

2.1.2. A HUNDRED YEARS OF PAPUAN LINGUISTIC RESEARCH: WESTERN NEW GUINEA AREA

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2.1.2.1. GENERAL REMARKS

The label 'Western New Guinea Area' is used here to cover the mainland of West New Guinea (Irian Jaya) and adjacent islands as well as the islands of Halmahera, Timor, Alor, and Pantar in eastern Indonesia, on which Papuan languages are known to be spoken. Till after the second world war the area formed part of the Dutch East Indies; it now is part of the Republik Indonesia.

As in the Eastern New Guinea Area, the modest beginnings of research in Papuan languages were the short vocabularies compiled by occasional travellers and explorers who visited the area. As mentioned in 2.1.1.3., they date back to 1828, when Modera collected a wordlist in the Kamoro language on the south coast of West New Guinea (Modera 1830). Actual research however was not begun before the last quarter of the nineteenth century, when missionaries established themselves in areas where Papuan languages were spoken; first of all in Halmahera, and in the early twentieth century also on the mainland of West New Guinea. Up to the early fifties, the output of missionary research was almost the sole source of information on Papuan languages. It consisted of grammars of various sizes, texts, dictionaries and religious literature. These works were generally based on a sound practical knowledge of the languages studied, but lacked in linguistic sophistication, since none of the early missionaries had received formal training in general linguistics. The Dutch linguists Adriani and Kern paid only passing attention to Papuan languages, and only Van der Veen's comparative study of the North Halmaheran languages (Van der Veen 1915) stands out as a work of importance.

The dawn of modern linguistic research in the area began with Capell's survey of the languages of Timor (1944), in which he showed that a number

of non-Austronesian (Papuan) languages are spoken on the island. Shortly after the interruption of all research by the second world war, American missionaries trained in linguistic fieldwork by the Summer Institute of Linguistics (S.I.L.) began working in West New Guinea. Their work is centered in the Central Highlands. Foremost among them are M. Bromley, G.F. and M.O. Larson, and J. Ellenberger.

Research along modern lines by Dutch linguists began in the early fifties with the work of Cowan, Anceaux, and the missionary-linguist Van der Stap. They were joined by Voorhoeve in 1960. However, linguistic research in West New Guinea received a severe setback when the territory became part of the Republik Indonesia in 1962. Only missionary-linguists could carry on with their work, and in the difficult years following the change in political status, very few results of their work reached the outside world. It was almost impossible for researchers to enter the territory, and any work by outside linguists had to rely on older sources and on the little information obtainable from West New Guineans who had crossed the border into Papua New Guinea. Such work, mainly of a comparative and classificatory nature, was carried on by some linguists of the Australian National University (Wurm, Laycock, Voorhoeve), by Anceaux (Leiden University), Healey (Summer Institute of Linguistics) and Greenberg (Columbia University and Stanford University).

During the last few years, however, prospects of linguistic research in the area have become brighter. In 1973 the first team of linguists of the S.I.L. began their work at Lake Holmes in the middle Mamberamo area, and there is hope that under the sponsorship of the University of Cenderawasih in Jayapura linguists will again be allowed to conduct field work in West New Guinea.

2.1.2.2. LINGUISTIC RESEARCH IN DETAIL

2.1.2.2.1. EASTERN INDONESIA

In Eastern Indonesia, non-Austronesian languages are known to be spoken in North Halmahera, and on the islands of Timor, Kisar, Alor, and Pantar. The languages of North Halmahera (Galela, Tobèlo, Loda, Ibu, Sahu (Waioli),¹ Modole, Tabaru, Pagu, Ternate, Tidore) have mainly been studied by the missionaries of the Utrechtsche Zendings-Vereniging, who started their work on the island in 1865. In addition to mission literature² they produced wordlists of Galela (Baarda 1895), Tobèlo (Roest 1905), Pagu and Modole (Ellen 1916a,b), Tabaru, Waioli, Ibu, Galela, Loda, and Ternate (Fortgens 1905, 1917); a Tobèlo-Dutch dictionary (Hueting 1908c, 1935); a grammatical sketch and a manual of Galela (Baarda 1891, 1908); a grammatical sketch of Tabaru (Fortgens 1928) and Tobèlo (Hueting 1936); a

comparative study in Loda and Galela grammar (Baarda 1904) and texts in Galela (Dijken and Baarda 1895), Tobèlo (Hueting 1908b), Pagu and Modole (Ellen 1916c,d) and Tabaru (Fortgens 1928). Hueting (1908a) gave a survey of the North Halmaheran languages together with comparative vocabularies. It was later corrected and supplemented by Adriani (1912:300), who probably also is the author of the survey of North Halmaheran languages given in the *Encyclopaedie van Nederlandsch-Indië* (Adriani? 1918).

Further have to be mentioned the history of Ternate, written in the Ternate language (Van der Crab 1878), the Ternate wordlist, texts, and a few grammatical notes by de Clercq (1890), the notes on Galela grammar by Kern (1891), and an article on word taboo in Galela (Kern 1893). The distinct character of the North Halmaheran languages was noticed as early as 1872 by Robidé van der Aa. W. Schmidt (1900-01) put forth the hypothesis that they belonged in one group together with the Papuan languages, and Van der Veen (1915) clearly demonstrated in his thesis their non-Austronesian character. Finally, Cowan (1958a) confirmed Schmidt's hypothesis and included them in his West Papuan Phylum. At present, the position of the North Halmaheran languages *vis-à-vis* the other Papuan languages is again under scrutiny by Capell (see 2.10.1. in this volume). Van der Veen's study was the last extensive work done in these languages; unfortunately it has not been followed up by more up-to-date linguistic research.

The Papuan languages of Timor were recognized as such by Capell (1944). They are: Bunak (Buna?), Makasai, Waimaha, Dagodá (Fataluku), Kairui, and (see 2.10.1.) Lovaea. Capell gave a grammatical outline of Bunak and Makasai, and comparative wordlists of the Austronesian and non-Austronesian languages of Timor. In Capell 1972, he provided information on Fataluku and an additional language, Lovaea. Bunak has been the subject of further study by Berthe (1959, 1963), who considered it a 'mixed' language. Cowan (1963) refuted this and argued for a link with the West Papuan Phylum. Kemak, a Timorese language which Capell had reported to be related to Bunak has been shown to be Austronesian (Stevens 1967).

