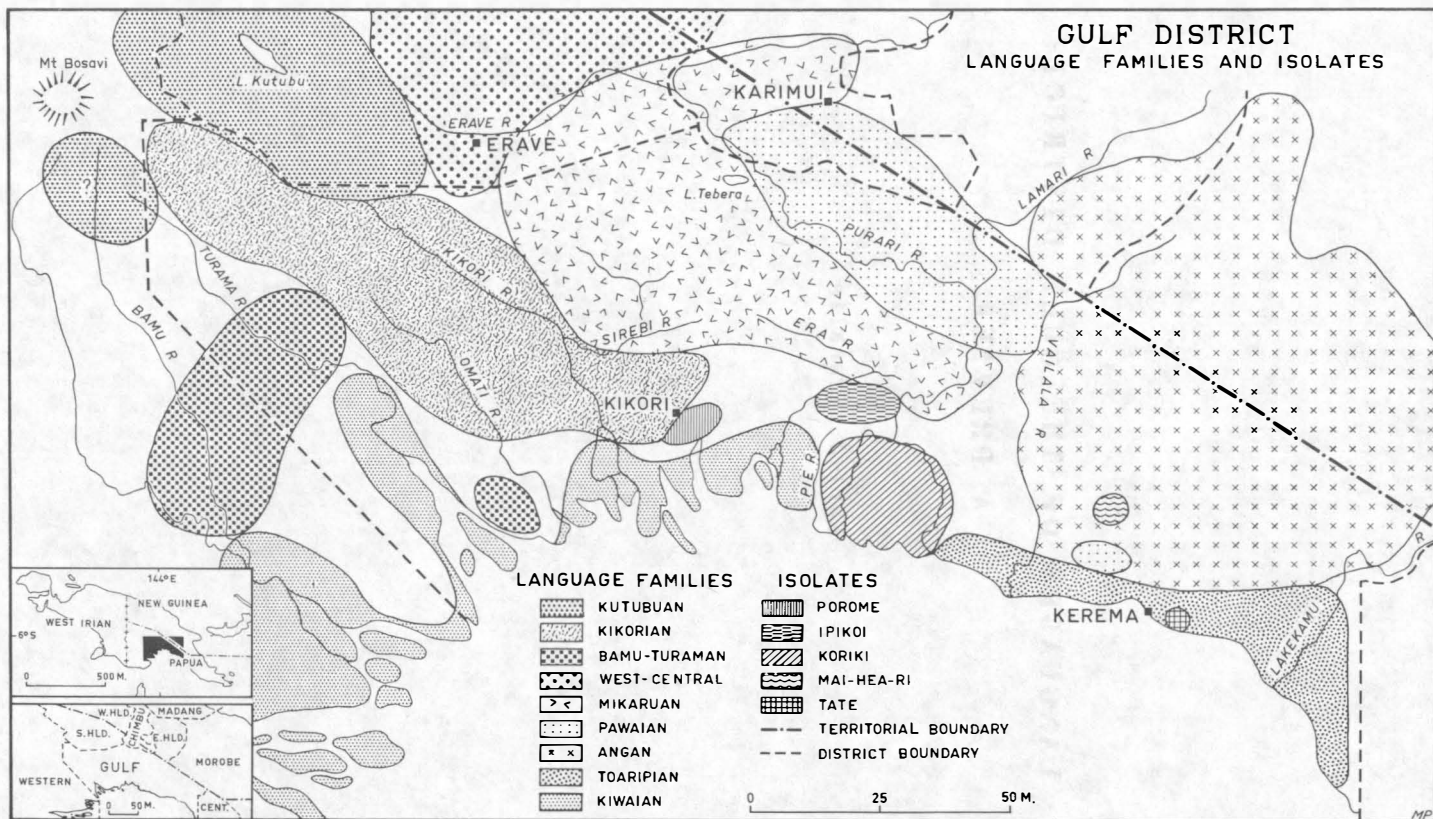


**LANGUAGES OF THE GULF DISTRICT:
A PREVIEW**

Karl J. Franklin



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0. INTRODUCTION

This article outlines and classifies the languages of the Gulf District of Papua.¹ In so doing four previously unreported Families of languages are suggested:

1. The **Mikaruan**, which extends from Karimui of the Chimbu District south and west as far as the junction of the Sirebi and Kikori Rivers (see Map), and then east to the Purari River.

2. The **Kikorian**, lying mainly along the Kikori River, but extending westward toward the Turama River area.

3. The **Bamu-Turaman**, consisting of languages between the middle Turama and Bamu Rivers, and of one language at the mouth of the Turama River.

4. The **Kutubuan**, comprising at least two languages in the area surrounding Lake Kutubu.²

1. PRELIMINARIES

1.1. Historical Summary

Prior to 1951 the Districts in Papua were called Divisions. During 1951 the Central Highlands and Delta Divisions of Papua were abolished and the former Gulf and Delta divisions were amalgamated into a single district known as the Gulf District. Administrative headquarters for the Gulf District was set up at Kerema. In 1966 the Chimbu District was formed, a small part of it from the Gulf District by crossing over the Papua-New Guinea territorial boundary (see Map inset).

