0. Introduction

The linguistic relatives of Taiwan’s indigenous population live in a vast area covering Madagascar, most parts of Southeast Asia, New Zealand, the Polynesian islands, and Hawaii. The languages spoken in this area belong to the Austronesian language family. The Austronesian languages of Taiwan are commonly referred to as Formosan languages.¹ Formosan languages are not or only distantly related to Taiwan’s Sinitic languages, viz. Mandarin, Taiwanese-Min, and Hakka.² In the past two centuries, about a dozen of Formosan languages have become extinct, and the remaining twelve languages are threatened with extinction. Large-scale surveys on Formosan languages were first conducted by Japanese scholars during the Japanese colonial period (1895-1945).³ In the past decades, the number of linguistic studies on Formosan languages by Taiwanese and international scholars has steadily increased. In 2000, reference grammars of thirteen Formosan languages were published.⁴

It is a well-known fact that Formosan languages were first recorded by Western missionaries in the 17th century. In the 19th century, the earliest missionary accounts were important sources of information for European scholars who tried to piece together the linguistic puzzle of the Far East. This paper examines the history of European research on Formosan languages by addressing three questions. What kind of sources did the missionaries exactly leave behind? How did these sources shape the

¹ Li 2000: 45
² The claim that Austronesian and Sinitic languages share a common ancestor language has been made by Sagart (1993, 1994). This claim has been rejected by Li (2004 [1995]).
³ Tsuchida 2000
European perception of Formosan languages in the 19th century? Which claims concerning the linguistic classification of Formosan languages had been made by the end of the 19th century? The first section focuses on the early years of missionary linguistics in Taiwan. The second part addresses 19th century European scholarship on Formosan languages.

1. Early days of missionary linguistics in Taiwan

1.1 Spanish contributions (1626-1642)

The arrival of the Spaniards in 1626 laid the foundation for a stable presence of Dominican missionaries in northern Taiwan. As missionary work required direct communication with the natives, we may assume that this communicative requirement resulted in systematic analyses of the local language. However, descriptions of Formosan languages compiled by the Spaniards are no longer extant, although they are mentioned in missionary sources. For example, in his comprehensive account on the Dominican mission in Asia, Gonzaléz mentions two works on Formosan languages attributed to the Dominican friars Jacinto Esquivel and P. Theodore Quirós de la Madre de Dios. The former is supposed to have written in 1630 a vocabulary *Vocabulario muy copioso de la lengua de los indios de Tanchui* [Comprehensive vocabulary of the language of the natives of Tamsui in Isla Hermosa] and a grammar book entitled *Arte de la lengua de Formosa* [Art of the language of Formosa]; the latter is supposedly the compiler of another version of the *Arte de la lengua de Formosa* and the vocabulary *Vocabulario en la misma lengua* [Vocabulary in the same language].

The fact that pertinent bibliographies lack conclusive hints to the whereabouts of the Spanish language tracts leaves room for speculation. Have the vocabularies and the grammars actually been compiled? Gaps between inventories of missionary tracts and available sources are by no means uncommon. According to Masini, these may be due to the fact that compilers of inventories not necessarily cited sources which were actually available, but also included information drawn from letters and reports written by missionaries. When a missionary proclaimed in a letter that he had learned

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5 Borao 2001: 103
6 cf. Gonzalez 1966: 363-364
7 Personal communication, August 2004
the local language and compiled a dictionary or a grammar, this information was easily taken for granted. The validity of such information could hardly be checked. Yet from another perspective it seems equally likely that the earliest manuscript grammars have simply been lost. After all, Dominican friars are known for their dedication to linguistic research, and their activities in this field resulted in the compilation of almost 200 language tracts after the 16th century. If Dominican language research included Formosan grammar tracts, the Spanish friars must be considered the founders of linguistic research in Taiwan. However, unless the manuscripts are rediscovered, nothing will ever be known about the contents of their research, and no links between the language tracts and Formosan language research in the following centuries can be established.

