5.4.0. SPECIAL LANGUAGES IN PARTS OF THE NEW GUINEA AREA

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5.4.1. INTRODUCTION

In this chapter are considered special languages that are subsets of normal language, or are special modifications of it. The comments will be brief, as the field has been little investigated for the New Guinea area. I have been greatly assisted by unpublished observations from a number of sources, particularly M. Reay (Australian National University) for Kuma (Wahgi) data, R. Bulmer (University of Auckland) for Enga and Kalam data, and I. Riebe (Australian National University) for Kalam data. Buin and Abelam data are from my unpublished notes.

Special languages can be considered from the viewpoint of either form or function, but such a division is not appropriate when data on one or the other aspect are lacking. A mixed approach is therefore adopted here, where headings such as 'Baby Talk' refer to a form of language used in a particular social context, whereas the heading 'Ludlings' refers to sublanguages recognisable by a particular form. A brief section is added on 'Drum and Trumpet Signals', although this subject is treated by I. Eibl-Eibesfeldt in chapter 6.1., in order to add a few additional observations and references. (A full discussion of vocal and instrumental speech-surrogates in general, with a particularly valuable account of possible taxonomies, is provided by Umiker (1974); an earlier analysis is that of Stern (1957).)

5.4.2. BABY TALK AND CHILDREN'S LANGUAGES

Neither the languages used by parents (especially mothers), nor the forms of language used by young children themselves, have been described for the New Guinea area; impressions of frequent repetition, key phrases, and extensive use of kinship terms, have been noted for Kalam, Kuma, and

Buin. Kalam mothers, when talking to babies, substitute voiced phonemes for unvoiced, and [tš] for [s] - thus Kalam /aps/ becomes /abwc/. Kuma mothers use diminutives of kinship terms, and use those of address, rather than of reference, when speaking to children; a woman will say ndab-o 'my father' (otherwise a term used primarily during mourning rituals) to a child to mean 'your father'. In the same way, Buin mothers will use a form such as moka 'my father' (or even rogoma moka 'your my-father'), rather than ruumo 'your father', when speaking to a child. Such usages are almost certainly designed to teach the child correct kinship terminology, from his or her own point of view.

5.4.3. LUDLINGS

Ludlings are a category of special language with a formal definition the result of a transformation or a series of transformations
acting regularly on an ordinary language text, with the intent
of altering the form but not the content of the original message, for purposes of concealment or comic effect.
(Laycock 1972)

Examples in English are Pig-Latin, spoonerisms, Alfalfa, and Ziph. Examples from Papua New Guinea are rare; Aufinger (1949) gives examples of New Guinea Pidgin spoken backwards, and Manam being written backwards; the data are also discussed by Baker (1966). Examples are:

Normal language

Special language

Pidgin: yupela wok, masta i kam

alapui wok, atsam i mak

'you all work, the boss is

coming'

Pidgin: mi kilim mumut

im milik tumum

'I killed a bandicoot [=pig?]'

Manam: ruagnagu bua aludi masa goina ba ngakina kalea ngaena lo

ugangaur aub idula asam aniog ab anikang aleak ol aneang

'my friend, send me some betel nut this month'

Aufinger also says that some speakers used this 'backwards talk' with a mixture of their own vernacular and Pidgin. Backwards Pidgin is also encountered in modern Pidgin slang; a man will say mi laikim supsup 'I want a fish-spear' for mi laikim puspus 'I want sexual intercourse'.

Kuma-speakers are reported to substitute glottal stops for all or most medial consonants, as a form of linguistic play indulged in by adolescent boys and girls; the same system was reported for Chimbu by Laycock (1972: example 110), but no actual forms are available.