The Papuan Gulf has had a long history of contact: linguistic information appeared as early as Bevan (1890), Ray

(1895), Chalmers (1897-8), and Holmes (1913).³ Two recent surveys, Loukotka (1957) and Capell (1962b), give names and limited information on languages in the Gulf District. Capell lists 19 language names on his map of the district, but several of these are not verified. Loukotka includes certain language groups, as well as language isolates, on his map and amplifies them in text by including all possible dialect names of each language. Neither Capell nor Loukotka give details on how they arrive at their language groups. The language families proposed in this article include several of Loukotka's (1957:44ff): **Mikaruan** includes his **Sesa**; **Kikorian** includes some of his **Kasere**; several of his isolates are included within other families. Many of his language and dialect names are identified in the legend at the end of this article.

The most recent attempt to summarise linguistic information on Papua is by C.F. and F.M. Voegelin (hereafter referred to collectively as Voegelins) in 1965. Their interpretations of the linguistic situation in the Gulf are frequently in error and have been examined critically in this article.

1.2. Materials and Methods

Linguistic data are primarily from three sources: vocabularies from early Annual Reports of Papua (hereafter, simply *AR*), or, as Papua was known earlier, British New Guinea; from wordlists collected by members of the Summer Institute of Linguistics (hereafter *SIL*); and from wordlists collected by Reverend John Cribb of the London Missionary Society (hereafter *LMS*). Although the *AR* lists⁴ appear often to be phonologically and in other ways defective, for many languages of the Gulf these alone are available for comparison.

The classifications proposed are based solely upon lexical data and may consequently be modified later. The number of lexical items compared between languages is given in square brackets immediately following the shared percentage figure. Percentages are a mean figure between apparent and possible cognates which have been identified by inspection. The term *Language Family* means that the languages listed as members of the Family generally show a lexical connection above 20%

in the vocabulary tested;⁵ dialects show at least a 75% lexical relationship. For the purposes of this article all dialects of one language are assumed to be mutually intelligible, but it is only at this level that mutual intelligibility is considered. Sub-classification, based upon limited intelligibility (Wurm and Laycock 1961) or upon percentage figures (Wurm 1960, after Swadesh) is not attempted, nor, at this stage, thought meaningful.

In certain instances separately published *AR* vocabularies of the same language do not show the close relationship expected. For example, vocabularies of the **Sau** language (in the Samberigi valley area, near the common border of the Southern Highlands and Gulf Districts) show less than a 70% relationship with each other. Because there was then no common trade language known throughout the hinterland, bilingual (or multilingual) interpreters assisted the government officers in collecting early *AR* lists. The interpreters, coupled with other factors such as word taboo and (in cases other than the **Sau**) the semi-nomadic nature of the people, probably contributed to skew the lexical relationships by widening them. If this is so, even closer relationships between representative members of the Families may be assumed.

2. LANGUAGE GROUPINGS

In the following presentation languages of the District are catalogued according to their postulated Family relationship. Several apparent language isolates are labelled "Unclassified". References in parentheses immediately following language names are to the major sources of data. The languages are designated by numerals, and subscripts to numerals designate dialects. Any name with the suffix *-an* (or *-n*) always represents a language Family.

2.1. The Kiwaian Family

Beginning west of the mouth of the Fly River of the Western District and extending east along the Gulf of Papua to the Era Bay is a large number of related languages which Wurm (1951) calls the Kiwai(an), after an island by that name. One area, called the North-Eastern, is within the

Gulf District and is further subdivided into: (a) the Western, with the **Turama River** and **Kerewa-Goari** languages, and (b) the Eastern, with the **Urama-Iwainu** and **Era River** languages.⁶ According to Wurm (1951:7ff) this NE group of Kiwaian contains some strong non-Kiwaian elements, but even so, **Kerewa** shares a 52% lexical relationship with "the majority" of other Kiwaian languages. The Family as a whole shares a 50-65% lexical relationship between the languages (p.77). The Kiwaian Family languages in the Gulf District on which we have data are:

(1) **Kerewo** (J. Cribb, *LMS*) which is spoken in the area from the West bank of the Omati River east and inland to the village of Samoa, near Aird Hills.

(2) **Gope** (J. Cribb, *LMS*) apparently spoken from the boundaries of Kerewo east to at least the Wapo River.⁷ **Gope** shows a lexical relationship of between 51-59% [98 words] with **Kerewo**.

(3) **Turama** (Brown *et al*, *SIL*) is spoken on both banks of the lower reaches of the River by the same name, and may also include the Gama River area.

(3a) **Wariadai** and (3b) **Umaidai** (*AR*, 1923-4) appear to be closely related dialects on the west bank of the Turama River area. Lists in the *AR* were taken at the villages of Kesumubu and Iosiku. Austen's map (1934) calls the whole area the **Turamarubi**, meaning people of the Turama River area.

There are reported to be an estimated 5500 speakers in the North-Eastern group of Kiwaian (Wurm, forthcoming).