2.1 Dutch contributions (1624-1661)

The Dutch started colonizing parts of Southern Taiwan at about the same time when the Spanish arrived in northern Taiwan. They clearly perceived the linguistic diversity of the island. In 1661, the Dutch missionary Daniel Gravius wrote “[t]hat, however, which of all along has greatly hindered the advancement of the work is the manifold variety of Languages in the Island, so that scarcely four or five villages have the same language; this apparently arising from the endless quarreling of the people and their consequent want of mutual intercourse”.9

The missionaries’ encounter with the local languages resulted in a number of spelling books, dictionaries, and translations of Christian texts, as will be explained presently. The linguistic diversity among the aboriginal population leads us to the question which languages the Dutch missions actually recorded. One language was spoken in the village of Sinkan, located in the southwestern plain of Taiwan. Due to its close distance to the Dutch headquarters at Fort Zeelandia—“a half day’s journey on horseback”10—Sinkan was one of eight villages on which the Dutch focused their initial missionary efforts. The language of Sinkan is referred to as Siraya. According to Ferrell, “[t]he Siraya (“Sinkan”) language was employed by the Dutch as a sort of lingua franca for administration and missionary activity in southwestern

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8 cf. Breitenbach 2000: xxx
9 translated by Campbell 1996 [1888/1661]: xiii
10 Ferrell 1971: 218
Taiwan”. The Siraya language became extinct about two hundred years ago. After the withdrawal of the Spanish in 1642, the Dutch expanded further to the central and northern parts of the islands, including the district of Favorlang. The Favorlang language is the second linguistic variety recorded by the Dutch. Like Siraya, it is now extinct.

In June 1627, the first ordained Dutch minister George Candidius started his service in the castle of Zeelandia, located near the present-day city of Tainan. Candidius was obviously not inclined to limit his sphere of action to the headquarters of the Dutch colonialists. Instead, in Heylen’s words, “[w]hen the opportunity arose, he crossed over to the nearby village of Sinkan, built a bamboo hut and took up the role of missionary in the field”. Only a little more than a year after his arrival, he wrote in letter to Governor-general J.P. Coen that he had “compiled a vocabulary of all the native words with which I am familiar”. And he recommended “to send a clergyman who would remain here for a long time, or who felt inclined to stay here for good. I will hand him all my Sinkan writings, so that when the outlook is more hopeful, he may have a better opportunity for becoming thoroughly proficient in the language”.

Whether or not the “missionary in the field” Candidius was in fact a capable linguistic fieldworker cannot be ascertained, as his writings are likewise no longer extant. In contrast to the uncertain status of Spanish linguistic research in northern Taiwan, however, philological inquiries by the Dutch in the South produced tangible and lasting results. More than ten years after Candidius’ preliminary investigations, a first speller of a Formosan language compiled by Robertus Junius was printed in the Dutch town of Delft. As shown in Table 1, the speller was followed by a number of translations and dictionaries.

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11 Ferrell 1971: 219
12 Li 2001: 52
13 Heylen 2001: 204f.
14 Heylen 2001: 205
15 quoted and translated by Campbell 1992 [1903]: 97
16 Heylen 2001: 211
### Table 1: *Tracts in Formosan languages compiled by Dutch missionaries*

<table>
<thead>
<tr>
<th>Author</th>
<th>Year</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vertrecht, Jacob</td>
<td>1650</td>
<td>Leerstukken en preeken in de Favorlangsche taal (eiland Formosa) [Doctrines and prayers in the Favorlang language]</td>
</tr>
<tr>
<td>Happart, Gilbertus</td>
<td>1650</td>
<td>Woord-boek der Favorlangsche taal, waarin het Favorlangs voor, het Duits achter gestelt is [Dictionary of the Favorlang language in which Favorlang precedes Dutch]</td>
</tr>
<tr>
<td>Gravius, Daniel</td>
<td>1661</td>
<td>Het Heylige Euangelium Matthei en Johannis ofte Hagnau ka d'ilig Matiktik ... / overgeset inde Formosaansche tale [The gospel of St. Matthew translated into Formosan]</td>
</tr>
<tr>
<td>Anonymous</td>
<td>No date</td>
<td>[Vocabularium Formosanum; Utrechtsche Academie]</td>
</tr>
</tbody>
</table>

I have not been able to localize Junius’ speller of 1645, but a similar title comprising 24 pages is mentioned by Adelung.\(^{17}\) It is therefore safe to assume that Junius compiled a short tract in a Formosan language, although its exact title and contents cannot be verified. Vertrecht’s “leerstukken en preken” contains prayer texts and dialogues in Favorlang with Dutch translations. The original manuscript of 1650 was printed in 1888 and translated into English by Campbell in 1896. Happart’s manuscript dictionary *Woord-boek der Favorlangsche taal* contains about 3000 Favorlang entries with Dutch translations. It was discovered in the archives of the