Two Buin ludlings are also discussed by Laycock (1969). In the first of these, the syllables are reversed in disyllables, and the first two

syllables placed at the end of the word in polysyllables (with gemination of the third vowel in trisyllables):

Normal language Special language
moi 'canarium nut' imo
omio 'give me!' ooomi
oreu 'breadfruit' uuore
amanoko 'many' nokoama
ummainerai 'all villages' maineraiun

No opportunity presented itself to observe the use of this type of language in its social setting, though statements made about it suggest that it is again a jargon used by adolescents.

The second type of ludling, representing the speech of a dog in a story, involves two processes: the omission of stops between identical vowels, and the (phonologically conditioned) suffixation of -noko/-roko:

Normal language	Special language
ia ŋkoma muo pai oromui?	ia ŋkoroko muoroko pai oromuinoko?
kagatarei tou kagatokui.	kaatarei tou kaatokui.
topokarei menu perekoku aruere topogorogui	tookarei menu perekoku aruere toogorogui

'who placed this coconut here for me? I cannot shell it, but if I roll it down the mountain it will break on the stones'

Such forms of 'play-language' seem, from the data provided by Laycock (1972), to be endemic in Austronesian languages, and can perhaps be expected to be widespread in non-Austronesian languages as well; Schuhmacher (1972) accounts for sound-changes in Austronesian languages of the western Solomon Islands on the basis of common ludling transformations.

5.4.4. SECRET LANGUAGES WITH LEXICAL SUBSTITUTION

Other secret languages reported for the New Guinea area involve lexical substitution. The first instances available for the New Guinea area are those for the Austronesian language of Bilibil, as an appendix to a paper by Dempwolff (1909). I cite some of the examples, with my interpretation (based on the glossary provided by Dempwolff) of the origin of the words of the secret language:

English	Normal language	Special language	Derivation
'ghost'	mariberáb ^l	burtamale	bur 'forest', tomol 'man'
'people of Miok'	míok	malhé	mal 'loincloth', he 'not'
'paddle'	féo	poluala	pólu 'run', polani 'to paddle'
'sail'	bainde	báninde	bánin 'wing'
'pot'	bódi	tópi	[consonant reversal?]
'arrow'	уu	dúri	durí 'fetch' (?)
'knife'	badír	aoala	aowara 'carry (in hand?)' (?)
'taro'	ma	auaranek	aowara 'carry (in hand?)' (?)
'water'	yóu	medidin	madidi 'cold'
'coconut'	níu	potuande	pótu 'star' (?)
'sugar- cane'	tóu	seliiék	seleiselei 'in bushels?' (?)
'dog'	gaon	sasás	sasami 'shark'

Similar examples are given for a number of closely-related Austronesian languages by Aufinger (1942-45, 1949), along with many more examples of connected speech than are provided by Dempwolff. Aufinger also provides instances of secret language in a non-Austronesian language, Suroi, from the villages of Rimba, Sorang, and Masi. The lexical replacements are fairly predictable; 'man' and 'woman' are expressed by words meaning 'dog' and 'bitch', and 'loincloth' by 'liana species' or 'woven circular flower-stand'. A section on Pidgin tok bokis ('secret talk') is added in the 1949 translation of the 1942-45 paper, with such phrases as go kisim bilinat bilong mi 'fetch my betel nut', meaning 'send for my girlfriend'. (Tok bokis is now a common feature of urban Pidgin in Papua New Guinea, though it has been little studied; many of the expressions would, however, be better classified as slang, rather than secret language; see Brash 1971).

Aufinger distinguishes between 'figurative language' and 'secret language', but the distinction is not always easy to make. 'Secret language' in the New Guinea area often functions more as a 'group language' than as a means of disguising the meaning of a discourse; outsiders may catch the meaning, but are excluded from the group because they do not have active control of the 'secret' language. In this sense, secret languages occur commonly in the New Guinea Highlands, usually (as among the Kuma) as clan languages; such languages are specifically taught to all clan members, including strangers who take up permanent residence with the clan. The mechanism is again that of lexical substitution, and the types of phrases used are comparable with those reported by Aufenanger (1962) for various parts of the eastern Highlands; thus, for example, 'they hit the bird with a stick' can mean 'they blow

the spirit flutes'. 'Opposite speech' is quite common; 'go down' can mean 'go up', and 'I am a miserable man' can mean 'I am a strong, healthy man'. (Compare also the metaphorical usages in Kewa songs in Franklin 1970.)