2.2 The Toaripian Family

One language Family extends from near the Purari River at the west to east of the Miaru River (near the border of the Gulf-Central Districts). Ray (1907:322ff) listed seven languages for this area which he said "are all more or less related to each other". Capell (1962:140ff), on the other hand, lists four names which he says "are all branches of one language, though not mutually intelligible".⁸ By comparing the information of Capell and Ray (which was based mainly on Holmes), as well as *SIL* and *AR* wordlists, the following languages seem to be well attested:

(1) **Toaripi** proper (Brown *et al.*, *SIL*; *AR*, 1890-1; Holmes 1924) includes the two languages called **Moaripi** and **Lepu**, both eastward toward Cape Possession.⁹ Lists by Brown *et al.*, *SIL*, suggest there may be at least three other dialects, each related by at least 75% [50] with **Toaripi**:

(1a) **Kaipi**, from the village of Silo; (1b) **Opau**, inland on a river by the same name and taken from the village of Malakera, near Kerema; and (1c) **Petoi**, west of the Kerema bay. Although the latter two are geographically quite close, they show a number of apparently regular sound changes, e.g. (O)pau #k > (P)etoi #t O - ~~h~~ - > P -m- O#l > P #n; and O #h > P #p. These three dialects comprise areas referred to as **Kerema** by Capell, which in turn includes the language areas which Ray called **Uaripi** and **Milarepu**.

(2) **Elema** (Brown *et al.*, *SIL*; *AR* 1914-15; 1919-20) extends from the mouth of the Purari River east to the Bairu River. The name **Elema** is apparently a Motu designation for people in the general Orokolo area (Williams 1940:24ff), but, as mentioned, Williams applies the name to all of the people between Cape Possession and the Purari River. It includes the main villages of **Orokolo** (see also Williams, 1940) and **Vailala**, which may also be dialects. The *AR* list from near Orokolo shows a 65% [35] relationship with Toaripi, while the list taken up the Vailala River at Paku shows only 53% [38]. Compared with each other, the *AR* lists are cognates in 24 out of the 28 words tested.

2.3. The Angan Family

The Angan or Kukukuku Family of languages centres on the Papua-New Guinea boundary and has up to eleven member languages.¹⁰ Based on Lloyd's map (*SIL*, n.d.) three of these languages extend into, or totally lie within, the Gulf District. However, *AR* reports suggest only one major language consisting of numerous dialects:

(1) **Kapau** proper (W. and L. Oates, 1968; Brown *et al.*, *SIL*) extending from the Morobe District well into the Gulf District mainly along the Tauri and Kapau Rivers, but as far inland east to the Lakekamu River (approximately the border of the Gulf and Central Districts). At least three dialects are apparent in the Gulf District: (1a) **Lohiki**, spoken from the Vailala River north and along the Lohiki River, then

perhaps north and northeast. It shows an 86% [50] relationship with the dialect spoken further east at the Nabo Range - (1b) **Mumuro**. **Lohiki** may be what Lloyd tentatively calls **Obi**. (1c) **Oreba** (AR, 1918-19) is spoken along a river of the same name which is a northeastern tributary of the Lakekamu. It shows a close relationship with Mumuro (20/22 words), including some easily recognised sound shifts: M #h > #ʔ, M -r- > -t-.

There are undoubtedly many other dialects of **Kapau** but at present there is no linguistic evidence which suggests more than this one Angan language in the Gulf District.

2.4. The Pawaian Family

Wurm (forthcoming) places Pawaia as a language isolate within the East New Guinea Highlands Phylum. However, there are two known, although closely related, languages in the Family, as well as dialects of the languages. The geographical spread of this Family is immense: from Karimui in the Chimbu District south along the Pie River, and then (probably) south along the Purari to near the Koriki language area. In addition a settlement has been found as far southeast as Pollard's Peak (northwest of Kerema).¹¹ Based on other observations by Hides, as well as Capell, it seems that the Pawaian have roamed far west into the area mapped for the Mikaruan. According to Hides the names "Pawaia" and "Turoha" were known and feared throughout the Kikori hinterland. Williams (1924), however, does not mention any of the Pawaian names in sketching the boundaries and neighbours of the Koriki tribes. At present there are but two Pawaian languages known:

(1) **Pawaia** proper (D. Trefry, *SIL*) is spoken in the Karimui area, south along the Pie, and along the Purari River by some 2000 people.

(2a) **Aurama** (AR, 1919-20, J. Cribb, *LMS*) is spoken half-way up the Purari in the present day vicinity of Oroï.¹² It is 70-72% [98;51] related to Pawaia and includes as a dialect (2b) **Huaruha** at the village of Havoro, at Pollard's Peak. The latter is 84% [56] related to **Aurama**, but only 60% [35] with **Pawaia**.

2.5. The Mikaruan Family

Extending from Karimui in the Chimbu District south to the headwaters of the Era River, then west to the junction of the Sirebi and Kikori Rivers, and then finally northwards to the Kerabi valley (near the southeastern border of the Southern Highlands District) is a large but yet undetermined number of related languages and dialects. Relationships within the proposed Family are very tentative.

(1) **Mikaru** proper (G. MacDonald, *SIL*) is a language spoken near Karamui and shows a 45% [170] relationship with

(2) **Kewah** (G. MacDonald, *SIL*), a language spoken somewhere in the vicinity of the junction of the Tua and Erave (upper Purari) Rivers.

