7.9.8. INSTITUTIONAL FRAMEWORK OF LANGUAGE STUDY: ANTHROPOS INSTITUTE

John A. Z'graggen

7.9.8.1. ANTHROPOS AND THE ANTHROPOS INSTITUTE

In 1906 Fr W. Schmidt, S.V.D., founded the *Anthropos* periodical and in 1931 the Anthropos Institute in Mödling near Vienna, Austria.[1]

In their evangelical work throughout the world missionaries of all denominations came in close contact with tribes which had been unknown or only superficially known. To carry out their evangelical work, they needed a good knowledge of the culture of the people to whom they intended to bring Christianity. Missionaries of the Roman Catholic Church were not only encouraged but also requested in papal instructions and circular letters to study the culture of their people, especially their religion and language. Missionary studies were usually published in ecclesiastical or missionary magazines and were frequently overlooked by academics. It was also observed that such missionary publications had been misinterpreted as fostering theories not in favour of Christian thought. A need was felt to establish a journal of high scientific standard to give missionaries of any church the opportunity to publish their field studies and to express their opinion. This was the main reason for the establishment of the *Anthropos* periodical in 1906 (Schmidt 1950a:199). To ensure the academic standard of his periodical Schmidt made a name for himself through extensive and numerous publications in the various fields of anthropology and linguistics. In addition a number of fellow priests received full academic training to become experts in various parts of the world (Schmidt 1932:276). With these scholar-priests, wholeheartedly dedicated to research into the culture of *homo sapiens*, Schmidt founded the Anthropos Institute in 1931. Its headquarters, together with its director, editor and some advisory staff,

are located at present in St Augustin near Bonn, Western Germany, but
the rest of the members work all over the world in universities and
seminaries, or are on special assignments.

Since its foundation, the Anthropos Institute has published a con-
siderable amount of linguistic material in its periodical and in a
linguistic monograph series, and in 1953 it initiated the *Micro-
Bibliotheca Anthropos* series to make unpublishable manuscripts available
to the public. The latter publication series contains valuable contri-
butions to the studies of the languages in the New Guinea area.

The foundation of *Anthropos* encouraged and inspired many missionaries
to do research work in the cultures of their people. Members of the
Anthropos Institute, especially G. Höltker and A. Burgmann, were active
in editing missionary manuscripts. Space and time unfortunately does
not allow a summary of the contributions made by associates and friends
of the Institute. In the following section a brief account of the
contributions made by members of the Anthropos Institute has been given.
For a comparison of their views with recent studies the reader is
referred to the corresponding parts in volumes I, II, and the present
volume.

7.9.8.2. W. SCHMIDT (1868-1954)[2]

Schmidt, founder of the Anthropos Institute, contributed considerably
to the linguistic studies of the New Guinea area, especially in the
first decade of this century. Along with S. Ray, Schmidt was regarded
as the authority in Oceanic linguistics during the first half of this
century. Schmidt (see Schmidt 1899a, 1899c, 1901, 1902) began his re-
search in the Pacific and especially in the New Guinea area with exten-
sive studies of a historical-comparative nature on the Austronesian (at
that time called the Malayo-Polynesian) and Papuan linguistic situations.
Most of Schmidt's linguistic work was of a comparative nature; even in
describing the characteristics of an individual language he was looking
beyond the boundaries of that particular language. Structure was for
him more important than vocabulary.

Schmidt never visited the Pacific. However, his studies on individual
languages based on published and unpublished materials (see e.g. Schmidt
1900, 1901) and his book reviews showed him to be a careful observer
and a thorough analyst, though he seems to have been occasionally in-
fluenced by his historical theory. For instance, in his review of
Hanke's grammar of the Bongu language (Schmidt 1910:605) he observes
that only one symbol is used for a voiced bilabial contoid and a corres-
ponding affricate. The researcher into the earlier stages of Austronesian

and Papuan linguistic history will find in his book reviews valuable documents for the understanding of the history of research. For instance, in Schmidt 1908a, he learns about MacDonald's short-lived hypothesis about the assumed affinity of the Oceanic languages to the Semitic.