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\(^{17}\) Adelung 1806: 578
Dutch Reformed Church Council at Batavia around 1840. After its discovery it was edited and published by the Dutch missionary Wolter Robert van Hoëvell (1812-1879) and—as an English translation—by the English missionary Walter Henry Medhurst (1796–1857) of the London Missionary. With approximately 1000 entries, the *Vocabularium Formosanum* is much shorter than Happart’s *Woord-boek*. It consists of a classified word list and four appended dialogues in Favorlang and Dutch. The word list is divided according to eighteen topics, e.g., *God, natuur* ‘God, nature’, *tijd* ‘time’, *ligchaamsaandoeningen* ‘disorders of the body’, *bijvoegelijke naamwoorden* ‘adjectives’, etc. The four dialogues are short and on trivial topics (“where are you going?”, “what are you doing?”, etc.). The manuscript was discovered in the Dutch city of Utrecht by Christianus Jacobus van der Vlis in 1842. He later copied the work and published a printed version. As pointed out by Van der Vlis, the manuscript contains neither information about the compiler nor the year of compilation. Judging from the spelling of the Dutch words, he assumes that it was compiled in the 17th century.

Gravius’ bilingual Favorlang-Dutch gospel text and catechism were published as printed editions in 1661 and 1662.

As is obvious from the above titles and descriptions, the primary purpose of these works was the practical application for missionary work. It is evident from descriptions in the respective prefaces and also mentioned in other missionary accounts that the spellers and translations of Christian texts were not only intended for the teaching of missionaries by missionaries, but also for use by the natives. As Campbell points out, for example, “Gravius wished it [his translation of 1661] to be of service to those Islanders amongst whom he had formerly been labouring; but, while his Translation was passing through the press, a large force of Chinese invaders drove the Hollanders from Formosa, destroyed the native Church, and rendered all further attempts at missionary work impossible”.

The fact that linguistic activities of Dutch missionaries had chiefly practical purposes leads us to the question what kind of contribution to the linguistic study of Formosan languages their works represent? Lacking explanations on pronunciation, lexicon, and syntactic constructions, the analytic dimensions of the descriptions are

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18 Hoëvell 1842, Medhurst 1840
19 Van der Vlis 1840: 639
20 Campbell 1996 [1888]: vi
rather modest. In this respect, the Dutch approach to the linguistic documentation of Taiwan clearly differed from missionary linguistics in other parts of Asia. When the Dutch compiled the texts, Dominican and Jesuit linguistic studies on other Asian languages had long ago embarked upon explicit grammatical analysis. However, the methodological dominance of the Greco-Latin grammatical model which they used, following in the footsteps of the Spanish scholar Antonio Nebrija (1441–1522), is considered inadequate from a modern linguistic perspective.

Dutch contributions to the study of Taiwan’s languages are especially acknowledged with regard to the introduction of an alphabetic script for Formosan languages. Chiung, for instance, writes that the script “was the first well formed writing system and the first Romanization for writing the native Taiwanese languages in the history of Taiwan”. The fact that use of the script by the aborigines in numerous contracts, mortgage bonds, and leases outlasted the Dutch occupation and continued into the 19th century certainly increases its historical significance. This historical significance, however, is not tantamount to linguistic quality. As Adelaar points out, the alphabetic script is not a consistent orthography, as the missionaries “often used several ways to spell a sound. These ways often reflect the spelling problems that existed in their own language”. In other words, the problem of representing the local languages in writing was solved in an ad-hoc fashion and not the result of systematic linguistic analysis.

2. European studies in the 19th century

2.1 Formosan affinity with Malay

In the early 19th century, missionary records of Asian and American languages were the foundation for a growing academic interest in the linguistic diversity of the world. Through a comparison of linguistic data elicited from missionary sources scholars tried to draw conclusions about the relatedness of languages. It was against this background that European philologists rediscovered the almost forgotten Dutch records of Formosan languages in the early 19th century. At the turn to the 19th century, the Jesuit Lorenzo Hervás y Panduro conceded in his authoritative catalogue

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22 Chiung 2004: 100
23 Adelaar 1997: 365
of 300 languages that “the character of the Formosan language is unknown to me”. 24
Only a few years later, some of the Dutch sources were cited by the German scholar
Johann Christoph Adelung (1732-1806) in his well-known overview of the Lord’s
Prayer in “almost 500 languages and idioms”. 25 The Formosan samples in Adelung’s
work were selected from a Formosan catechism written in 1645 (attributed to Junius)
and Gravius (1662). As Happarts’s dictionary and the *Vocabularium Formosanum*
had not yet been rediscovered, Adelung notes that “as neither a grammar or a
dictionary of this language exists, I can only present translations of a few words”.