(3a) **Polopa** (K. Franklin, *SIL*) is a dialect comprising some 1500 speakers, mainly in the Kerabi valley at the villages of Keba, Kumbirepa, Turibadi, Wopasali, Boro, Pupitau, Sirigi, Sepese, and Suani.¹³ **Polopa** shows a 45% [170] relationship with **Kewah**, but only up to 25% [170] with **Mikaru**, indicating (perhaps) that **Kewah** is the genetic link between 1 and 3.

(3b) **Foraba** (*AR*, 1922-3) is a dialect spoken north of Mt Murray, ten miles or so east of the Polopa area. The *AR* list shows up to a 75% [70] cognate relationship with **Polopa**. This, along with the phonetic resemblance of the names, suggest that **Polopa** and **Foraba** are dialects.

(4a) **Bara** (*AR*, 1919-20) represents the village of Uari Sagi between the Kiko (now Kikori) and Sibi (now Sirebi(?)) Rivers at the headwaters of the Anu Creek. **Bara** is about 60% [58] related to **Polopa** (3a), 37% [58] related to **Mikaru** (1), and 86% [76] related to **Ro** (4b).

(4b) **Ro** (*AR*, 1922-3), which is also called **Keai** or **Worugl**, and **Bara** are dialects; **Ro** is located east-southeast of Mt Murray near the headwaters of the Sirebi River. The *AR* list is said to represent the villages of Muimani, Suru, and Abasariba. **Ro** is also closely related to **Polopa** (55% [66]) and **Foroba** (50% [85]) and may, with **Bara** actually constitute a dialect chain from the Kerabi valley area south to the junction of the Sirebi-Kikori Rivers.¹⁴

(5) **Sesa** (*AR*, 1924-5) is a language spoken in an area on the north bank of the Era River where it is joined by the

Aweri Creek, twelve miles above Maipua. The village where the list was collected is called Hai-i. **Sesa** shows up to a 45% [65] relationship with **Polopa**.

(6) **Ibukairu** (AR, 1920-1) vocabulary items were collected at the village of Wiau which is northeast of the Kuro Creek, off the Kwinic River (creek), i.e. just north of the **Sesa** and south of Lake Tebera. **Ibukairu** may eventually be classified as a dialect of **Sesa** in that it shows well over a 50% [65] relationship with it, as well as up to a 48% [62] relationship with **Polopa**.

Another language name known within the area is **Harahui** (J. Cribb, personal communication), which is said to be between the upper Purari and Mt Murray. This name is very similar to **Harahu** which Capell (1962) lists on his map as an unclassified language in the vicinity of **Bara**. The mobility of the people, and consequently the shifting of tribal names, suggest a possible dialect chain for some of the languages postulated earlier.

Capell (1962b:139) also lists the languages of **Mamisu** and **Songu** in the Lake Tebera area on the basis of information from A.P.C. oil expeditions. The former group are said to reside on island villages in the lake. It is doubtful that these languages would be very different from **Sesa** or **Ibukairu** (5 and 6).

2.6. The Kikorian Family

In general the languages which lie along the southern banks of the Kikori River, and extending as far westward as the Turama River, are closely related. The languages and dialects which are known to exist in this area are:

(1a) **Kasere** (Brown *et al*, Austen's map, 1934) appears to be spoken somewhere around the areas southeast of Kibirowi Island on the Kikori River. Brown's list (comprising only 50 words) was elicited from a speaker of Sorobc village.

(1b) **Kairi** (Brown *et al*) apparently is spoken not far from Wabi Island on the Kikori River. The speaker was from the village of Komaioc. **Kairi** shows a 74% [50] relationship with **Kasere**.

(2) **Barika** (AR, 1921-2) vocabulary was taken at a village called Aso-nu which is (or was) eight miles northeast by

east from the headwaters of the Omati River. **Barika** shows a fairly close relationship with **Kasere** (57% [33]) and may actually be a dialect of **Dugeme** (3a).

(3a) **Dugeme** (AR, 1923-4) shows a 66% [62] relationship to **Barika**. The AR list was taken at a village which is also called Sorobo (see **Kasere**), said to be fifteen miles north-west of the headwaters of the Paibuna River.

(3b) **Karima**¹⁵ (AR, 1919-20) is also said to be in the area at the headwaters of the Paibuna River and has been included here as a dialect with **Dugeme**, even though it shows only a 70% [63] relationship. **Dugeme** and **Karima** should, when more information is available, turn out to be even more closely related. **Karima** shows only a 44% relationship with **Barika**, compared to 66% for **Dugeme**.

(4) **Kibiri** (AR, 1917-18) is also called **Kai-iri** or **Dumu**.¹⁶ It is said to be spoken along several tributaries of the Kikori River: the Veru River, the Momera Creek, and the Sirebi River. The last at least is also reported to be **Bara** (cf. 2.5., 4a) territory. **Kibiri** shows the following relationships with languages of the assumed Family: **Kasere** - around 20% [50]; **Kairi** - around 25% [50]; **Barika** - around 18% [110]; with **Kopo-Monia** (see below) - over 50% [50]. Only two or three words show any similarity with **Bara**.

(5) **Kopo-Monia** (Brown *et al*) is spoken mainly north of the government station of Kikori at the villages of Irimuku, Kabarau, Kopi, Waira, and Tugugi. **Kopo-Monia** shows only a 14% [50] relationship with **Kasere**, but has a chain relationship up the Kikori River similar to **Kibiri** and is therefore included within the Kikorian Family.