Oirata, the language of Kisar, a small island near the east coast of Timor, has been described by de Josselin de Jong (1937) who published texts, phonetical notes, a grammatical sketch, and a vocabulary. Capell (1944) found it clearly related to Makasai and Cowan (1965b) demonstrated that both languages appear to belong to the West Papuan Phylum.

Only recently it became known that also on the islands Pantar and Alor non-Austronesian languages are spoken. Wordlists of two languages on Alor, viz. Kui and Kolana, had been published in the *Tijdschrift Koninklijk Aardrijkskundig Genootschap*, Vol.31 (1914), and a wordlist and texts in the Abui language, also on Alor, had been published by Nicolspeyer

(1940). But only in 1973 it was pointed out in an article by Watuseke and Anceaux that these languages as well as the language on the east coast of Pantar were probably non-Austronesian.

This was affirmed in 1975 by W. Stokhof who published a survey and wordlists of all the languages in the Pantar-Alor area. It appears that only one Austronesian language, Alor, is spoken on the two islands. The remaining twelve languages are all non-Austronesian. They are clearly related to each other and have been grouped into one family. The most recent linguistic fieldwork done in the area is a study of the Woisika language on Alor by W. Stokhof and a study of the Blagar language on Pantar by H. Steinhauer. The publication of the results of their research can be expected in the near future.

The linguistic position of the non-Austronesian languages of Timor, Alor, and Pantar within the whole group of non-Austronesian (Papuan) languages has been the subject of further study by Capell (see chapter 2.10.1. in this volume).

2.1.2.2.2. WEST NEW GUINEA AND ADJACENT ISLANDS

The history of linguistic research in the Papuan languages of Irian Jaya will be described here in three sections, each dealing with a separate geographical area:

a) West and North Irian Jaya, where until the early sixties linguistic research was carried out almost exclusively by non-missionaries: explorers, anthropologists, and Dutch linguists.

b) The Central Highlands, where after the first attempts by early explorers, language study was undertaken solely by the Protestant and Roman Catholic Missions.

c) South Irian Jaya, where linguistic history was almost exclusively the work of the missionaries of the Sacred Heart.

2.1.2.2.2.1. West and North Irian Jaya

The western and northern parts of Irian Jaya are linguistically the least known areas of West New Guinea. Even today information on most languages is very poor and only two languages, Sentani and Nimboran, are relatively well known.

Prior to the second world war, only a few data had become available. There were a number of short wordlists of limited value (Meyer 1874: Arfak [Hattam]; Miklukho-Maklař 1876: Mairasi; Rosenberg 1878: Karufa [Asienara]; Laglaize 1879: Karon; Robidé van der Aa 1879: Kapaur [Iha], Karas; *idem* 1885: Pauwi; Bink 1902: Sentani; Moolenburgh 1904: Seka [Sko];

idem 1906: Sentani; Sande 1907: Sentani, Manikion; Anonymous 1913: Pauwi, Koassa [now Kwerba], Borumessu, Sidjuai, Tori, Südfluss; Le Roux 1926: Kaowerawej [now Kwerba]) and a few wordlists with additional grammatical notes and/or illustrative sentences (Wirz 1922: Sentani, 1923: Mansibaber [now Meax]; Cocq d'Armandville 1903: Kapaur [Iha];³ Schneider 1926: Nimboran).

Ray (1912a) used a number of these lists for his preliminary classification of the languages in Dutch New Guinea in 'Papuan' ("non-Malayo-Polynesian") and 'Indonesian' languages. On the basis of his data he classified the Kapaur and Karufa languages erroneously as Indonesian.

It was only several years after the second world war that linguistic research of any importance got under way, and to a great extent it was the work of two Dutch linguists, H.K.J. Cowan and J.C. Anceaux.

Cowan was not a linguist by profession. He occupied a top position in the public service of Netherlands New Guinea, but he had a keen interest in linguistics and was very well read in the subject. In his early publications he paid attention to the criteria distinguishing the Melanesian from the Indonesian languages (1949, 1951) and determined the border between Papuan and Austronesian languages in the north of West New Guinea (1952b). In the meantime he had begun the study of the Sentani language, publishing texts (1950, 1952a), grammatical notes (1951-52) and much later a grammar with texts and a lexicon (1965a). He discovered the first tonal language in West New Guinea (1952c) and wrote articles on various subjects of theoretical and practical importance (1953b, 1954a,b; 1958b, 1959a,b). His main work however was to become the classification of the Papuan languages. In 1950 the Bureau of Native Affairs in Hollandia (now Jayapura) had sent out a wordlist of 350 items, including some possessive constructions, to be filled out in the vernaculars with the help of government officers and teachers in all the areas then under government control. The materials obtained in this way were used by Cowan in his classificatory work. The first result was a survey covering the then known languages of north and west West New Guinea (1953a), in which he presented whatever grammatical information was available in those languages. Then followed the establishment, by means of a lexicostatistical analysis of the data, of a group of related languages in the Bird's Head, which, he pointed out, seemed to be related to the non-Austronesian languages on North Halmahera (1957a). In the same year he proved that genetic relationships existed between the so-called Tami languages near the border with Papua New Guinea, the languages of the Tor river area in the central north, and the Demta, Sentani and Nimboran languages in between. This group he named the North Papuan Phylum (1957b). The next year he extended the western group to include all the languages of the

Bird's Head and those of North Halmahera, and labelled it the West Papuan Phylum (1958a). Later, he added several languages of the Bomberai Peninsula to this Phylum, as well as the Mantembu [now Yava] language on Yapen Island (1960). As mentioned above (see 2.1.2.2.1.), Cowan finally argued for the inclusion of the far-away non-Austronesian languages of Timor and Kisar in the West Papuan Phylum (1963, 1965b).