120 out of Schmidt's 710 publications are concerned with linguistic problems throughout the world (see Burgmann 1954a:627, Bornemann 1954) and many of his anthropological studies contain valuable linguistic information. 24 publications, including book reviews, deal entirely or partly with the linguistics of the New Guinea area. The New Guinea area, with its many Melanesian and Papuan languages, was for him the start in his publishing career. This is understandable - and research has to be motivated. The north-eastern portion of the New Guinea main-land and the large islands to the north had just become a colony of Germany. A few years before his first publications, missionaries of the Society of the Divine Word (S.V.D.), a missionary society of which he was himself a member, arrived at the north-eastern coast of New Guinea and found themselves in a linguistically complex and largely unknown area. The situation called for an expert. This was the reason Schmidt initiated his research and publishing career with New Guinea studies (Koppers 1956:63). In 1900 Schmidt describes for the first time the linguistic situation of German New Guinea and summarises all the material available at that time. Other surveys and summaries followed in 1920 and 1926 (see below). Through his influence, missionaries such as Vormann, Klaffl, etc. were publishing extensively at the beginning of this century. But these missionary publications declined in number as Schmidt got more and more absorbed in other studies in other parts of the world. Instead of publishing, missionaries stored their mater-ials mainly in the basement of their cathedral at Alexishafen, all of which got lost later, in a bombing raid during World War II.

In 1920 Schmidt summarised in a brief and concise form his views with regard to Austronesian and Papuan languages, when he, the expert in Oceanic linguistics in general, was invited to write for the *Deutsches Kolonial-Lexikon*. Another summary is included in his momentous work *Die Sprachfamilien und Sprachenkreise der Erde* in 1926. The two summaries are complementary.

Many of his findings are now superseded. For instance, not only Austronesian, but also a large number of Papuan languages divide nouns into two classes with regard to possession, prefixing and/or suffixing the possessive pronoun immediately to the noun. The structure of the genitive, a favourite topic of his, which he pursued throughout the world and into the deep history of mankind, seems to be overvalued as a classifying criterion. Structural comparison played a much more

important role to him than lexical. His study on the sound changes and
sound correspondences of the Melanesian languages Ulau, Ali, Yakamul,
Tumleo, is one of his few detailed word comparisons (Schmidt, Klaffl and
Vormann 1905:72-83). Seldom does he express doubts on the accuracy and
reliability of the data he did not collect himself.

No doubt, much of his data has to be restudied in the field and
supplemented. A comparison of Schmidt's view with the most recent
opinions is at this point of time not profitable, since this present
volume will summarise and clarify the latest views. In spite of this,
a brief account of Schmidt's views on the Austronesian, Melanesian and
Papuan languages based on his summary in 1920 and 1926 should be of
interest for the history of research in Austronesian and Papuan languages.
Space does not, however, allow a review of his frequently discussed
views on the Solomon and Torres Strait linguistic situation. The
following summary, it is hoped, will review briefly the linguistic
knowledge on the Austronesian and Papuan linguistic situation in the
first half of this century. There is unfortunately no comprehensive
study of the history of linguistic research in the Pacific available
for the second half of the 19th and the first half of the 20th centuries.
There is a clear break between these two halves of two centuries and
the new start, which was initiated by A. Capell and was carried rapidly
forward by S.A. Wurm and through his continuing encouragement. Hooley's
(1964) and Laycock and Voorhoeve's (1971) studies on the history of
linguistic research in New Guinea are not sufficiently detailed, though
Laycock's and Voorhoeve's chapters on the history of Papuan linguistic
research in (I) 2.1.1. and (I) 2.1.2. give extensive information on
this facet of the history of linguistic research in the New Guinea area.
Wurm 1972 is a useful summary of linguistic research in the Pacific in
general.