Secret clan languages are commonly used by clan members on hunting expeditions; the Kuman say that this is so other men will not hear them and know of their plans, but in other areas explanations involving deeper tabus are offered. Thus, the Kalam say that their alnaw mnm ('pandanus language', Bulmer 1967, 1968) is necessary on pandanus—collecting expeditions, as otherwise the pandanus kernels will be soft and watery on removal from the earth-ovens.

In Buin, tabus are placed on certain words - principally names of individuals, and names of spirits - in certain areas of bush inhabited by specific spirits; but the tabu on uttering the names of animals being hunted has a different basis - namely, that the animals understand the Buin language, and will run away and hide if they know that the hunters are seeking them (Laycock 1969).

A ritual pandanus language is described in detail by Franklin (1972). This language, used only by the clans who have the right to harvest in the restricted pandanus area of Mt Giluwe, involves not only lexical substitution, but also a regularisation and restriction of the grammar of the normal language (Kewa). The most important consideration is that the ritual language should be recognisably distinct from the normal language; West Kewa speakers stated that outsiders could speak Pidgin if the ritual language were unknown to them.²

Franklin mentions the existence of ritual languages among the Kalam, the Duna, the Huli, and the Telefol, but gives no examples. Perhaps worthy of further consideration is however his statement on the social divisiveness of 'hidden' languages:

Within social and political contexts almost any example of hidden language can be shown to be ominous Hidden language, because of its function, is often the source of disruption and ill-feeling between clans that have a history of friction.

5.4.5. POETIC LANGUAGE

The language of songs, speeches, and traditional tales in the New Guinea area may exhibit features which distinguish it from everyday language; these features may be those which have already been discussed in the previous sections, but may also include the use of archaic, dialectal - or simply rare - words or grammatical forms. The fullest discussion of any poetical language in the New Guinea area is probably to be found in Malinowski's analysis (1935) of Kiriwina texts, though

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other anthropologists, such as Fortune (1932), have also dealt with the subject. (A popular account of Dobu poetry, based on Fortune's material, is provided by Franklyn 1936.)

However, the system of creating a poetic lexicon in Buin, described by Laycock (1969), appears to be unique to that language - or perhaps to the languages of the South Bougainville Stock of the East Papuan Phylum. The first two or last two syllables are taken out of the words of the normal language, and to these syllables are added a fairly arbitrary two-syllabled prefix or suffix; the resulting four-syllabled word is then the 'poetic' form used in songs. The origins of this procedure are not completely clear; obviously, lexical tabu plays a part - especially as personal and locality names obligatorily undergo this transformation - and metrical considerations are relevant, as the slot in which the names are inserted in songs requires four syllables. (Four-syllable words predominate in Buin, and almost all words are even-syllabled.) Some examples:

	Normal language	Special language
[male name]	amakai	kainei
[male name]	kaakai	kainei
[male name]	meekai	kainei
[male name]	tiŋkai	kainei
<pre>[village name]</pre>	omitaro	tarorai
<pre>[village name]</pre>	raitaro	tarorai
'bereaved sibling'	uoreku	rekumanu
[male name]	moio	moiaka
[male name]	moiru	moiaka
<pre>[village name]</pre>	paagui	paakei
[village name]	paare	paakei
'rat'	inakia	kiarou
'sea hawk'	keerai	keekono, rainei

Poetic language in Buin may also involve the use of archaic or restricted morphology (for examples, see 5.6.7.).

5.4.6. CALL LANGUAGES

By 'call languages' are understood the forms of language used for transmitting messages over long distances, usually across valleys, the speaker being located on high ground; such a language from Wahgi valley may be heard on record (Sheridan 1958).