2.7. The Bamu-Turaman Family

Three languages are included within this Family, none of which show more than a chance relationship with the Kikorian Family, i.e. one or two words:

(1) **Pepeha** (AR, 1920-1) is also referred to as the **Eme-Eme** tribe. The AR list was collected two miles southwest of Hibiri on the Paibuna River. According to Austen (1934:25), the **Pepeha** are the same as the **Hei**, who live between the Bamu and Turama Rivers.

(2) **Mahigi** (AR, 1923-4) is 37% [95] related to **Pepeha** and

is located around the fork of the Aworra and Bamu Rivers.

(3) **Karami** (*AR*, 1917-18) is related to both **Pepeha** (16% [80]) and **Mahigi** (15% [80]) about equally. The list is said to represent the villages of Kikimairi and Aduahai on the right hand side of the left branch of the Turama River. It is tentatively included as a member of the Family because other languages which are also assumed members appear to lie between it and **Pepeha** or **Mahigi**. These additional but unrecorded languages should demonstrate the relationship of the Family more clearly by serving as a link between **Karami** on the one hand and **Pepeha** and **Mahigi** on the other.

2.8. The Kutubuan Family¹⁷

Within this Family there are two languages which adjoin or cross over the Southern Highlands District into the Gulf District:

(1) **Foi** (Rule, *UFM*; ¹⁸ Brown, *et al.*, *SIL*) is a language spoken east and south of Lake Kutubu. An identical dialect is spoken on the Mubi River which includes three tribes: Mubi, Fimaga and Ifigi (Williams 1940-1:12,13). The **Foi** are cut off from the Kikori River by rapids on the Mubi (*AR* 1926-7:35). Although **Foi** shows little relation to **Kasere**, the **Foi** people originally obtained steel axes from such groups along the Kikori River (*ibid.*, p.36). **Foi** shows a 25% [165] lexical relationship with **Fasu**.

(2) **Fasu** (J. May and E. Loeweke, *SIL*) is spoken west and southwest of Lake Kutubu by several dialects. It appears that the southernmost dialect of **Fasu** may cross over to the west bank of the Kikori River, east of Mt Bosavi. Voorhoeve (this volume) includes **Fasu** as a language isolate within his South and Central New Guinea Stock.

May and Loeweke have been told that **Fasu** speakers (a dialect?) are also located at the headwaters of the Turama River, i.e. south, southeast of Mt Bosavi. Some of the possible wider affinities of Kutubuan are mentioned later.

2.9. Unclassified Language Isolates

Several languages within the Gulf District do not show any lexical relationship with each other or the Families described:

(1) **Tate** or **Tati** (Strong, 1911) is spoken at the village of Uriri which is located "on the Cupola, a rocky promontory on the shores of the Papuan Gulf, close to the village of Kerema" (p.178). Strong remarks that in his list of 240 words, fifteen are similar to and probably borrowed from **Elema** (Toaripian Family). Ray examined Strong's list and appended a total of seventeen apparent borrowings from Melanesian languages to the east.¹⁹

(2) **Mai-hea-ri** (AR, 1917-18) is said to lie in the valleys between the Nabo Range and the Albert Mountains. Villages which speak this language are Karauwi, Papikava, and Arowa Hawoiu.²⁰

(3) **Ipikoi** (AR, 1925-6; J. Cribb, *LMS*) shows a very slight relationship with **Kibiri**. The village where the AR list was collected was a temporary one called Amipoki and the people were semi-nomads at that time living about 30 miles up the Pie or Kapaina River. Cribb's list is from the village of Ipiko, also on the upper Pie River. The two lists show 81% [31] in the few words that it was possible to compare.

(4a) **Koriki** (Williams, 1924; Brown *et al*, *SIL*; J. Cribb, *LMS*), also commonly called **Namau** by both Ray (1907) and Holmes (1913), is spoken between the Kapaina Inlet and the Elema language area by about 4000 people.²¹ Holmes (1913: 125) says that **Namau** refers to the Vaimuru tribe in the Era Bay, the Kaimare tribe east of the Pie River, and the Iai tribe inland near the eastern boundary of the delta. Williams (1924:5) lists four tribes and calls them all **Purari** (= **Koriki**) speakers: (a) Ukiravi (sometimes called Koriki), (b) Iari, (c) Kaimari, and (d) Baroi. Kaimari includes the villages of (e) Vaimuru and (f) Maipua, of which the latter is probably a separate dialect. Maher (1961:14ff) says that a-f are tribes which speak dialects of a common language.

(4b) **Maipua** (AR, 1893-4) is probably a close dialect of **Koriki** (Capell 1962:137). According to Brown *et al* (unpublished) other villages which speak the same dialect are: Akoma, Apiope, Ara-av, Baimuru, Ikinu, Kinapo, Kaimana, Koravake, and Kairimai.

In 1890 Bevan published a list of 72 words and expressions of a language which he called **Evorra** after a village

on the Stanhope River (now Pie River) of Port Romilly. Allowing for phonetic discrepancies the list matches that of Williams (1924) and can be classified as a Koriki dialect. Williams (1924) and, more recently, Maher (1961), have given ethnographic summaries of the Koriki area.