7.9.8.2.1. *W. SCHMIDT AND THE AUSTRONESIAN LANGUAGES*

In the second half of the 19th century, three language groups were
established in the Pacific: Malay (or Indonesian), Polynesian and
Melanesian. First they were called 'Malayo-Polynesian', but after the
discovery of the Melanesian languages, Schmidt (1899a:245-51) proposed
to change this double name to 'Austronesian', which has become a gen-
erally accepted name. The three subgroups of Austronesian languages
were obviously interrelated. But their historical relationship to each
other and the nature of the Melanesian subgroup came under debate at
the end of the 19th century. These are the two main points which
Schmidt discusses in his first publication on linguistics (Schmidt 1899a)

with vigour and self-assuredness. The two above-mentioned topics became
more complex as more and more languages (some of them right in the
middle of the Melanesian territory) were discovered which did not fit
into the pattern of the Austronesian language group. These languages
were generally referred to as non-Austronesian (or non-Melanesian) or
Papuan.

Gabelentz and Meyer (1882) and especially Müller (1876-88) proposed,
basically on anthropological grounds, the following two theories:

1) The Melanesian languages are a mixture of Malayo-Polynesian with
Papuan languages. Residues, especially in the vocabulary which could
not be explained as Malayo-Polynesian were taken as non-Malayo-Polynesian
or Papuan elements. Such Papuan languages were, for Müller, Mafoor
(Numfor) in the north-west of New Guinea, and in the south of Melanesia
the languages of New Caledonia, Nengone, Aneitum and Ero'mangan. The
Papuans were the original inhabitants of the Melanesian territory.

2) The Polynesian languages are the oldest substratum within the
Austronesian language family; the Melanesian languages, with a richer
phoneme and formative inventory, are a further development. This rich-
ness reached its height in the Indonesian language group.

Codrington's (1885) views differ:

1) The Melanesian languages are not mixed languages. In the present
day languages there are no traces of an earlier language as an examin-
ation of vocabulary and grammar reveals. Nengone, Ambrym, Santa Cruz
and Savo are aberrant, but they are not the remains of an older Melan-
esian speech.

2) The Melanesians have no doubt the ancient idiomatic usage.

Schmidt (1900, 1901) discusses these two points extensively and
proposes his own view which he, however, had to revise later on.

1) Melanesian is the proto-language of the Austronesian language
family, and not Polynesian as Müller postulated. His main proofs are:

a) Unity of the pronoun suffixes. The Melanesian languages suffix
the possessive pronouns in two ways: i) immediately to nouns denoting
body parts, terms of relatives and parts of a whole, and ii) mediately
via a particle (or possessive noun) to all other nouns denoting the
possessed. Thus two ways are present in Melanesian. The Malay languages
retained in their later development only the immediate way whereas the
Polynesian languages retained and further developed the mediate way.

b) The Melanesian languages have a plural, dual and trial form for
pronouns. Dual and trial are formed by adding the numeral two or three
respectively to the plural. The plural form is more original, and dual
and trial forms were developed at a later stage as a need for more

precision was felt. In the course of time the Polynesians dropped the
plural form and retained only the dual and trial whereas Malay retained
only the plural form. The trial in Polynesian languages is nothing
other than the plural.

c) The rich phoneme inventory of Melanesian also supports this
theory.

d) Residues in Mafoor, Aneitum and Eromanga identified by Müller as
Papuan, are of Melanesian origin. Kern (1883, 1906) holds the same view.

In his review of Thalheimer's study of the pronouns in Micronesian
languages, Schmidt (1908b:633) abandoned his earlier view. He said
that the Indonesian languages were the original languages within the
Austronesian languages. The Melanesian languages developed through
movements to the east and south-east and through mixing with the abor-
igines (Papuan) of the new Melanesian territory. The Melanesians re-
tained the immediate way of suffixing the possessive pronouns but
developed also, under the influence of Papuan language structure, the
mediate way of expressing possession. This seemed to him a more plau-
sible explanation than his earlier view.