Anceaux, who received his linguistic training at Leiden University, began his work in New Guinea about 1955. His main work was in the Nimboran language, resulting in a detailed phonology and morphology (1965). He did a survey of the languages of the Bomberai Peninsula (1958) and of the islands Yapen, Kurudu, Nau, and Miosnum north of the Geelvink Bay (1961). The last publication deals mainly with the Austronesian languages of the area, but contains some notes (though no actual language materials) on the Yava language of Yapen. From his pen further appeared a useful bibliographical survey of the linguistic literature on West New Guinea (1953a) and an outline of the various theories concerning the linguistic position of New Guinea (1953b).

Apart from the work of Cowan and Anceaux very few new data became available in this period. As a by-product of anthropological research there appeared a wordlist of the language of the Tori Aikwakai in the Lake Plain (Feuilletau de Bruyn 1952), a few grammatical notes on the Mejbrat [now Brat] language in the Bird's Head (Elmberg 1955), short comparative wordlists in the Tor river languages (Oosterwal 1961), and a wordlist, sentences and some paradigms in the Kaowerawej language (van Eechoud 1962), material which had been collected already in 1940. Galis (1955) published a survey of languages and dialects of West New Guinea containing short wordlists.

During the last ten years, research in the languages of west and north West New Guinea was mainly carried out by linguists of the Australian National University. Voorhoeve (1969) established the existence of a genetic relationship between Sentani and the Asmat language in the south, and argued that this relationship was closer than the genetic relationship between Sentani and the other members of Cowan's North Papuan Phylum. He also carried out a survey of the languages near the Papua New Guinean border, and presented additional support for the genetic relationship between the Tami and Tor languages (1971). During the last few years he worked, in collaboration with Anceaux, on a reappraisal of the language classification in the area, the results of which are presented in chapters 2.6.2., 2.10.2., 2.14.3. and 2.15.2. of this volume. Working from the Sepik District, Papua New Guinea, Laycock collected wordlists in two hitherto unknown languages west of the border, Pyu and Biksi, published in a report on Australian National University activities in Irian Jaya

(1972). In a recent survey of the Sepik languages (1973) he also covered the languages immediately west of the international border, supplementing and correcting Voorhoeve's 1970 survey.

At present, the Summer Institute of Linguistics has begun working in the Mamberamo River area, and Protestant Missions have moved into the western part of the Lake Plain. It can be expected therefore that before long the first reliable language data from these areas will become available.

2.1.2.2.2.2. The Central Highlands

The Central Highlands were the last area of West New Guinea to be opened up. From 1910 onwards several military and scientific expeditions penetrated into parts of it; they collected wordlists in several languages on the fringes of the Highlands but only part of these became accessible to the public. They were the lists in Jabi, Simori, Wolani, Ekari, Moni, Dem, Uhunduni, Enggipilu, Uringup, Dani, Sauweri-Hablifuri, Pesechem, and Goliath, brought together and published by Le Roux in his great work on the Mountain Papuans (Le Roux 1950:809-913).⁴ Before 1940 the only linguistic work exceeding the collection of words and occasionally sentences was done by Wirz who published a wordlist and grammatical notes on the Dani language spoken in the Swart valley (1924).

The situation changed when in 1939 the Roman Catholic Mission and the Christian and Missionary Alliance (CAMA) established themselves in the then one-year old patrol post at Enarotali, Wissel Lakes, and took up the study of the local languages.

In 1940, the Dutch Roman Catholic missionary, P. Drabbe, collected grammatical notes in the Ekagi (Kapauku) and Moni languages. Their publication however had to wait until after the war (Drabbe 1949b). At the beginning of the war, the newly established mission stations were abandoned and linguistic research was not taken up again until the late forties. On the Roman Catholic side, Drabbe then resumed his study of the Ekagi and Moni languages, publishing a grammar of Ekagi in 1952, and a grammar of Moni in 1959 (Drabbe 1959a). His Ekagi grammar was later corrected on several points by the pedagogical grammar of Kapauku (Ekagi) by Steltenpool and Van der Stap (1959). Van der Stap had studied linguistics at Leiden University; his only other published work to date is his Leiden Ph.D. thesis, entitled *An outline of Dani morphology* (1966). The remainder of the results of his linguistic work is still in manuscript form. It includes grammars of Moni and Amung-kal (Uhunduni), a grammatical sketch of Western Dani, an extensive Amung-kal-Dutch/Dutch-Amung-kal wordlist, a Moni-Dutch/Dutch-Moni dictionary, and a Dani-Dutch/Dutch-Dani dictionary.

The first published work from the CAMA side is an article on transliteration in Kapauku (i.e. Ekagi) by Marion L. Doble (1950). Much later, she published a small Kapauku-Malayan-English-Dutch dictionary (1960), and essays on Kapauku grammar (1962). In 1953, Gordon F. Larson and Mildred O. Larson (CAMA), both trained linguists, began their language study among the Moni and Wodani (Wolani) groups, and in 1956 they also started work among the Western Dani in the Ilaga valley. Only a small part of the output of their work has been published to date, i.e. 'Preliminary studies in the Moni language' (Larson and Larson 1958a), and a comparative study of the Ekagi, Wodani, and Moni languages (Larson and Larson 1972). Their unpublished work includes: two glottochronological studies (G.F. Larson), a dialect study (Larson and Larson), a Moni dictionary (Larson and Larson), and a paper on Moni phonology and morphology (Larson and Larson), and several studies of Western Dani. Other CAMA missionaries working in the languages of the same area are W.A. Cutts and J. Ellenberger, but no results of their work have been published.