'Call languages' may frequently be heard in the Highlands areas of Papua New Guinea - though it is reported that their use is on the wane, in the face of the greater information-carrying capacity of local radio

stations - but have not been studied, in comparison with normal language. Acoustically, they give the impression of yodelling; vowels are held to abnormal lengths, especially finally, and consonant clusters may be simplified in some languages, but specific data are lacking. The tonal pattern also apparently differs from that of the normal language.

The brief notice by Wurm (1972) is worth quoting here in full:

LANGUAGES, CALL. In many of the mountain areas of New Guinea, messages are shouted across narrow valleys or gorges by natives who, for topographical reasons, have difficulties in getting together. These shouts carry over amazing distances, and special forms of the local languages are employed for them. These are described as call languages. The message is repeated a number of times, and the utterance cut down to the essentials, comparable to telegram style. A message is usually preceded by a long-drawn-out modulated call to attract attention, whereupon the message itself is shouted, with vowels of the most important word prolonged and shouted at maximum loudness but with correct relative pitch and length in relation to each other. The consonants are neglected and sometimes almost entirely omitted. At the end of such an important word, modulated shouts are often added. These seem to contribute in a not yet clearly understood way to making the message more intelligible. The call as described is repeated a few times, and then at subsequent repetitions, other words in the message are treated as important words. Another type of call language is used at large gatherings, festivities, food distributions, and the like, to give information concerning all those present. In this type every word in the - often abbreviated - sentences is drawn out as described above, with modulated shouts preceding and terminating the message call.

Call languages are not restricted to the Highlands areas; I have heard a call language being used by Mountain Arapesh-speakers, in the East Sepik District, and suspect that special modifications or ordinary language for shouting can be found virtually throughout the New Guinea area, even in the lowlands and on the coast. Townsend (1968) mentions call language among Wom-speakers (see quote in 5.4.7. below), and it is also reported for speakers of the Yambes language. Further examples are mentioned by Eilers (1967), and a recorded example (from Medlpa) can be heard on the disc accompanying Curth 1968.

5.4.7. WHISTLE LANGUAGES

Communication by means of whistling is reported for a number of areas, but no studies have been made; see Eilers (1967) for references not given here. The occurrence of whistled speech in an area is not necessarily an indication that the language of the whistlers is tonal; whistled speech occurs, on hearsay evidence, among speakers of the Au, Urat, and Wom (Torricelli Phylum) languages in the Sepik region, languages which are certainly not tonal in any normally accepted sense of the word

(though a certain amount of marginal tonological phenomena may be present). Townsend (1968:67) provides one of the few published mentions of whistled speech (and call language) among Wom-speakers of 'Arasili' (Arisili) village, East Sepik District:

I was now awake and soon realised that some of the village people were actually conversing with one another by means of low whistles.

From the direction of a nearby hut came a "wi wa wi wo", which was answered by the boy with "we wu". The hut repeated its signal in a most decisive manner and the boy got up off his haunches and went to the hut. I looked round for my sergeant, to see him grinning at me.

"All of the Arasili people are whistle people", he said, in Pidgin. "In the village when there are strangers about they whistle like a bamboo flute; when they call from the mountain they call like a garamut (wooden slit-gong)."

In the Papua New Guinea Highlands, whistled speech is used by trancemediums to communicate messages from the spirits; this practice is
reported for two parts of the Highlands, among the Kuma and the Enga,
and is probably widespread. The whistled speech reproduces the tones
of the spoken language (both Kuma and Enga are tonal), and, from report,
is intelligible with virtually no ambiguity. Umiker (1974) also quotes
M. Frantz (Summer Institute of Linguistics) as noting the use of whistled
speech in the tonal language of Gadsup (Trans-New Guinea Phylum). The
Kalam, whose language is not tonal, use a code of whistle-signals when
hunting.