2) In his first publication, Schmidt (1899a) definitely rejected
Müller's theory that the Melanesian languages were a mixture of Malayo-
Polynesian and Papuan. Müller's evidence could, after close inspection,
be explained as to be of Austronesian origin. Kern (1883, 1906) inde-
pendently reached the same conclusion. Real Papuan languages were
definitely discovered by Ray on the south coast of New Guinea, but all
of them were in the border area of the Melanesian territory. But sub-
sequently more and more Papuan languages were discovered in areas which
were assumed to be purely Melanesian territory. Upon this new evidence
Schmidt (1902) revised his opinion and formally rehabilitated Müller's
opinion with regard to the mixed nature of Melanesian languages. In
his latest view, however, he regarded only Melanesian languages in the
neighbourhood of Papuan languages as a mixture of Malay and Papuan, i.e.
the Melanesian languages on the New Guinea mainland and some languages
on New Britain and in the south of Bougainville. The mixed nature of
Melanesian is a problem which has worried Schmidt again and again in
different publications. The student of his work has a hard time to
follow his reasoning on this point. A thorough study of this topic
should be worthwhile since a careful study of Melanesian influence on
Papuan languages and vice versa is becoming more and more important.

In 1920 Schmidt summarised his view on the Austronesian languages
as follows:

The Austronesian languages form one family with the Austric languages.
The Jesuit missionary P. Hervas was the first to recognise the

Austronesian language family, with basically three subgroups. Indonesian
developed into Melanesian which mixed with Papuan, and from Melanesian
to Polynesian. The main characteristic features of Austronesian are:
1) Basically the same phoneme inventory, though Melanesian and Polynesian
lost some of the original phonemes. 2) Sameness in the formation of
words. 3) Similarity of personal pronouns, demonstratives, interroga-
tives and numerals.

7.9.8.2.2. *W. SCHMIDT AND THE MELANESIAN LANGUAGES*

Gabelentz (1861-79) was first to describe the Melanesian languages
as a group. Gabelentz and Meyer (1882) and later Müller (1876-88)
regarded the Melanesian languages as a mixture of Malayo-Polynesian
with the languages of the aborigines in Melanesia, and believed that
Polynesian developed into Malay (see above). Kern (1883, 1886, 1906)
noticed a closer relationship between Melanesian and Polynesian languages.
Codrington (1885) points out the general unity of the Melanesian lan-
guage group. Polynesian is for him a descendant of Melanesian.
Thalheimer (1908) grouped the Micronesian languages with the Melanesian
group, except for Chamorro and Palau.

For Schmidt (1920c) the Melanesian languages were an independent and
peculiar descendant within the Austronesian language family. They
developed from Malay into Melanesian and developed further into Poly-
nesian. The Polynesian languages originated in the languages of the
southern Solomon Islands. The bulk of the Melanesian area languages
were Austronesian. They were not a mixture of Malayo-Polynesian and
Papuan in the sense Müller had postulated it, except in the neighbour-
hood of the Papuan language area.

The Melanesian territory consisted of: New Caledonia, Loyalty
Islands, New Hebrides, Banks Islands, Santa Cruz, Fiji, Rotuma, the
Solomon Islands, Bismarck Archipelago, Admiralty Islands, Gilbertese
and Marshall Islands, Ponape and the Carolines. On the New Guinea
mainland, Melanesian-Papuan languages were found on the south coast from
Cape Possession to the east and on the north coast in pocket areas and
the adjacent islands. Within the Melanesian territory Schmidt found
also a group of Polynesian languages, which could be explained as a
re-immigrated group. They were on small islands adjacent to the New
Hebrides, the Solomon Islands, and the Bismarck Archipelago, i.e. part
of Uvea in the Loyalty Islands, Futuna, Fate, part of Sesake, Tikopia,
islands near the New Hebrides, some of the Swallow Islands near Santa
Cruz, Rennell, Bellona, Ontong Java (Liueniua), Marqueen Island (Tauu),
Tasman Island (Nukumanu), Fead Island (Nuguria), and Sikayana.