In 1954 missionaries of the CAMA established the first mission post in the Baliem Valley. Following their arrival, other missions moved into the same general area: the Unevangelized Field Mission (UFM)(now Asia Pacific Christian Mission) into the upper Hablifuri and Wodo Valleys, and into the highlands east of the Baliem (Station: Naltja); the Regions Beyond Missionary Union (RBMU) also settled east of the Baliem (Stations: Ninia and Korappun), while the Australian Baptist Missionary Society (ABMS) and the Roman Catholic (R.C.) Mission again chose the Baliem Valley. All these missions are engaged in translation and literacy work, but scientific research has only been carried out by Myron Bromley (CAMA) and Van der Stap (mentioned above). Bromley's work centres in the Baliem Valley. His first publication was a comparative study of the phonological systems of eight Dani dialects (1961); this was followed by a lexicostatistical classification of the Dani languages (1967), and recently by his Ph.D. thesis entitled *The Grammar of Lower Grand Valley Dani in Discourse Perspective* (1972). In his lexicostatistical study of 1967, Bromley established the Central Highland Phylum of languages, which includes the Dani Family, Uhunduni (Amung-kal), Dem, and the Wissel Lakes-Kemandoga group (Larson's Ekagi-Wodani Moni language family). He also established the Goliath Family of languages, east of the Dani Family. The Goliath Family was included in the Central and South New Guinea Phylum by Voorhoeve (1968). Research in the Goliath languages has not yet produced any published results.

East of the Goliath language family, the Roman Catholic Mission is working among the people of the Star Mountains who speak languages related to the Ok languages across the border and in South Irian Jaya. The only

data available from this area is a translation of the four Gospels in the language spoken near Apmisibil (R.C. Mission 1970).

2.1.2.2.2.3. South Irian Jaya

Linguistic exploration in the southern lowlands of Irian Jaya began at the extremities, first in the west and later in the east. The western Mimika coast which was easily accessible to visitors from Indonesia, yielded the earliest recorded data in a Papuan language in West New Guinea. In 1828 Modera and Müller, during a visit to Utanata, collected wordlists of what now is called the Kamoro language (Modera 1830, Müller 1857); in 1876 Miklukho-Maklaï published, amongst others, wordlists of Lakahia and Kiruru [now Kamoro]; in 1903, 1904, and 1905, members of expeditions of the Royal Dutch Geographical Society collected wordlists near Jamur lake (Anggadi, Nagramadu, Goreda) (Sande 1907) and on the Mimika and Kupera-pukwa rivers (Seijne Kok 1908); another wordlist of the Mimika language was collected by Dumas (1911). It had not escaped the investigators that the collected lists belonged to related languages. Sidney Ray in his notes on languages in the East of Netherlands New Guinea (Ray 1912a), using these wordlists, wrote some comparative and grammatical notes on what he called the Angadi-Mimika group of languages. In these, he traced some sound correspondences, and presented a number of lexical correspondences. From their grammatical features he concluded that the languages were Papuan (i.e. "non-Malayo-Polynesian"). He further compared their vocabulary with words in the languages of the Merauke and Trans-Fly areas, noting some lexical similarities, and thereby gave the first hint of genetic relationships to be established much later by Voorhoeve (1968).

In the east, linguistic research began after the Dutch government in 1902 established the first patrol post south of the mountains on the Merauke River. From those first years date two lists of words and sentences in the Marind language (Bauer 1904, Seijne Kok 1906) and some grammatical notes on Marind by Adriani (1908) who on the basis of Seijne Kok's materials established the non-Austronesian character of Marind. A short wordlist of the Asmat language, halfway between the Marind and Mimika language areas, was published by Feuilletau de Bruyn (1913). In 1905 the missionaries of the Sacred Heart Mission settled in Merauke and at once took up the systematic study of the Marind language. The first solid result of their linguistic activities was the Dutch-Marind dictionary by J. van de Kolk and P. Vertenten published in 1922 (Kolk and Vertenten 1922). It was followed four years later by a Marind grammar (Geurtjens 1926) and in 1933 by a Marind-Dutch dictionary, also by Geurtjens. In the following years a little more became known of the

languages outside the Marind territory through the work of Nevermann who published ethnographies containing wordlists and some general information on the Kanum and Moraori (1939a), Sohur [now Yaqay] (1939b) and Je-nan [now Yey] (1942).

Until the end of the time-period discussed above, only Marind had been the subject of intensive study, but this was soon to change. In 1935 the Dutch missionary-linguist P. Drabbe arrived in the south, and stayed almost uninterruptedly in the area until 1960.

When Drabbe arrived in the eight year old Mission station at Kokonaw on the Mimika coast, he already had a long experience in research in the languages of the Tanimbar Islands in Eastern Indonesia. He had not been formally trained in linguistics, but he had a natural talent for, and a keen interest in, languages, and during the twenty years of his work on the Tanimbar Islands he had accumulated an invaluable amount of fieldwork experience.

In Kokenaw he began the study of the local language which he called the Kamoro language, and produced amongst others a Kamoro-Dutch dictionary and an extensive wordlist of the related Sempan language, which have not been published. All this work was done besides his normal duties as a missionary, but in 1939 the Mission allowed him to devote all his time to language work, and from that time on he produced an impressive array of first language descriptions. Starting with Kamoro folk-tales (1947-50) he published grammatical notes on the Kimaghama, Riantana, Ndom (1949a), on Yelmek, Maklew, and Mombum (1950b), and on Bian-Marind, Boazi, Yey, Moraori, and Kanum (1954); elementary grammars of Syiagha and Yenimu (1950a), and Yaqay (1954); grammars of Kamoro (1953), Kati (1954) and Gawir-Marind (1955); a grammar plus text of Aghu (1957) and Asmat (1959b), a dictionary of Asmat (1959c), texts with grammatical notes in Kaeti and Wambon (1959d), and a study of three Asmat dialects (1963). He added wordlists of approximately 400 items to all his grammatical studies except to his grammars of Asmat and Marind, for which languages separate dictionaries were available. To this output should be added his work on the Ekagi and Moni languages already mentioned in the previous section, an unpublished study of the Tamagario language and a large amount of religious literature in the languages studied, which he prepared for his Mission. Thus Drabbe provided the basic data in nearly all the languages between Etna Bay and the Papua New Guinean border. For many of these languages his work is still the only source available.

The only language description from a non-missionary source was made by Voorhoeve (Leiden University) who spent two years in the Asmat area and published a phonology, morphology and texts in the Flamingo Bay Dialect (1965).

As a result of the descriptive work, questions of language classification and typology began to attract the attention of those involved in the study of Papuan languages.