(5a) **Porome** (Brown, *et al SIL*; J. Cribb, *LMS*) is spoken in the Aird Hill area and is mentioned by Capell (1962:138) as a language distinct from **Dumu** or **Kiwai**. It shows a close 85% [165] relationship with the dialect (5b) **Veiru**, spoken by villagers at the junction of the Veiru River with the Kikori River.²²

3. OTHER POSSIBLE GULF LANGUAGES

There are undoubtedly other languages than the ones outlined in this article that lie within the Gulf District. However, in no instance has a language or dialect been included without some linguistic data to support it. Other linguists and writers have mentioned names which are reported to be separate languages; some of these are even included on maps. In this section a list of these unverified language names is given, followed by, in some cases, a comment on their likely placing:

(1) **Harahu** (Capell, 1962:139 and on his Gulf District map), and (2) **Songu** (*idem*) are supposed to be spoken near Mt Favenc (=Faveng). These would seem to be quite clearly our **Sesa** and **Ibukairu**. Capell, however, speaks of **Harahu** and **Songu** as "two regions both near Mt Favenc" (p.139). Although both names appear as language designations on his map, it is unclear in the text if the same language is found at both areas, or if both areas speak a different language. Voegelins (1965:40) interpret Capell's remarks as the latter and list **Harahu**, **Songu** and also (3) **Mamisu** as languages. Capell quotes A.P.C. oil explorers as saying **Mamisu** is spoken on islands of Lake Tebera. If this is so, it is most likely a language of the Mikaruan Family, in that Pawaian languages are east of the Purari or on islands in the Purari. (4) **Waiiemi**, (5) **Morigi Island**, and (6) **Kibene** are also on Capell's map as languages in the Gulf District. **Kibene** is said to have "much vocabulary in common" with other languages of the upper Turama and Paibuna Rivers, "probably

including the Omati River" (p.138). This would suggest that **Kibene** is probably in the Bamu-Turaman Family. **Morigi Island** must be either a Kiwaian language, and if so a dialect of **Turama**, or else related to **Pepeha**. The former is more likely, in that Austen includes Morigi Island as part of the Turamarubi group.²³ The island is located at the mouth of the Turama River. Capell's **Waiemi** is located inland between the Kikori and Turama Rivers. No other information is given by Capell, but all languages now known in this area belong to the Kikorian Family.

Lloyd of *SIL* has an Angan language called (7) **Yeripa** on their map with a question mark. This and their (8) **Obi** are in the vicinity of, and probably similar to, the **Lohiki** dialect of **Kapau**.

Austen (1934) prepared a map which outlines in great detail names of language groups, language group boundaries, tribe boundaries, tribes and villages. However, very few of the languages other than those in the Kiwaian Family are mentioned in the text, so that it is impossible to fully interpret the map. The name *tribe* is of course also ill-defined. It usually refers to some sort of a descent group which may either be localised (as is the case of the various tribes representing the **Koriki** language), or nomadic (as would be the case of the people around Lake Tebera or along the upper Purari River).

4. WIDER AFFINITIES

Some of the wider possibilities of linguistic affiliation have been mentioned by Voorhoeve (this volume) and Wurm (forthcoming). Voorhoeve's Central and South New Guinea Phylum already includes Kutubuan and Kiwaian and, depending on the interrelationship of the Kutubu-Kikorian Families, will quite likely include Kikorian. The position of the Bamu-Turaman Family is not as certain but it may also be included realistically within the Phylum.²⁴

Wurm, as mentioned, has already included the Mikaruan and Pawaian Families within his East New Guinea Highlands Phylum. He has also included **Foi** as a language isolate, but this conflicts with our (and Voorhoeve's) evidence that Kutubuan belongs within the *CSNG* Phylum. It may, however, eventually be linked to Wurm's *ENGH* Phylum, but through the

West-Central Language Family. There is evidence of a lexical relationship between **Kewa** in the Southern Highlands District and **Fasu**. A dialect of **Kewa** borders **Foi** which in turn geographically separates **Kewa** and **Fasu**. There is also evidence of much culture contact between **Foi** and **Augu**, a **Mendi** dialect of the West-Central Family (Williams 1940-1). It is too early to positively conclude that **Fasu** or **Foi** and languages of the West-Central Family are genetically related. It appears, however, that the link of the Kutubuan with the *ENGH* Phylum should be investigated along this avenue, rather than as language isolates - **Fasu** in Voorhoeve's *CSNG* Phylum and **Foi** in Wurm's *ENGH* Phylum.

CHART 1, in a very superficial and limited manner, illustrates three words which are common across language Families. Most examples are from the *ARs* where, in some cases, polymorphic entries are identified with parentheses.