Schmidt found the following features to be characteristic of Melan-
esian languages:

Phonology: As a rule the Melanesian languages have dropped final fric-
atives, nasals and r, l.

Word formation: Loss of the Indonesian infixes. For a list of common
prefixes and suffixes in Melanesian see Schmidt 1920c:540.

Grammar: There is no overt number and gender marking. But number marking
in pronouns is very explicit. Melanesian languages of an older sub-
stratum (New Caledonia, Loyalty Islands and some of those on the New
Guinea mainland) have formed an additional dual form. Most Melanesian
languages have formed a dual and a trial form. Melanesian languages
of the youngest substratum (southern Solomons, some languages of the
New Hebrides, Nengone, Rotuma, New Ireland (Neu Mecklenburg), Marshall Is
(Kusaie), developed an additional quatrial (quartal) form. Dual, trial
and quatrial are formed by adding the corresponding numeral to the
plural pronoun form. A typical Melanesian feature is the division of
nouns into two classes. (Class 1: Body parts, terms of relatives, and
parts of a whole which suffix the possessive markers immediately to the
noun base, and class 2: all other nouns plus the exceptions of class 1,
which suffix the possessive pronoun to a particle or possessive noun,
thus mediately to the noun.) The number of possessive nouns indicating
different relationships of the possessor to the possessed varies from
one to four. The Melanesian languages postpose the genitive whereas
the Papuan languages prepose them. Schmidt's description of the verb
structure is rather confusing; the interested reader is referred to
Schmidt 1920c:542.

Schmidt finds it difficult to subgroup the Melanesian languages.
The concept of grouping languages into families, stocks etc. was as yet
unknown. In contrast to the Polynesian languages, the Melanesian lan-
guages differ among themselves considerably in vocabulary and grammar.
From this Schmidt concludes a prolonged settlement of the Melanesian
area and feels that Papuan languages with their notorious diversity
might account for this diversity. Each island has its own language
and some have even two and three. Schmidt proposes then the following
subgrouping for which he in 1920 gives some criteria to justify his
subgrouping.

1) **Southern Group:** New Caledonian, Loyalty Islands, Aneitum, and
Eromanga in the southern New Hebrides.

2) **Central Group:** the remainder of the New Hebrides, Banks Islands,
Fiji Islands, and the southern Solomons as far as Bougainville. The

latter are the youngest substratum from which the Polynesian languages
originated, and are more closely related to the Melanesian languages in
southern British New Guinea.

3) Northern Group: northern Solomon Islands, New Britain (Neu-
Pommern), New Ireland (Neu-Mecklenburg) and probably the Admiralty
Islands.

4) Isolate: Santa Cruz. They are more archaic and closely related
to the Torres Strait languages.

5) Melanesian-Papuan languages: Barrioi, Kilenge, Upper-Mengeni (New
Britain) and in the south of Bougainville: Mono, Uruava, Torau, and New
Guinea mainland.

6) Micronesian languages: Caroline Islands, Yap, Ponape, Gilbert
Islands, Marshall Islands and Nauru.

7) Transition languages from Melanesian to Polynesian: south coast
of British New Guinea, central New Hebrides, central Solomon Islands.

7.9.8.2.3. *W. SCHMIDT AND THE PAPUAN LANGUAGES*

Gabelentz and Meyer (1882) and later Müller (1876-88) were first to
observe aberrant languages within the Austronesian language family.
They called them Papuan or non-Malayo-Polynesian (later non-Austronesian).
Their proofs were however rejected. Ray (1892) was the first scholar
to discover unmistakenly Papuan languages on the south coast of New
Guinea. Schmidt (1900-01) discovered the separate existence of Melan-
esian and Papuan languages on the north coast of New Guinea. As more
and more Papuan languages were discovered in Melanesian territory they
appeared to be the remnants of a pre-Austronesian population.