A first attempt to come to some sort of classification of the languages in South Irian Jaya was undertaken by Drabbe's confrère Boelaars, on the basis of Drabbe's field notes (1950). By comparing the languages with regard to a number of grammatical features he arrived at a broad typological classification into three groups: 1) The Frederik-Hendrik Island languages; 2) Yaqay, Marind, Boazi; 3) the remaining languages. Drabbe (1950b) set up a typological division into four groups of languages based on features of verb morphology, and in the course of his work recognized the existence of four groups of related languages: Kamoro-Sempan-Asmat (1953), Marind-Yaqay-Boazi (1955), Yelmek-Maklew (1955) and the Awyu languages (1959d). A first attempt at the internal classification of the Awyu languages was made by Voorhoeve (1968, see below), and carried a step further by Healey in his paper on Proto Awyu-Dumut phonology (1970). Earlier Healey had already shown that the Kati language east of the Awyu languages formed part of a family of languages which stretched across the border into Papua New Guinea (1964). He called this family the Ok Family, and mentioned the possibility that the Ok, Awyu and Asmat-Sempan-Kamoro languages were genetically related. This was confirmed by Voorhoeve (1968) who gave a first lexicostatistical classification of the languages of South Irian Jaya in a large group of related languages, named by him the Central and South New Guinea Phylum. This Phylum became part of the Trans-New Guinea Phylum in the revised and much extended classification of Papuan languages by McElhanon and Voorhoeve (1970).

In the revised classification the languages of South Irian Jaya are divided into five stocks: 1) Asmat-Sempan-Kamoro, the Awyu Family and the Ok Family; 2) Yaqay, Marind, and the Lake Murray Family; 3) Yelmek-Maklew; 4) the Frederik-Hendrik Island languages; 5) Yey, Kanum, and Moraori.

The Lake Murray Family, consisting of the Boazi and Zimakani languages, was established by Voorhoeve (1970). The greater part of the family is located in the Western District of Papua. Wurm (1971) further united Yey, Kanum and Moraori into one stock with the languages of the Trans-Fly area east of the Papua New Guinean border. In 1970, Voorhoeve visited the Asmat and Awyu areas and made a survey of the languages in the hinterland of the Casuarina Coast. As a result he established the Kayagar Family with three member languages, Kaugat, Kaigir, and Tamagarío, and classified it as a one-family stock within the Trans-New Guinea Phylum. A fourth language, Sawuy, could be added to the Awyu-Dumut Family.

A comparative typological analysis of Kamoro and some East New Guinea languages was published by Holmer (1971). The study is now of limited value, being superseded by subsequent typological research (see below).

2.1.2.2.2.4. General Approaches

Finally, the West New Guinea area languages as a whole have been a part-subject of several broad classificatory and typological studies, viz. the typological survey of New Guinea languages by Capell (1969); Greenberg's wide-ranging classificatory study (1971); and the extensive research of S.A. Wurm into the classification, typology, and prehistory of the Papuan languages (1972, 1977). Details of their work have already been given by Laycock in the preceding chapter in the section Themes in Papuan Linguistic Research (see 2.1.1.5.1. and 2.1.1.5.1.2.) and will therefore not be repeated here.

Quite recently, Voorhoeve (1975) has made a re-assessment of the language situation in Irian Jaya.

N O T E S

1. Language names are given as in the respective quoted publications; if obsolete, they are followed by the current name in square brackets. Alternative names currently in use are put between round parentheses.
2. A survey of the mission literature published before 1915 can be found in Van der Veen 1915; bibliographical data on mission literature published after that date were not available to the author.
3. During the writing of this article, the manuscript of a grammatical sketch of Ihandin [Iha], written by the Dutch Roman Catholic Missionary J. Coenen in 1953 came into the possession of the author by courtesy of Father P. Van der Stap.
4. With the exception of a wordlist of the language of the Tapiro Pygmies [Ekagi] in Rawling 1913.

BIBLIOGRAPHY

ADRIANI, N.

- 1908 'Eenige opmerkingen over de Merauke taal naar aanleiding der woordenlijst van J. Seijne Kok'. *De Zuidwest Nieuw-Guinea-Expeditie 1904-5 van het Koninklijk Nederlands Aardrijkskundig Genootschap* 10.635-66. Leiden. Brill.
- 1912 *De Bare'e sprekende Toradjas van Midden Celebes*. Vol.III. Batavia. Landsdrukkerij.
- 1918(?) 'Halmahera-talen'. *Encyclopaedie van Nederlandsch-Indië*. 2e dr. Vol.II.9-10.

ANCEAUX, J.C.

- 1953a 'De huidige stand van het taalonderzoek op Nieuw-Guinea's Westhelft'. *BijdrTLV* 109.231-49.
- 1953b 'New Guinea: keystone of Oceanic linguistics'. *BijdrTLV* 109.289-300.
- 1958 'Languages of the Bomberai Peninsula'. *NGS* 2.109-21.
- 1961 *The linguistic situation in the islands of Yapen, Kurudu, Nau and Miosnum, New Guinea*. VKI 35. The Hague. Martinus Nijhoff.
- 1965 *The Nimboran language*. VKI 44.
- 1973 Postscript to *Watusoke* 1973. *BijdrTLV* 129.345-6.

ANONYMOUS

- 1913 'Wörterverzeichnisse von Papua-Sprachen aus Holländisch-Neuguinea'. *Anthropos* 8.254-9.
- 1914 'De eilanden Alor en Pantar, Residentie Timor en Onderhoorigheden'. *TAG*, 2nd series 31. Bijlage I.94-102. (Vocabularies of Alor, Kui, Kolana).

BAARDA, M.F. VAN

- 1891 *Beknopte spraakkunst van de Gallilareesche taal*. Utrecht.
- 1895 *Een Galelareesch-Hollandsche woordenlijst*. Den Haag. Martinus Nijhoff.
- 1908 *Leiddraad bij het bestuderen van het Galela'sch dialect*. Den Haag. Martinus Nijhoff.

BAUER, H.W.

- 1904 'Verzeichnis von Wörtern und Sätzen der Sprache die zwischen dem 138° und 141° O.L. von Niederländisch Süd-Neuguinea gesprochen wird...'. *IAE* 16.226.