5.4.8. DISGUISED SPEECH

Although it is common for the sound of flutes and of whistles to be regarded as the voices of spirits, I have not found many reports of the human voice being disguised or distorted for this purpose; some references are given by Eilers (1967). The phenomenon can be heard on a recording of a singer distorting his voice by means of a half-coconut shell; the accompanying pamphlet states (Sheridan 1958):

An empty coconut shell distorts the voice of the person speaking or singing into it. This example is in the style used by the primitive tree-dwellers of early Sepik history. In this way messages could be passed from one tree house to the next without the meaning being understood by the invading warriors on the ground. Today, this type of speaking survives in Sepik ritual. (Side One, Item 3b)

(The 'primitive tree-dwellers of early Sepik history' are unverified entities, but the explanation may well have been the one given by the indigenous performer.)

I also have a tape-recording (made in 1959) of an Abelam-speaker singing a ritual song in a distorted voice (low pitch with extreme

faucalisation); the explanation was that as the song was sung out of context (in my hut, by day) it should not be heard by chance passers-by.

The Sheridan record also has a song from the 'Numi' (Lumi) area (the language being probably Olo), illustrating 'a nasal style of singing ... regarded as the true voice in this area'; but such singing styles, which include the widespread choice of a high nasal voice-style for female singers, can only marginally be considered as voice distortion, and even less as 'special languages'.

5.4.9. DRUM AND TRUMPET SIGNALS

'Drum signals' are taken as being the signals beaten out on the large slitgongs (garamut), widespread, but by no means universal, in lowland areas of the New Guinea region; the smaller hand-drums (kundu) are used only for rhythm accompaniment to dancing.

The fullest accounts of drum-signals in general, with lists of further reading, are those of Graf (1950a), Hermann (1943), and Eilers (1967); to these we may add a detailed treatment of the drum language of Kwomaspeakers of the East Sepik District by Zemp and Kaufmann (1969); four examples of Monumbo signals (in musical notation) are also given by Graf (1950b). These publications raise, in varying forms, the question of whether there is a true drum 'language' in the New Guinea area, and, if so, what its relationship to normal spoken language can be stated to The fullest answer would seem to be that of Zemp and Kaufmann (1969), who conclude that, for the Kwoma at least, the 'drum language' consists of a number of discrete signals, with distinct meanings, each signal being independent of the linguistic content of its message, and being distinguished from others by a 'unit of repetition' which is repeated during that signal, but which cannot be substituted meaningfully in any other signal. (The possibility of combining entire signals, by sending one after the other, is not discussed, but I formed the impression in 1959 that some such method accounted for the ability of Wogamusinspeakers (neighbours of the Kwoma) to recall individuals to the village, by specifying first the clan or sib, and then a further restricting detail.)

My recordings of Abelam slitgong signals would seem to support the Zemp and Kaufmann analysis; certainly there is no possibility of assigning a unique spoken-language utterance to any signal, nor is it possible to equate a fixed number of beats with any signal or signal-segment, since the number of beats varies considerably in repetitions of the same call.

Further data on the use of arbitrary signals for individuals are given in an anonymous (1913) account of slitgongs in the Bogia area;

the relevant paragraph, with the belief (unsupported, however, by any evidence) that there is a relationship between the spoken language and the signal, is also cited by Umiker (1974):

Für den Nachrichtendienst hat jeder Mann sein bestimmtes Zeichen, das allen Männern seines Stammes bekannt ist. Gewöhnlich ist es ein ganz willkürliches Zeichen. Auch wechselt er es schon mal, wenn er glaubt, ein besseres gefunden zu haben. Die Zeichen werden nach bestimmten Worten getrommelt; doch passt weder Silbenzahl noch Akzent auf das Zeichen; es darf aber nicht gesagt werden, dass es willkürlich mit den Worten verbunden ist.