Papuan languages were found on the New Guinea mainland in some pocket
areas on the coast, and in the smaller adjacent islands. The interior
was still unknown. Papuan languages known outside New Guinea were
1) Savo in the Solomon Islands, and the languages of South Bougainville,
2) Baining and Sulka on New Britain, 3) Tidore and Ternate on Halmahera
Island. More were expected to be discovered in the largely unknown
areas.

Schmidt found no evidence for a Papuan language family. The name
Papuan meant simply not belonging to the Austronesian language family.
Papuan languages were regarded as an agglomeration of genetically un-
related, radically different languages, differing from each other more
radically in vocabulary than in grammar and which were spoken only in
a few villages each.[3] This is the view still held nowadays by linguis-
tically ignorant people. A genius such as Schmidt found no common

vocabulary, and found even the pronouns differing. In the structure,
however, he found some characteristic features which he used to identify
a language as Papuan or Austronesian, but they gave him not enough
evidence to postulate a genetic relationship. Such common features are
summarised in Schmidt 1920a:18, and 1926:154. The main points are:
1) occurrence of the fricatives x, y, ɸ, š and the affricates ts, bw,
tš. 2) Preposing of the genitive. 3) No Papuan language divides nouns
into a two-class system a) terms of relatives - body parts - part of
a whole, and b) all other nouns plus the exceptions of a). 4) The
personal pronouns have only singular, plural and dual forms but no
trial. The dual form is frequently derived from the singular form.
5) No difference is made between an inclusive and exclusive form of the
first person plural pronoun form. 6) The languages frequently distin-
guish masculine and feminine forms with the third person singular
pronoun. 7) The languages have a pair counting system. 8) The languages
show a complex structure of the verb.

Schmidt, so much interested in comparison and classification of lan-
guages, came quickly to a solution in Austronesian language grouping.
But he felt lost with regard to the classification of Papuan languages;
probably he concentrated too hard on discovering one single Papuan lan-
guage group. Schmidt (1920a:19, 1926:150ff.) lists the then known
Papuan languages based on geographical grounds. But hints of two major
groupings are given. **Group 1:** Miriam and probably Tauata in British
New Guinea, Valman and Monumbo on the north coast of New Guinea (which
are fairly closely related to each other despite their distant geo-
graphical location), then Baining, Telei, Nasioi, Koromira and Savo in
the New Guinea island area, and finally the Halmahera languages in
Dutch New Guinea. **Group 2:** the rest of the then known Papuan languages.
Characteristic features of the first group based on H. Potter's un-
published study are: a) grammatical gender and different forms for
masculine and feminine third person singular pronouns, b) no difference
between first person plural pronoun inclusive and exclusive except in
Miriam, c) occurrence of r, l initially except in Masio and more vari-
ations in final phonemes.

In 1900 Schmidt already had doubts on the applicability of traditional
principles in comparative linguistics for the New Guinea area. In his
last summary (Schmidt 1926), he felt a classification of Papuan languages
had to start with grammar, rather than vocabulary, which is more diverse
than structure. With reference to 1926, such a classification was only
of limited use, and was suitable to indicate only a certain probability
of a genetic relationship within a language group.

