast Asia preceding the first occurrence of *homo sapiens* (Bellwood 2017:34-85).

earlier population is attested (Bellwood 2017:86-87).

The first modern humans entered the region in the Late Pleistocene about 50,000 years ago — colloquially referred to as Late Ice Age, a time when the islands of Sumatra, Java and Borneo still formed an extension of the Asia continent called the Sunda shelf. Much later, about 4,000-5,000 years ago, the Malayo-Polynesian branch of the Austronesian languages and its speakers moved from Taiwan into island Southeast Asia and further west and east (cf. Karafet et al. 2010:1833; Bellwood 2017:181; Hudjashov et al. 2017:2439-2440).[10] Some later migration phases are connected to the spread of Hinduism starting almost 2,000 years ago, the later spread of Islam several hundred years ago and more recent Chinese influence (Karafet et al. 2010:1841-1842).

Traces of all migration phases are still present in the modern day genome of the Indonesian people (Karafet et al. 2010:1842). There appears to be a clear boundary between Asian genomes in the west and non-Asian genomes in the east between the islands of Bali and Flores, more specifically between Sumbawa and Flores (Karafet et al. 2010:1837-1838; Hudjashov et al. 2017:2447). This genome boundary coincides with the Wallace line, a boundary of transition between Asian and Australian types of flora and fauna.

The genetic sampling results of Hudjashov et al. (2017) provide more specific data on the Indonesian province of Nusa Tenggara Timur and the country of Timor-Leste which are the focus of this dissertation. The sampling results from the eastern part of Flores (Bama), from Lembata and from Timor show an almost half-half division of the Papuan and the Austronesian genome component. This genetic profile is very similar to the sampling results on the islands of Alor and Pantar which show only a slightly higher Papuan component. Towards the west, the central and western part of Flores (Bena and Rampasasa) and Sumba show a smaller Papuan component than found further east. On Sumba, the Austronesian component is the biggest. On Flores, the admixture is more diverse, also including other Southeast

[10] The Austronesian expansion may have contributed to the Neolithic transition in island Southeast Asia. But there is also evidence for neolithic influence from mainland Southeast Asia, such as domesticated pigs, and also New Guinea has been recognised as a center of neolithic innovations. For example, the cultivation of bananas in the region most likely has its origins in New Guinea and was taken towards the west form there (Hudjashov et al. 2017:2440).

Asian components (Hudjashov et al. 2017:2442). Overall, the eastern Indonesian islands sampled in Hudjashov et al. (2017), all show a very similar picture of genetic contact. Following different types of analyses, Hudjashov et al. (2017:2445) deduce a date for the latest admixture of around more or less 2,000 years ago between two populations: one "non-Asian/Papuan-like" type and one "Indonesian/Philippine-like" (Austronesian) type. There is a crucial difference between the Austronesian component of western Flores and Sumba on the one hand and the Austronesian component of Lembata, Alor, Pantar and Timor on the other hand. The source for the Austronesian admixture on western Flores and Sumba contains a larger proportion of Java and Bali components, while the Austronesian admixture on Lembata, Alor, Pantar and Timor is dominated by Sulawesi inheritance (Hudjashov et al. 2017:2447).

The dates of the most recent major genetic admixture between the "Austronesian" and "Papuan" components in eastern Indonesia contrast with the archaeological signals of the Austronesian expansion in the region that date back to about one thousand years earlier (Hudjashov et al. 2017:2447-2448). This suggests that there were either several migration waves out of Taiwan which blur the genetic signal, or that culture and technology spread earlier than genetic contact took place (Hudjashov et al. 2017:2448).

1.4 Research questions and aims

The Flores-Lembata languages in eastern Indonesia are located in an area that is linguistically mainly Austronesian, with the exception of the Timor-Alor-Pantar family (cf. §1.3.1). In contrast, the genetic profile of the population appears to be mixed with almost equal "Austronesian-like" and "Papuan-like" components (cf. 1.3.2). Assuming that usually languages match with genomes, this miss-match of genome and language family raises the hypothesis of language shift: speakers of non-Austronesian languages may have shifted to Austronesian languages. Language shift can leave traces of the languages that are disappearing in the structure of the languages people are shifting to, especially when preceded by a period of bilingualism (Thomason and Kaufman 1988; Muysken 2010; Ross 2013).

Based on the hypothesis that languages match with genomes and non-Austronesian speakers shifted to incoming Austronesian languages, non-

Austronesian features are expected to be found in the Austronesian languages of the area. Previous research has indeed reported non-Austronesian traits, specifically in some of the Austronesian languages of Nusa Tenggara Timur and Timor-Leste. In particular for Western Lamaholot, a subgroup of Flores-Lembata, a whole set of non-Austronesian structural features has been reported by Klamer (2012a). Further examples of non-Austronesian traces in Austronesian languages of this area include (i) sound correspondences with no Austronesian source (Edwards 2016b), (ii) plural words (Moro 2018), and (iii) non-decimal numeral systems (Schapper and Hammarström 2013; Schapper and Klamer 2017).