Only one modern writer (Snyders 1968) has made the claim that there is a drum language in Melanesia directly based on the spoken language; he asserts that the drum signals on San Cristoval (Solomon Islands) represent spoken utterances, that each low note of the two-note drum corresponds to the vowel a, and that each high note corresponds to the vowels e, ê, i, o, u. But the analysis is statistically unconvincing, and even with many arbitrary decisions the author cannot achieve more than a 78% correlation between signal and linguistic message. Much more evidence would be needed to establish the existence in Melanesia of a true signalling code based on spoken language. (Further additional references on this aspect of the subject include Börnstein (1916), Eberlein (1910), Gerstner (1934-35), Höltker (1942-45), and Neuhauss (1911:314, 316).)

On the question of whether signal-systems coincide with linguistic boundaries, discussed by both Behrmann (1924) (who says that drum signal-systems do not cross linguistic boundaries), and by Eilers (1967:159) (who says the same system is used by speakers of different languages east and west of the Yuat River), my observations are inconclusive. In the northern Sepik plains, where the Abelam and Arapesh languages meet, slitgong signals of the Arapesh are recognised and understood by the Abelam, and vice versa; but I was unable to determine whether there is overlap between the signal systems, or whether a single system is found throughout each of the language areas.

A relevant factor is the carrying-power of the drums, estimated at at least 15 km (with a claimed maximum of 30 km) for large drums in the Sepik plains areas, and (from observation) about 10 km along the Sepik River. Physical geography and the resonance of the drums affect the carrying-power, as do also playing techniques. Drums in the areas north of the Sepik River are usually beaten by a standing player wielding a single stick, with considerable body-force, while those on the Sepik River are usually beaten by a sitting player holding a short stick in each hand. In any case, adult individuals can recognise all calls in their listening area. Additional clues to the meaning of a signal are

provided by the direction from which it comes (for instance, if it is common knowledge that a particular village is ready to inaugurate a new clubhouse) and the drum on which it is beaten. Individual drums are clan- and individual-owned, and are identified by their tone; some drums are reserved for messages connected with the owners - or in some instances even more specific messages. The analogy with church-bells in European communities is obvious, and, like church-bells, drums often bear individual names. In the Abelam village of Kalabu in 1959 I counted - without attempting a full census - a total of 17 drums, many - perhaps all - of which were individually named, and recognised, reportedly in the surrounding villages. In assessing the communicative function of slit-gong-signalling, such extra-linguistic contextual information obviously needs to be taken into account.

The learning of the signal system by each new generation is also of interest. Tabus on touching the drums, except when a signal is sent, and the lack of practice on the drums beforehand, mean that knowledge of the signals is first acquired passively (by hearing the signals and having their meaning explained); after that, the signals may be practised on any suitable medium (see e.g. Burridge 1959:142). However, in at least some societies the signals may be taught by rhythmic mnemonics, which have little or no linguistic meaning. Thus the Abelam (East Sepik) call for 'the administrative officer is coming' is explained as tuan tuan, tuan tuan, tuan-tuan-tuan-tuan-tuan-tuan (two pairs of slow beats followed by approximately seven fast beats); tuan (a loanword from Malay) means 'white man'. (The signal is stated by Abelam-speakers to be based on that used in pre-contact times for 'there is trouble brewing', and this is confirmed by my recordings of slitgong signals from the southern Abelam area. The same equation of signals was reported to me by Arapesh-speakers, and may be widespread.) The mnemonic for the 'singsing' call contains only one recognisable Abelam word (kan 'handdrum'), and that may be fortuitous; the mnemonic runs kan králte kan králte kan kálte kálte kan. This is a call beaten by two men on two drums of differing pitch (interval of a tenth); the accented syllables are those beaten on the drum of higher pitch.