7.9.8.3. G. HÖLTKER

Höltker visited the islands Karkar, Manam and Blupblup and large parts
of the Bogia subdistrict at the north-east coast of New Guinea. Most
of his publications are primarily concerned with various topics in
anthropology, but some of them contain valuable linguistic information
(e.g. Höltker 1947, 1964). Höltker (1932b:964, fn.20) lists in his
fieldwork report the following Papuan languages or language groups in
the area between the mouth of the Sepik River and the town of Madang:
1) Marangis, Watam-Marangis-Kayan, Boroi (Watam, Kaian, Gamei),[4]
2) Nubia-Bosngun (Awar, Bosman), 3) Mikarew-Ariaw (Mikarew), 4) Kire-
Puire (Giri), 5) Tangum-Igom (Tangum, Igom), 6) Monumbo-Ngaimbom
(Monumbo, Lilau), 7) Wadaginamb (Wadaginam), 8) Murusapa-Sarewa
(Moresada), 9) Awarken (Andarum), 10) Wangam (Kopar), 11) Moando
(Kaukombaran family). Watam, Kaian, Gamei and Mikarew form a
related group which Z'graggen (1971) calls the Ruboni language stock.
The Moando or Kaukombaran languages are related to the Bongu language
in Astrolabe Bay. Though Höltker offers no evidence, he was the first
to postulate a relationship between languages of the Adelbert Range and
the Rai Coast. Ulingan and Waskia (Tokain) are said by him to be
aberrant Papuan languages, but he gives no data. The Melanesian lan-
guages listed by him are: Medibur-Toto (Medebur), Sarang-Megiar (Megiar),
Matukar (Matukar), Sek and Siar-Ragetta (Gedaged).

Höltker (1932b), according to his field report, learned the Awar
language, collected ample text material and produced an extensive dic-
tionary, which however, he never published. In 1938 he published a
first wordlist of the Gapun language which he collected with Fr J.
Much, S.V.D., and he regards this language as an isolate. Laycock
(1973) classifies Gapun with Bungain as forming a sub-phylum within the
Sepik-Ramu Phylum. In his study on the Giri people (1961) Höltker
incorporates a first short wordlist of the Giri language. In 1952 he
edited Fr Tranel's study of the Tani people which includes a first
Tani wordlist. In 1964, Höltker published extensive corrections to
Vormann and Scharfenberger's 1914 study of the Monumbo language. His
essay on Pidgin English as vehicle of communication by the Catholic
Mission (Höltker 1945) is also valuable.

7.9.8.4. L. LUZBETAK[5]

Luzbetak carried out fieldwork in the New Guinea Highlands from
October 1952 to April 1956. His studies were primarily ethnographic,
with a special interest in native religion. An important linguistic
interest of his was the phonology of the Middle Wahgi, but for

comparative reasons he covered a much larger area. Luzbetak carried
out a large amount of morphological and syntactic analysis of some
highland languages and dialects, e.g. the Tabare dialect with Fr
McVinney (Luzbetak and McVinney 1954), the Kup, Minj, Nondugl, and
Ambang dialects of the Wahgi language, and he carried out a full gram-
matical study of the Banz dialect (Luzbetak 1954). Luzbetak also
served on the Papua New Guinea Government's Commission on Languages
for Standardising Pidgin Orthography in the mid-1950s. He also carried
out some experiments in literacy, especially in studying the effective-
ness and practicality of a phonemic alphabet for the highland languages.
Hamp (1957) praises Luzbetak's study on the Middle Wahgi phonology
(Luzbetak 1956) as a capital contribution to our knowledge of the lan-
guages of New Guinea. Unfortunately, most of his field material is as
yet unpublished.

7.9.8.5. H. AUFENANGER

In 1933, Aufenanger came to New Guinea for the first time, as a
missionary. He spent many years in New Guinea doing research in anthro-
pology and linguistics in addition to his missionary duties. His con-
tributions to our knowledge of Gende (1938, 1952, 1953c) and Nondugl,
a dialect of Wahgi (1953a, 1953b), are extensive. His dictionary and
grammar of Biyom has got lost. Of interest also is his introduction
to Salisbury's vocabulary of the Siane language (Aufenanger 1956). The
majority of Aufenanger's publications are of an ethnographic nature,
but many of his publications also contain valuable linguistic materials
such as technical terms, myths, stories, sayings with a hidden meaning,
etc. (Aufenanger 1953b, 1953c, 1960, 1962, Aufenanger and Höltker 1940).