BERTHE, LOUIS

- 1959 'Sur quelques distiques Buna' (Timor central)'. *Bijdr TLV* 115. 336-71.
- 1963 'Morpho-syntaxe de Buna' (Timor central)'. *Homme* 3.106-16.

BINK, G.L.

- 1902 'Eenige woorden uit de taal van de bewoners van het meer Sentani'. *TBG* 45.90-3.

BOELAARS, J.H.M.C.

- 1950 *The linguistic position of South-Western New Guinea*. Leiden. Brill.

BROMLEY, H. MYRON

- 1961 *The phonology of Lower Grand Valley Dani*. *VKI* 34.
- 1967 'The linguistic relationships of Grand Valley Dani: a lexicostatistical classification'. *Oceania* 37.286-308.

- 1972 *The grammar of Lower Grand Valley Dani in discourse perspective*. Ph.D. thesis. Yale University.

CAPELL, ARTHUR

- 1944 'Peoples and languages of Timor'. *Oceania* 14.191-219, 311-37; 15.19-48.
- 1969 *A survey of New Guinea languages*. Sydney. Sydney University Press.
- 1972 'Portuguese Timor: two more non-Austronesian languages'. *OLM* 15.95-104.

CLERCQ, S.A. DE

- 1890 *Bijdragen tot de kennis der Residentie Ternate*. Leiden. Brill.

COCQ D'ARMANDVILLE, C.F.J. LE

- 1903 'Woordenlijst der taal die gesproken wordt in het gebergte van Kapaur tot aan Sëkar'. *TBG* 46.1-70.

COWAN, H.K.J.

- 1949 'Indonesisch of Melanesisch op Noord Nieuw Guinea?'. *Indonesië* 3.351-9.
- 1950 'Een volksverhaal van het Sentani meer'. *Bingkisan Budi*. Een bundel opstellen aan van Ronkel ... aangeboden. 83-95. Leiden. Sijthoff.
- 1951 'Genitief-constructie in Melanesische talen'. *Indonesië* 5. 307-14.
- 1951-52 'Notes on Sentani grammar'. *Oceania* 21.214-29, 302-10; 22. 53-72, 315-7.
- 1952a 'Drie verhalen in de Sentani taal'. *BijdrTLV* 108.347-64.
- 1952b 'De Austronesisch-Papoea'se taalgrens in de onderafdeling Hollandia (Nieuw Guinea)'. *TNG* 13.133-45, 161-78, 201-7.
- 1952c 'Een toon-taal in Nederlandsch Nieuw-Guinea'. *TNG* 13.55-60.
- 1953a *Voorlopige resultaten van een ambtelijk taalonderzoek in Nieuw-Guinea*. Den Haag. Martinus Nijhoff.

- 1953b 'De aanduiding der objects-relatie bij het werkwoord in Papua-talen'. *BijdrTLV* 109.128-44.
- 1954a 'Ethnolinguistics and "Papuan" etymology'. *Oceania* 25.54-60.
- 1954b 'Variability in New Guinea languages'. *Oceania* 25.208-16.
- 1957a 'Prospects of a "Papuan" comparative linguistics'. *BijdrTLV* 113.70-92.
- 1957b 'Een tweede grote Papoea-taalgroepering in Nederlands Nieuw-Guinea'. *NGS* 1.106-18.
- 1958a 'A large Papuan phylum in West New Guinea'. *Oceania* 28. 159-66.
- 1958b 'A rough means of verifying aural phonological observations in New Guinea languages'. *Oceania* 28.245-7.
- 1959a 'Linguistic research in New Guinea'. *NGS* 3.196-206.
- 1959b 'La classification des langues papoues'. *Anthropos* 54.973-81.
- 1960 'Nadere gegevens betreffende de verbreiding der West-Papoease taal-groep (Vogelkop; Nieuw-Guinea)'. *BijdrTLV* 116.350-65.
- 1963 'Le Buna' de Timor: une langue "Ouest-Papoue"'. *BijdrTLV* 119.387-400.
- 1965a *Grammar of the Sentani language*. *VKI* 47.
- 1965b 'The Oirata language'. *Lingua* 14.360-70. Also Milner, G.B. and E.J.A. Henderson, eds. *Indo-Pacific Linguistic Studies*, Part I: *Historical Linguistics*. 360-70.

CRAB, P. VAN DER

- 1878 'Geschiedenis van Ternate, in Ternataanschen en Maleischen tekst beschreven door den Ternataan Naidah...'. *BijdrTLV* 26. 381-493.

DOBLE, MARION L.

- 1950 'Transliteration in Kapauku'. *BT* 1.133-5.

1960 *Kapauku-Malayan-Dutch-English dictionary*. Den Haag. Martinus Nijhoff.

1962 'Essays on Kapauku grammar'. *NGS* 6.152-5, 211-8, 279-98.

DRABBE, P.

1947-50 'Folk-tales from Netherlands New Guinea'. *Oceania* 18.157-75, 248-70; 19.75-90; 20.66-79, 224-40.

1949a 'Bijzonderheden uit de talen van Frederik-Hendrik eiland: Kimaghama, Ndom en Riantana'. *BijdrTLV* 105.1-24.

1949b 'Aantekeningen over twee talen in het Centraal-gebergte van Nederlands Nieuw-Guinea'. *BijdrTLV* 105.423-44.

1950a 'Twee dialecten van de Awju-taal'. *BijdrTLV* 105.93-147.

1950b 'Talen en dialecten van Zuid-West Nieuw-Guinea'. *Anthropos* 45.545-74.

1952 *Spraakkunst van het Ekagi, Wisselmeren, Nederlands Nieuw-Guinea*. Den Haag. Martinus Nijhoff.

1953 *Spraakkunst van de Kamoro-taal*. Den Haag. Martinus Nijhoff.

1954 *Talen en dialecten van Zuid-West Nieuw-Guinea*. *MBA* 11.

1955 *Spraakkunst van het Marind*. Wenen (Vienna). Mödling.

1957 *Spraakkunst van het Aghu-dialect van de Awju-taal*. Den Haag. Martinus Nijhoff.