The rediscovery of these sources in the 1840s filled important gaps in
linguistic research, and the Dutch tracts received new recognition as the only basis for
an inclusion of Formosan languages into linguistic comparisons. More than 50 years
after the publication of Adelung’s comparison, the German linguist Hans Conon von
der Gabelentz (1807-1874) acknowledged that “everything that up until now has been
known about the Formosan language must be thanked to the Hollanders”. 26

The linguistic comparison of the data in the Dutch sources with those of other
Asian languages revealed linguistic affinities between Formosan languages and Malay.
These were hinted at by Adelung who wrote that Siraya “seems to be different from
all known languages, although it contains some Malay words, e.g., Matta ‘eye’,
*Rima* ‘hand’, *Tangira* ‘ear’”. 27 Twenty years later, the orientalist Julius Heinrich von
Klaproth (1783-1835) made the explicit claim that the languages recorded by the
Dutch missionaries and Malay were related: 28

I have analyzed it [Gravius 1662] completely and I have extracted words from it
suitable for a comparison of this language with other dialects of South East Asia
and with those of Oceanic and the Island of Madagascar. This comparison
proves that the inhabitants of Formosa belong to the great Malay family, which
spreads from the Oceanic islands closest to America to the oriental coasts of
Africa.

24 Lorenzo Hervás y Panduro 1979 [1801]
25 Adelung 1806
26 Gabelentz 1859: 59
27 Adelung 1806: 579
28 Klaproth 1826: 353; cf. similar statements in Klaproth 1822: 196; 1831: 380
Interestingly, the geographic references given by Klaproth closely correspond to the geographic extension of the Austronesian family as posited by modern linguists. In hindsight, Klaproth’s hypothesis has thus proven to be correct. This does, however, by no means imply that it found immediate recognition. The Scottish Orientalist John Crawfurd (1783-1868), for example, in his Malay grammar, merely mentions the occurrence of “words of Malayan languages […] in the language of the aboriginal inhabitants of Formosa, or Taiwan”, but he does elaborate on these linguistic affinities. The first scholar who testified Klaproth’s hypothesis on the basis of the data in Happart’s dictionary and the *Vocabularium Formosanum* was Gabelentz. He basically agreed with Klaproth, albeit with some reservation. This reservation arose from the difficulty to determine the exact position of Formosan languages vis-à-vis Malay languages. He pointed out that “first, quite a few of the most common words of the Formosan languages do not display any correspondences with all other languages of the Malayan trunk; second, when correspondences occur, they neither chiefly concern geographically close languages nor the language of one particular branch of this language trunk”. This led him to the conclusion that “according to these results it would be difficult to assign Formosan a particular position within the Malay trunk”.

Klaproth’s caution about the classification of Formosan languages leads us to a fundamental methodological issue. According to which criteria could an affinity of languages be claimed? More concretely, did the lexicostatistical approach as taken by Gabelentz and other scholars allow valid conclusions about the affinity of Formosan and Malay languages? Klaproth himself tried to supplement earlier studies by a grammatical and typological comparison of linguistic data selected from the aforementioned dictionaries. This approach was by no means uncommon in the 19th and 20th centuries. However, in the words of Van Driem, “[t]he results of syntactic typology […] led to a classification which from the point of view of genetic affinity can only be qualified as bizarre”. Although this criticism is legitimate to a certain degree, one should not forget that the modern science of historical comparative

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29 cf. Crawfurd 1852: exxxiii
30 Gabelentz 1859: 78
31 Gabelentz 1859: 80f.
32 Van Driem 1997: 460
linguistics had not developed beyond a fledgling stage in the first half of the 19th century. Moreover, as Seuren points out, “[t]hroughout the 19th century, comparative philology was almost exclusively restricted to the Indo-European language family”.

In sum, the linguistic data recorded by the Dutch missionaries inspired European linguists throughout the 19th century. They clearly recognized a linguistic affinity between Formosan and Malay languages, although the exact nature of this affinity remained unclear. In the second half of the nineteenth century the British consul and amateur linguist T.L. Bullock therefore only reiterated previous claims when he argued that

“[w]ith so many words appearing identical, there can hardly be a doubt as to the languages [Formosan and Malay] being connected. It cannot be imagined that so many resemblances are the result of accident. Nor can it well be the case that one has merely borrowed certain words from the other. For in the first place, the identical words are those of the commonest description, the names of the parts of the body and the like, such as would not be likely to be borrowed. Second, the Formosans are not a maritime people. They have no intercourse with nations beyond the sea, and are, in their wild state, perhaps the most inhospitable and unfriendly race to strangers that the world has ever seen. Therefore they can hardly have introduced a number of foreign words into their daily speech.