7.9.8.6. A. BURGMANN

Burgmann edited the journal *Anthropos* from 1959-1968. In 1953
Bornemann and Burgmann initiated the 'Micro-Bibliotheca Anthropos', a
publication series which publishes manuscripts not publishable in
printed form, but which are nevertheless of high value as a source of
information. Burgmann gave short introductions to these manuscripts
in *Anthropos*. Within the New Guinea area they are the following: Gende
(1953a), Chimbu (1953b), the Nondugl dialect of Wahgi (1953c), Konua
(Kunua) (1954a), Lir (1954c), Ubili (1961a), Tuna (Gunantuna) (1961b),
Sulka (1962), Alüban (Arapesh) (1963), Tangga (1966c, 1972), Pala
(1966b). In his study of 1968 Burgmann investigates the origin of the
word 'Tamberan'.

7.9.8.7. J.A. Z'GRAGGEN

Z'graggen began his linguistic fieldwork in New Guinea in August 1964 in the coastal area of the Madang District, at first part-time and as much as his missionary duties allowed him. The complex linguistic situation at the mission station Mugil on the north-eastern coast of the Madang District awakened in him the interest for comparative linguistic and survey studies. From March 1966 to June 1969, he worked under the auspices of the Australian National University. His findings on the linguistic situation of the western Madang District are summarised in Z'graggen 1971. To assist missionaries in the field to handle various language problems independently, he studied a combination of linguistic discovery procedures and pattern practice language learning methods in 1970. A basic understanding of the techniques of the substitution frame would help the missionary in the field to discover the meaningful parts of speech; the same frame could then be used and expanded at will into a pattern practice device. This method was found to be of limited use and was not developed further. In January 1971, he resumed his fieldwork in the Madang District area with the aim of a complete linguistic survey of the Madang District. Summaries of the results were published in Z'graggen 1975 and in (I) 2.8.2. and (II) 4.4.1. There is a great need for linguistic survey studies on the district (now province) and national level. Districts (now provinces) will most likely remain important political units for a long time and an adequate knowledge of the linguistic composition should prove helpful to the administration and educational agencies. Linguistic complexity is a characteristic of the New Guinea area and thus is something a Papua New Guinean should be taught in school. Linguistics has a great task and responsibility in this respect.

N O T E S

1. For more general studies on the Anthropos Institute see Schmidt 1932, 1950a, Rahmann 1956 and Burgmann 1966b. The author prepared this summary in response to an invitation by Professor S.A. Wurm to write it for this volume. It was prepared at Alexishafen in October 1973. The author has been a member of the Anthropos Institute since 1970, but has been in contact with members of the Institute since 1956. He was not personally acquainted with the founder and only a little acquainted with the contributors to New Guinea linguistics. For this reason, this chapter is based on publications and some letters to the author. It is hoped that this study gives a fairly complete account of the contribu- tions made by members of the Anthropos Institute to the linguistics of the New Guinea area.

2. For further information on Schmidt's work and personality the reader is referred to: Koppers 1956, Henninger 1956, Burgmann 1954b, Bornemann 1954.

3. The following quotation might be of interest to the historian of Papuan linguistics:

> Die geographische Sprachenmannigfaltigkeit ist dabei so gross, dass in Neuguinea, wo diese Sprachen in geschlossener Reihe aneinander stossen, jedes Gebiet von ein paar Meilen im Durchmesser seine eigene von denen der anstossenden Gebiete radikal verschiedene Sprache aufweist, so dass hier wohl für die ganze Erde der Gipfelpunkt extensiver und intensiver Sprachenzersplitterung erreicht ist. (Schmidt 1920a:18)

4. Names in parentheses are names newly adopted by Laycock (1973) and Z'graggen (1971).

5. Data based on Luzbetak's letters to the author: 26 July 1973 and 13 March 1973.

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