1959a *Spraakkunst der Moni-taal*. Hollandia. (Processed).

1959b *Grammar of the Asmat language*. Syracuse. Our Lady of the Lake Press.

1959c *Dictionary of the Asmat language*. Syracuse. Our Lady of the Lake Press.

1959d *Kaeti en Wambon, twee Awju-dialecten*. Den Haag. Martinus Nijhoff.

- 1963 *Drie Asmat-dialecten.* VKI 42.
- DUMAS, J.M.
1911 'Woordenlijst, verzameld op de Mimika en Atoeka riveren (Zuid-West Nieuw-Guinea)'. *BijdrTLV* 65.116-27.
- DIJKEN, H. VAN and M.F. VAN BAARDA
1895 'Fabelen, verhalen en overleveringen der Galelarezen'. *BijdrTLV* 45.192-290, 387-560.
- EECHOUD, J.P.K. VAN
1962 *Etnografie van de Kaowerawedj.* VKI 37. Den Haag. Martinus Nijhoff.
- ELLEN, G.J.
1916a 'Woordenlijst van het Pague'. *BijdrTLV* 72.67-102.
1916b 'Woordenlijst van het Modole'. *BijdrTLV* 72.67-102.
1916c 'Pague teksten'. *BijdrTLV* 72.143-95.
1916d 'Modole teksten'. *BijdrTLV* 72.199-232.
- ELMBERG, J.E.
1955 'Fieldnotes on the Mejbrat people in the Ajamaru district of the Bird's Head (Vogelkop), Western New Guinea'. *Ethnos* 20. 2-102.
- FEUILLETEAU DE BRUYN, H.
1913 'Korte aantekeningen nopens de Kaja kaja aan de Noord-West rivier (Nieuw Guinea)'. *TBG* 55.544-56.
1952 'Ethnografisch Verslag over de "Tori Aikwakai" van de Meervlakte, III, Taal'. *TNG* 13.144-7.
- FORTGENS, J.
1905 'Vier weken onder de Tabaroe en Waioli van Noord-West Halmahera'. *MNZG* 49.33-6.
1917 *Woordenlijst van het Ternatesch.* Semarang. Van Dorp.
1928 'Grammaticale aantekeningen van het Tabaroesch, Tabaroesche volksverhalen en raadsels'. *BijdrTLV* 84.300-542.

GALIS, K.W.

- 1955 'Talen en dialecten van Nederlands Nieuw Guinea'. *TNG* 16.
109-18, 134-45, 161-78.

GEURTJENS, H.

- 1926 *Spraakleer der Marindineesche taal*. VBG 68/2.
- 1933 *Marindineesch-Nederlandsch Woordenboek*. Bandoeng. A.C. Nix.

GREENBERG, JOSEPH H.

- 1971 'The Indo-Pacific hypothesis'. Sebeok, ed. 1971. 807-71.

HEALEY, ALAN

- 1964 *The Ok language family in New Guinea*. Ph.D. thesis.
Australian National University. Canberra.
- 1970 'Proto-Awyu-Dumut phonology'. Wurm and Laycock, eds. 1970.
997-1063.

HOLMER, N.

- 1971 *A comparative typological analysis of a New Guinea language*.
Australian Essays and Studies 7. Stockholm.

HUETING, A.

- 1908a 'Iets over de "Ternataansch-Halmaherasche" taalgroep'.
BijdrTLV 60.370-411.
- 1908b 'Verhalen en vertellingen in de Tobèloreesche taal'.
BijdrTLV 61.1-318.
- 1908c *Tobèloreesch-Hollandsch Woordenboek*. Den Haag. Martinus
Nijhoff.
- 1935 'Supplement op het Tobèloreesch woordenboek'. *BijdrTLV* 92.
161-76.
- 1936 'Iets over de spraakkunst van de Tobèloreesche taal'.
BijdrTLV 94.295-406.

JOSSELIN DE JONG, J.P.B. DE

- 1937 *Studies in Indonesian culture*. VKNA 39.

KERN, H.

- 1891 'Opmerkingen over 't Galelareesch naar aanleiding der beknopte spraakkunst van M.J. van Baarda'. *BijdrTLV* 40.493-530.
- 1893 'Woordverwisseling in het Galelareesch'. *BijdrTLV* 42.120-8.

KOLK, J. VAN DE and P. VERTENTEN

- 1922 *Marindineesch woordenboek*. Weltevreden. Batavia. Landsdrukkerij.

LAGLAIZE, LÉON

- 1879 'Wordlist of Karon'. *TAG* 3.106.

LARSON, G.F. and MILDRED O. LARSON

- 1958 'Preliminary studies in the Moni language'. *BijdrTLV* 114. 406-31.
- 1972 'The Ekagi-Wodani-Moni language family of West Irian'. *Irian* 1/3.80-95.

LAYCOCK, DONALD C.

- 1972 'Looking westward: work of the A.N.U. on languages of West Irian'. *Irian* 1/2.68-77.
- 1973 *Sepik languages: checklist and preliminary classification*. PL, B.25.

LE ROUX, C.C.F.M.

- 1926 'Expeditie naar het Nassaugebergte'. *TBG* 66.447-513.
- 1950 *De Bergpapoea's van Nieuw-Guinea en hun woongebied*. 3 vols. Leiden. Brill.

McELHANON, K.A. and C.L. VOORHOEVE

- 1970 *The Trans-New Guinea Phylum: Explorations in Deep-level Genetic Relationships*. PL, B.16.

MEYER, A.B.

- 1874 'Über die Mafoor'sche und einige andere Papua Sprachen auf Neu Guinea'. *Sitzungsberichte der Kaiserlichen Wiener Akademie der Wissenschaften in Wien*. *Phil.hist.klasse* 77.299-356.

MIKLUKHO-MAKLAI

- 1876 'Verzeichnis einiger Wörter der Dialekte der Papuas der Küste Papua-Kowiai in Neu Guinea'. TBG 23.372-9.

MODERA, J.

- 1830 *Verhaal van eene reize naar en langs de Zuid-Westkust van Nieuw-Guinea gedaan in 1828*. Haarlem. Vincent Loosjes.