Acoustic signalling by the use of wind instruments (mainly bamboo trumpets) has been mentioned by various authors (see bibliography by Hermann 1943, and Eilers 1967), but has not been studied. Trumpet signalling seems well-developed in areas where slitgongs do not occur, such as the northern 'border area' of the West Sepik District, but elsewhere may complement the use of slitgongs. Wogamusin-speakers of the Upper Sepik River (who also use slitgongs) are accustomed to carry bamboo trumpets of about ten feet long in canoes, for signalling on the

river; the signals consist of vocal noises and lip vibration amplified by the trumpets. 4 (A slitgong would normally be too large and too heavy for canoes.) In the same way, coastal dwellers frequently make use of triton or conch shells (taur) for signalling across stretches of ocean. Such deliberate use of wind instruments for signalling differs, of course, from the widespread use of flutes and whistles to represent, to the uninitiated the voices of the spirits.

5.4.10. FURTHER CONSIDERATIONS

This necessarily brief account of special languages in the New Guinea area shows how little we know of forms of language at any levels other than the most mundane - or at any levels other than those necessary for writing grammars. It is obvious that much of the sociolinguistic field is still virtually unexplored in the New Guinea area, and its exploration will be the logical sequel to the production of grammars. It is only when a linguist knows at least some of the 'special languages' that he can be said to be fully 'initiated' into the linguistics of the New Guinea area.

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NOTES

- 1. I have simplified and updated Dempwolff's orthography by writing his \Breve{a} \Breve{e} \Bre
- 2. A not unrelated linguistic phenomenon is that of Kuma youths pretending to speak English (by imitation of phonetic patterns), as observed by Marie Reay in 1953.
- 3. These and other Abelam drum calls were recorded by the author in 1960. Drum calls from Buin, imitated with sticks, were also recorded in 1967. None of these calls has yet been published. Some further published garamut signals from Buka can be found in Thomas 1931, who also has a brief but overstated note on slitgong signalling (Thomas 1965). Recordings of a slitgong signaller 'calling a man from another village' and of 'a leader of another clan being called' are to be found on the disc accompanying Curth 1968.
- 4. Recordings of bamboo trumpets played by Wogamusin-speakers from Washkuk village were made by the author in 1960.

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BIBLIOGRAPHY

ANONYMOUS

1913 'Die Garamut oder Signaltrommel der Papuas'. Steyler Missionsbote 41:155-6.

AUFENANGER, H.

'Sayings with a Hidden Meaning (Central Highlands, New Guinea)'. Anthropos 57:325-35.

AUFINGER, A.

1942-45 'Die Geheimsprachen auf den kleinen Inseln bei Madang in Neuguinea'. Anthropos 37-40:629-46.

'Secret Languages of the Small Islands near Madang'.

South Pacific 3:90-5, 113-20.

BAKER, S.J.

1966 The Australian Language. 2nd edn. Sydney: Currawong Publishing Co.

BEHRMANN, W.

'Die Stammeszersplitterung im Sepikgebiet und ihre geographischen Ursachen'. Petermanns Mitteilungen 61-5, 121-3.

BÖRNSTEIN, E.

1916 'Ethnographische Beiträge aus dem Bismarckarchipel'.

Baessler Archiv 5:229-56.

BRASH, E.T.

'Tok Pilai, Tok Piksa Na Tok Bokis: Imaginative Dimensions in Melanesian Pidgin'. Kivung 4/1:12-20.

BULMER, R.N.H.

'Why is the Cassowary Not a Bird? A Problem of Zoological Taxonomy among the Karam of the New Guinea Highlands'.

Man 2:5-25.

1968 'Karam Colour Categories'. Kivung 1:120-33.

BURRIDGE, K.O.L.

'The Slit-gong in Tangu, New Guinea'. Ethnos 24:136-50.

CURTH, H.

1968 Papua New Guinea: A Picture-Sound Book. Brisbane: Jacaranda Press.

DEMPWOLFF, O.

1909 'Beiträge zur Kenntnis der Sprache von Bilibili'. MSOS 12:221-61.

EBERLEIN, J.