With this background, this dissertation aims to examine in more detail the contact history of the Flores-Lembata family by taking a regional comparative perspective. This family is particularly interesting because the Flores-Lembata languages are genealogically closely related to their western neighbours: the Austronesian languages of Western and Central Flores (cf. Chapter 5). However, morpho-syntactically, they are mixed and share features with their eastern neighbours of the Timor-Alor-Pantar family, as well as with the Austronesian languages of Timor (cf. Chapter 8, 9 and 10).

The grammatical description of the Central Lembata language in Part I provides the description of a language belonging to the previously undescribed Central Lamaholot subgroup of the Flores-Lembata family, as laid out in §1.1. After having filled this documentation gap, Part II investigates the phonological and lexical history of the Flores-Lembata family and answers the following research questions:

(1) How are the Proto-Malayo-Polynesian (PMP) proto-sounds reflected in the Flores-Lembata languages?
(2) What is the evidence for (i) subgroups within Flores-Lembata, (ii) Flores-Lembata as a subgroup, and (iii) Bima-Lembata as a higher-level subgroup including Flores-Lembata and other Austronesian languages?
(3) Which Flores-Lembata lexical items are inherited from an Austronesian ancestor?
(4) Which Flores-Lembata lexical items are not inherited from an Austronesian ancestor?
(5) Which Flores-Lembata lexical items can be reconstructed to Proto-Flores-Lembata?

Questions (1) and (2) are addressed in Chapter 5 and questions (3) to (5) are addressed in Chapter 6. Chapter 5 is a top-down approach to the historical phonology of Flores-Lembata. In this chapter, I show that Proto-Malayo-Polynesian (PMP) sounds are regularly reflected in the languages of Flores-Lembata. Based on exclusively shared sound changes, I provide evidence for Flores-Lembata as a subgroup, as well as for five lower-level subgroups within this family. In addition, I propose the change of PMP *b > *w* in the same set of lexical items as evidence for a higher-level subgroup Bima-Lembata that includes, next to Flores-Lembata, the Austronesian languages of Central and Western Flores, of Sumba, Sabu and Bima.

Chapter 6 describes the Flores-Lembata lexicon with a focus on words inherited from PMP, on the one hand, and words that cannot be shown to have a PMP origin, on the other hand. I show that Proto-Flores-Lembata (PFL) has a comparably small component of non-Austronesian vocabulary, while the individual subgroups of Flores-Lembata have added more new vocabulary to different extents. There is an increase of non-Austronesian vocabulary towards the geographic centre of the Flores-Lembata subgroup which includes the three Lamaholot subgroups.

Part III of this dissertation aims at the comparative analysis of grammatical innovations in the languages of Flores-Lembata to detect possible contact-induced changes. The Flores-Lembata languages underwent a considerable number of structural innovations that are not attested in their closest genealogical relatives further west, the other languages of the Bima-Lembata subgroup. In contrast, most of these features are present in Austronesian languages of Timor, as well as in the non-Austronesian Timor-Alor-Pantar languages. The following research questions are addressed in Part III.

(6) Which structural features in the Flores-Lembata languages are innovations?
(7) Which structural innovations can be attributed to contact-induced change?

Chapter 8 is concerned with three morpho-syntactic innovations. (i) The Lamaholot subgroups have developed an alienability distinction in their possessive constructions. (ii) All Flores-Lembata have reanalysed property words as nouns. (iii) Central Lamaholot also innovated plural marking on nouns via grammaticalisation of the third person plural pronoun.

Chapter 9 describes three word order changes in the noun phrase that are found in all Flores-Lembata languages. (i) Possessor nouns are pre-nominal, while (ii) locative nouns and (iii) numerals are post-nominal. This is the opposite to the inherited Austronesian word order in the noun phrase. However, this is the word order found in the non-Austronesian languages of the area.

Chapter 10 discusses the innovation of two clause-final elements in the languages of Flores-Lembata. (i) All Flores-Lembata languages have clause-final deictic motion verbs, such as 'come' and 'go', although the general constituent order is verb-medial. In the Lamaholot subgroups and in Kedang, but not in Sika, these clause-final verb can also encode elevation. (ii) The Lamaholot subgroups, but not Kedang and Sika, have innovated clause-final negators. While Eastern Lamaholot and Central Lamaholot still retain also a pre-predicate negator at the same time, Western Lamaholot has only clause-final negation.

In Chapter 11, I synthesise the results from Part II and Part III and provide a hypothesis on the contact scenario that possibly led to the innovations in lexicon and grammar established in the preceding chapters by answering the last two research questions:

(8) What kind of scenario led to the lexical and structural changes in the Flores-Lembata languages?
(9) What kind of language(s) was/were the contact language(s)?

I argue that the Flores-Lembata languages acquired most of their innovative features through contact-induced change via language shift preceded by long-term language mixing in a bilingual community. The now extinct contact languages were typological very similar to the Timor-Alor-Pantar (TAP) languages but there is not enough lexical evidence to assume that the contact languages were a branch of TAP.