<i>Languages</i>	<i>Grouping</i>	<i>eye</i>	<i>cassowary</i>	<i>dog</i> ²⁵
Kasere		si		kas
Kairi		si		kas
Barika		si	sigina	kase
Dugeme	Kikorian	si	sigina	kase
Karima		isi(tumu)	kaibavo	kase
Kibiri		(hi)hi(tu)	wai	ka
Kopo-Monia		hi(tu)		ka
Pepeha		kupina	koiboau	gaso
Mahigi	Bamu-	kuhiru	henia	gahola
Karami	Turaman	epegu	koibo	kso
Ipikoi	Unclassified	uwino	hinia	gaho
Fasu		hi	sikina	kasa
Foi	Kutubuan	i	guru	gesa
Kaluli(Bosavi) ²⁶		siyo	gusuwa	gasa
Beami	CSNG Phylum	si	wida	wæme

5. SUMMARY

There are eight distinct language families and five language isolates within the Gulf District. Three families, the Kiwaian, Angan and Kutubuan, are peripheral to their main areas which lie respectively in the Western, Morobe and Southern Highlands Districts. It is also possible that the southernmost language in the West-Central Family, i.e. **Sau** (Wurm 1960), overlies the Gulf-Southern Highlands border.

Of the 44 dialects outlined in this article, 29 are classified as individual languages. The aspects of this classification will undoubtedly change after the proposed survey, but the Families outlined here seem well established.

Several of the language Families as well as one language isolate show more remote affinities.

All of the evidence is lexical and the problem of wider and wider classifications, e.g., macro-phylums, and then macro-macro-phylums must be treated with caution. The classification of New Guinea Papuan (Non-Austronesian) languages has already been too extensive and needs more supporting comparative evidence.

6. LEGEND

In this section all Gulf languages or dialects which have been verified, as well as some neighbouring languages of other districts are listed alphabetically, followed in parentheses by the language family of which they are a member. Alternate names and their sources conclude each entry.

- AURAMA (Pawaian) Turoha and Uri (Hides 1938);²⁷ cf. Huaruha
 BARA (Mikaruan) Harahui (Cribb, n.d.); Harahu (Capell 1962)²⁸
 BARIKA (Kikorian)
 DIBIASU (Bamu-Turaman(?))
 DUGEME (Kikorian)
 ERA RIVER (Kiwaian) (Wurm, 1951)
 ELEMA (Toaripian) Orokolo (Ray 1892; Williams 1940); Kairu-Kaura²⁹ (AR 1920-1); Haira (AR 1914-15); Kaipi (Brown *et al.*, Loukotka 1957); Muru (Loukotka 1957)

- FOI (Kutubuan) Kutubu and Mubi River (Williams 1940-1);
Foi-i or Mobi River (AR 1926-7)
- FORABA (Mikaruan)
- GIBARIO (Kiwaian) Goaribari (Ray 1913-14); Kerewa-Goari
(Wurm 1951); Baia (Ray 1907)
- GOPE (Kiwaian) Era River (Wurm 1951); Paia (Ray 1907)
- HUARUHA (Pawaian) Dialect of Aurama
- IBUKAIRU (Mikaruan)
- IPIKOI (Unclassified) Ipiko (Williams 1924)³⁰
- KAPAU (Angan) Menyanya; Kukukuku (Voegelins 1965). In-
cludes our Lohiki, Mumuro and Oreba dialects; Inaukina
(Loukotka 1957)
- KAIRI (Kikorian) Also Gairi
- KAIPU (Kutubuan) Dialect of Fasu
- KARAMI (Bamu-Turaman)
- KARIMA (Kikorian) Dikima (AR 1926-7); Kibene (Capell 1962).
As a Phylum (Voegelins 1965)
- KASERE (Kikorian) Waiiemi (Capell 1962); possible dialects:
Pimuru, Gorau, Utabi (Loukotka 1957)
- KASUA (Kikorian) (?)
- KEREMA (Toaripian) Our dialects of Kaipi, Opau (Loukotka
1957) and Peto; Uaripi (Ray 1907); Milarepu (Ray 1913-
1914). Milareipu (Loukotka 1957)
- KEREWA (Kiwaian) Kerewa-Goari (Wurm 1951); Baia (Ray 1907);
Kerewo (Austen 1934)
- KEWAH (Mikaruan) Kewá' (Wagner 1967)
- KIBIRI (Kikorian) Kai-iri (AR 1917-18);³¹ Dumu (Bevan
1890; Capell 1962); Tumu (Ray 1895); Rumuwa (Austen
1934)
- KOPO-MONIA (Kikorian)
- KORIKI (Unclassified) Evorra (Bevan, 1890), Evora (Loukotka
1957); Kaura (Holmes 1913),³² Namau (Holmes 1913);
Ukirave and Kipaia (Williams 1924); Purari (Williams
1924); Kaimare (Loukotka 1957)
- LEPU (cf. TOARIPI)
- LOHIKI (Angan) Dialect of Kapau; Obi (?) (Lloyd, n.d.)