2.2 Discovery of other Formosan languages

Whereas the classification of Formosan languages in relation to its linguistic environment increasingly gained scholarly attention in the 19th century, the linguistic situation within Taiwan remained largely ill-defined. As the tracts of the Dutch missionaries were the only sources of data, the recorded languages were often regarded as two dialects of one Formosan language. The scarcity of available data was aptly described by the German medical doctor Arnold Schetelig who lamented in 1867 about “the miserable situation that the Dutch sources […] have left behind material about the history, the inhabitants and their language which just suffices to

33 Seuren 1998: 83
34 Bullock 1874: 44f.
make use feel even more painfully the complete darkness which has fallen upon us after the banishment of the Dutch”. 35 A similar stance was formulated by the French linguist and Sinologist Albert Terrien de Lacouperie (1845 -1894) almost twenty years later, who wrote that, “[t]he data which we possess of the other dialects and languages spoken in the island are still more unsatisfactory than those hitherto described”. 36 As more data recorded by traveling amateur linguists became available in the second half of the 19th century, the contours of Taiwan’s linguistic map became sharper. One important contribution in this respect was made by the French vice consul M. Guérin, who, in 1868, published a vocabulary of the Atayal language comprising 551 words. 37 Other vocabularies include Schetelig’s vocabulary of two languages identified as Shekwan and Shinwan, Paul Ibis’ vocabulary of 50 German words with translations into six Formosan languages, and Bullock’s list of 179 English words into six Formosan languages. 38 These vocabularies certainly provided valuable information about particular languages, and they also reflect early forays into the lexical comparison of Formosan languages. On the basis of these vocabularies European scholarship gained a clear understanding that Taiwan’s linguistic setting was more complex than previously assumed. T.L. Bullock, for instance, writes that “a very cursory examination of the above list will be sufficient to satisfy any one that, though the various Formosan dialects differ enough to be called separate languages, yet there is an intimate connection between them”. 39

2.3 The myth of a native Formosan script
The publication of various Formosan vocabularies in the second half of the 19th century would not have been possible without investigations on the spot. Whereas direct contacts thus increased the knowledge about local languages, European scholarship also developed its own internal dynamics which—in some instances—lost touch with the Taiwanese reality. Probably the most illustrative example in this respect is a native Formosan script, the existence of which was claimed by Terrien de

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35 Schetelig 1868: 435
36 de Lacouperie 1887b: 473
37 Guérin 1868
38 Schetelig 1868: 452-458; Ibis 1877: 234f.; Bullock 1874: 40-43
39 Bullock 1874: 43
Lacouperie. Referring to Lorenzo Hervás’s catalogue, he writes that “[t]hree writings seem to have been known in Formosa: (1) The Chinese characters […]; (2) the Roman writing […]; a native alphabet […]”. The native alphabet he refers to fully corresponds to the “Formosan Alphabet” presented in the fictitious description of Taiwan by Psalmanazar in 1704. Although the oldest attested source of the alphabet had proven to be fictitious, de Lacouperie insisted that the script did indeed exist. Quoting evidence from other European sources, he argued that “[i]t has been generally and wrongly supposed that these were nothing more than another freak of his [Psalmanazar’s] imagination, like the palaces, altars, costumes, and moneys, which we figure in his book” and urged that Psalmanazar “must be acquitted of this accusation”. The claim that a native Formosan alphabet was strongly refuted by Campbell, who provided the most convincing counterargument, namely “that early notices all agree in representing the Formosans as being wholly ignorant of the art of writing, and that present-day missionaries—keenly interested, and with unrivalled opportunities for obtaining information—have never yet come across a single sheet written in native characters”.

3. Conclusion

The early European encounter with Formosan languages is reflected in two groups of sources, viz. (1) tracts on Formosan grammar compiled by Spanish Dominicans in the north, and (2) translations of Christian texts, manuals, and dictionaries compiled by Dutch missionaries in central and southern Taiwan. The former are no longer extant, and they had no discernible influence on European scholarship in the 19th century. In contrast, the Dutch records, albeit of a modest analytic quality, were the main source of data on Formosan languages throughout the 19th century. These data enabled scholars in the middle of the 19th century to claim that the linguistic relatives of Formosan languages are located in an area almost identical to the geographical stretch of the Austronesian language family. Whereas the outward connections of Formosan languages were thus defined at a relatively early stage, the high level of diversity

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40 de Lacouperie 1887a, 1887b
41 de Lacouperie 1887a: 259
42 see Foley 1992 [1968] for a reprint
43 de Lacouperie 1787b: 437
44 Campbell 1896: xvii
among Formosan languages was recognized in the second half of the 19th century only.

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