1910 'Die Trommelsprache auf der Gazellehalbinsel (Neupommern)'.

Anthropos 5:635-42.

EILERS, F-J.

1967 Zur Publizistik schriftloser Kulturen in Nordost-Neuguinea. Siegburg: Veröffentlichungen des Missionspriesterseminars St. Augustin 18.

FORTUNE, R.F.

1932 Sorcerers of Dobu. London: Routledge.

FRANKLIN, K.J.

'Metaphorical Songs in Kewa'. In: Wurm, S.A. and D.C. Laycock, eds Pacific Linguistic Studies in Honour of Arthur Capell. PL, C-13:985-95.

1972 'A Ritual Pandanus Language of New Guinea'. Oceania 43: 61-76.

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FRANKLYN, J.

1936 'Cannibal Poets'. The Contemporary Review 150:341-8.

GERSTNER, A.

1934-35 'Der Rufer im Urwald'. Steyler Missionsbote 62:121-2.

GRAF, W.

1950a 'Einige Bemerkungen zur Schlitztrommel-Verständigung in Neuguinea'. Anthropos 45:861-8.

1950b Die musikwissenschaftlichen Phonogramme Rudolf Pöchs von der Nordküste Neuguineas. Rudolf Pöchs Nachlass, Serie B: Völkerkunde 2. Vienna: Österreichische Akademie der Wissenschaften.

HERMANN, E.

'Schallsignalsprachen in Melanesien und Afrika'. Nachrichten von der Akademie der Wissenschaften in Göttingen, Philologisch-Historische Klasse, 1943, Nr.5:127-86. Also separately: Göttingen: Vandenhoeck and Ruprecht.

HÖLTKER, G.

1942-45 Review of Hermann 1943. Anthropos 37-40:933-5.

LAYCOCK, D.C.

'Sublanguages in Buin; Play, Poetry, and Preservation'.
PL, A-22:1-23.

'Towards a Typology of Play-languages, or Ludlings'.

Linguistic Communications 6:61-113.

MALINOWSKI, B.

1935 Coral Gardens and Their Magic. London: Allen and Unwin.

NEUHAUSS, R.

1911 Deutsch-Neu-Guinea. 3 vols. Berlin: Dietrich Reimer.

SCHUHMACHER, W.W.

1972 'A Note on Metathesis or Disguised Speech in Oceanic Languages'. Oceania 43:153-4.

SEBEOK, T.A., ed.

1974 Current Trends in Linguistics, vol.12: Linguistics and Adjacent Arts and Sciences. 2 vols. The Hague: Mouton.

SHERIDAN, R., ed.

1958 Music of New Guinea: the Sheridan and [W.E.] Smythe Collections. Sydney: Wattle Records.

SNYDERS, J.

1968 'Le langage par tambours à San Cristoval, British Solomon Islands'. JSOc 24:133-8.

STERN, T.

1957 'Drum and Whistle "Languages": An Analysis of Speech Surrogates'. AmA 59:487-506.

THOMAS, G.

1931 'Customs and Beliefs of the Natives of Buka'. Oceania 2:220-31.

1965 'Territories Talk-Talk'. PIM 36/4:115.

TOWNSEND, G.W.L.

1968 District Officer: From Untamed New Guinea to Lake Success, 1921-46. Sydney: Pacific Publications.

UMIKER, Donna Jean

'Speech Surrogates: Drum and Whistle Systems'. In: Sebeok, ed. 1974:297-536.

WURM, S.A.

'Languages, Call'. In: Ryan, P., ed. Encyclopaedia of Papua and New Guinea. 617. Melbourne University Press in association with the University of Papua New Guinea.

ZEMP, H. and C. KAUFMANN

'Pour une transcription automatique des "langages tambourinés" mélanésiens. (Un exemple kwoma, Nouvelle-Guinée)'. L'Homme 9/2:38-88.



PART 5.5.

LEXICOGRAPHY