MOOLENBURGH, P.E.

- 1904 'Extract uit een verslag der Noord-Nieuw-Guinea expeditie'. TBG 47.168-80, 381-6.
- 1906 'Woordenlijst van het Sentanisch'. *BijdrTLV* 59 (7e volgrees, 5).658-61.

MÜLLER, SALOMON

- 1857 *Reizen en onderzoekingen in den Indischen Archipel...* Amsterdam. Muller.

NEVERMANN, H.

- 1939a 'Die Kanum-irebe und ihre Nachbarn'. *ZEthn* 71.1-70.
- 1939b 'Die Sohur'. *ZEthn* 72.169-96.
- 1942 'Die Je-nan'. *Baessler-Archiv* 24.88-221.

NICOLSPEYER, M.M.

- 1940 *De sociale structuur van een Aloreesche bevolkingsgroep*. Ph.D. thesis. Leiden.

OOSTERWAL, G.

- 1961 *People of the Tor*. Assen. Van Gorcum.

RAWLING, CECIL GODFREY

- 1913 *The land of the New Guinea pygmies*. London. Seeley, Service and Co.

RAY, SIDNEY H.

- 1912 'Notes on the languages in the East of Netherlands New Guinea'. Wollaston, A.F.R. *Pygmies and Papuans*. London. Smith, Elder. 322-35.

ROBIDÉ VAN DER AA, P.J.B.C.

1872 'Vluchtige opmerkingen over de talen der Halmahera Groep'.
BijdrTLV 19.267-73.

1879 'Reizen naar Nederlandsch Nieuw Guinea'. Den Haag. Martinus
Nijhoff. Appendix D. 442-9.

1885 'Reizen van D.F. van Braam Morris naar de Noordkust van
Nederlandsch Nieuw Guinea'. *BijdrTLV* 34.73, 114. (114:
Pauwi vocabulary).

ROEST, J.L.D. VAN DER

1905 *Woordenlijst der Tobèlo-Boëng*. Den Haag. Martinus Nijhoff.

ROMAN CATHOLIC MISSION

1970 *Jesus Kristus Jepwenga (The Four Gospels in the Apmisibil
language)*. Jayapura. (Cyclostyled).

ROSENBERG, C.B.H. VON

1878 *Der Malayische Archipel*. Leipzig. Gustaf Weigel.

SANDE, G.A.J. VAN DER

1907 'Uitkomsten der Nederlandsche Nieuw-Guinea-Expeditie in
1903'. *Nova Guinea* 3.320-6.

SCHMIDT, WILHELM

1900-01 'Die sprachlichen Verhältnisse von Deutsch-Neu-Guinea'. *ZAOS*
5.354-84; 6.1-99.

SCHNEIDER, G.

1928 'Proben der Nimboran-Sprache (Niederländisch-Neuguinea)'.
ZES 18.128-40.

SEBEOK, T.A., ed.

1971 *Current Trends in Linguistics, Vol.8: Linguistics in Oceania*.
2 vols. The Hague. Mouton and Co.

SEIJNE KOK, J.

1906 'Het Halifoersch, zooals dit gesproken wordt ter Zuid-
Oostkust van Nederlandsch Nieuw-Guinea. Eerste proeve tot
bekendmaking'. *VBG* 56.4.

- 1908 'Vergelijkende lijst van woorden gebruikt te Mimika (1904), Oetá (1828) en Merauke (1906)'. *De Zuidwest Nieuw-Guinea Expeditie 1904-1905 van het Koninklijk Nederlands Aardrijkskundig Genootschap*. 475-96. Leiden. Brill.
- STAP, P.A.M. VAN DER
1966 *Outline of Dani morphology*. VKI 48.
- STELTENPOOL, J.
1969 *Ekagi dictionary*. VKI 56.
- STELTENPOOL, J. and P.A.M. VAN DER STAP
1959 *Leerboek van het Kapauku*. Hollandia. (Cyclostyled).
- STEVENS, ALAN M.
1967 'Kemak: an Austronesian language'. *AnL* 9/1.26-32.
- STOKHOF, W.
1975 *Preliminary notes on the Alor and Pantar languages (East Indonesia)*. PL, B.43.
- VEEN, H. VAN DER
1915 *De Noord-Halmahera'se taalgroep tegenover de Austronesiese talen*. Leiden. Van Nifterik.
- VOORHOEVE, C.L.
1965 *The Flamingo Bay dialect of the Asmat language*. VKI 46.
1968 'The Central and South New Guinea Phylum'. PL, A.16.1-17.
1969 'Some notes on the linguistic relations between the Sentani and Asmat languages of New Guinea'. *BijdrTLV* 125.466-86.
1970 'The languages of the Lake Murray Area'. PL, A.25.1-18.
1971 'Miscellaneous notes on languages in West Irian, New Guinea'. PL, A.28.47-114.
1975 *Languages of Irian Jaya: Checklist. Preliminary Classification, Language Maps, Wordlists*. PL, B.31.
- WATUSEKE, F.S.
1973 'Gegevens over de taal van Pantar - een Irian taal'. *BijdrTLV* 129.340-5.

WIRZ, P.

- 1922 'Beiträge zur Sprachkenntnis der Sentanier'. *TBG* 61.340-69.
- 1923 'Wörterverzeichnis der Sprache des Stammes Mansibaber (von Holländisch Nord-Neuguinea)'. *TBG* 62.189-208.
- 1924 'Wörterverzeichnis und einige grammatikalische Anmerkungen zur Sprache von Central Neu-Guinea'. *Nova Guinea* 16.128-47.

WURM, S.A.

- 1971 'Notes on the linguistic situation in the Trans-Fly Area'. *PL*, A.28.115-72.
- 1972 'The classification of Papuan languages and its problems'. *Linguistic Communications* 6.118-78.
- 1978 *Papuan Languages of Oceania*. The Hague: Mouton (In press.)

WURM, S.A. and D.C. LAYCOCK, eds.

- 1970 *Pacific Linguistic Studies in Honour of Arthur Capell*. *PL*, C.13.

P A R T 2.2.

LANGUAGE CLASSIFICATION