- MAHIGI (Bamu-Turaman)
- MAIPUA (Unclassified) (Loukotka 1957) Vaimuru and Kaimari
(Williams 1924); cf. KORIKI
- MAI-HEA-RI (Unclassified) Possibly Opau (AR 1922-3)
- MAMURO (Angan) Lakekamu (AR 1916-17); Kamaweka (Ray 1907)
- MIKARU (Mikaruan) Karimui; Daribi (Wagner 1967)
- MILAREIPU (cf. KEREMA)
- MOTUMOTU (cf. TOARIPI)
- OBI (Angan) Perhaps same as Lohiki
- OREBA (Angan) Dialect of Kapau
- OROKOLO (cf. VAILALA)
- PAWAIA (Pawaian) Sira (Capell 1962)
- PEPEHA (Bamu-Turaman) Eme-Eme (AR 1920-1); Hei (Austen
1934); Oberi (Loukotka 1957)
- POLOPA (Mikaruan)
- POROME (Unclassified)
- RO (Mikaruan) Keai or Worugl (AR 1921-2)
- SAU (West-Central) Samberigi; Okani or Tugi (AR 1921-2)
- SESA (Mikaruan) Mamisu and Songu (Capell 1962)
- TATE (Unclassified) Tati; Lorabada or Lou (Brown *et al*
1961)
- TOARIPI (Toaripian) Moaripi (Ray 1907); Lepu (Ray 1913-14);
Motumotu (Chalmers 1897)
- UARIPI (cf. KEREMA)
- UMAIDAI (Kiwaian) Turamarubi (Austen 1934). This and
Wariadai (below) Turama River (Wurm 1951); Baru (Austen
1934)
- URAMA (Kiwaian) Urama-Iwainu (Wurm 1951); Kaa (Ray 1907);
Iwainu (AR 1917-18)
- VAILALA (Toaripian) Keuru (Ray 1907); this and Orokolo is
Elema; Baibala (Loukotka 1957)
- WARIADAI (Kiwaian) Perhaps Dabura (Ray 1907) and Morigi
Island (Capell 1962)³³
- YERIPA (Angan) (Lloyd n.d.)

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NOTES

1. This preliminary report anticipates a more detailed survey of the Gulf District, proposed for early 1969 and to be carried out by the writer. I am grateful to T.E. Dutton, C.L. Voorhoeve, and S.A. Wurm of the Australian National University for comments on a previous draft of this article.
2. This Family lies almost completely within the Southern Highlands District, but borders on and probably extends into the Gulf District along the upper Kikori River.
3. A bibliography of the Papuan Gulf languages by Ray (1913-14), as well as a map by him (1907), summarises all of such very early language materials.
4. Klieneberger (1957) gives an excellent alphabetical listing of all *AR* vocabularies, although his language distributions and classifications are at times inconsistent.
5. No attempt has been made to adjust the percentages as if a full 200 items were being compared - as C.L. Voorhoeve does in his article on the Central and South New Guinea Phylum (*CSNG* Phylum) in an accompanying article of this volume. Earlier Wurm (1960:126) used the percentage figure of between 28% and 81% cognates as depicting a Family relationship. Wurm and Laycock (1961:140) later lowered the figure to 60%, which represents "at least limited mutual intelligibility". This, it seems to me, is much too low: distinct languages with which I am acquainted in the Southern Highlands would be considered dialects.
6. For a summary of Wurm's materials see Capell (1962b: 131ff).
7. Language or dialect boundaries are only suggestive. Cribb (personal communication to *SIL*) mentions a third Kiwaian "dialect" called *Urama*. This, with Wurm's *Iwainu* continue east to the Era River. However, Wurm (1951.2;96)

also mentions the **Era River** language which he says "shows the same typical features of the north-eastern group as **Urama** and **Iwainu**" but has some very atypical vocabulary. He suggests that words from **Gogodara** and **Waruna** (in the Western District and perhaps, with **Tirio**, a Family of the South and Central New Guinea Stock - see Voorhoeve, this volume) may have come into the **Era River** language. This remark may have prompted the postulation of a Kiwai Phylum (Voegelin 1965: 37). Loukotka's comment in *Current Anthropology* (1962:415) also points in this direction.

8. Williams (1940:25ff) called the population from Cape Possession to the Purari River the **Elema** and said that the area was divided into "some dozen territorial units which may be called tribes". He said that all of them "speak mutually intelligible dialects". Certainly the linguistic situation has changed very rapidly since Ray's assessment and **Toaripi** is now the dominant lingua franca for most of the area. Voegelins (1965:41-2) follow Capell and list four distinct languages. **Orokolo**, **Vailala**, **Kerema**, and **Toaripi**.

9. In 1907 Ray (p.324) stated that **Moaripi**, consisting of the villages of Jokea, Miaru and Lese had been supplanted by **Toaripi**. Lepu comprises the area closest to the Melanesian languages of **Roro** and **Mekeo**, both in the Central District, although **West Mekeo** is spoken at the village of Apinaipi, just within the Gulf District and at two villages near the junction of the Kunimaipa and Lakekamu Rivers.

10. R. Lloyd (*SIL*) confirms the classification of this Family, first postulated by S.A. Wurm (1960). Voegelins (1965:40-1) list seven member languages, but this includes **Samberigi**, which is in the West Central Family (Southern Highlands), **Wantakia** and **Barua**, which are called one language by Lloyd, and (probably) **Mumeng**, which, if it is **Buang-Mangga** as Voegelins suggest, is Austronesian (see Hooley 1964:247). Lloyd recently (personal communication) suggests that **Langimar** is more distantly related to other Angan languages. He also states that **Obi** and **Yeriba** are distinct Angan languages in the Gulf District.

11. The semi-nomadic nature of the Pawaian may render local information quite misleading; for example, the list taken at

Pollard's Peak may have been from a group temporarily settled in the area. In 1938 Hides reported four main nomadic tribes along the banks of the Purari: the **Uri**, the **Pawaia**, the **Naiakaia**, and the **Turoha**. Capell (1962:139) says that **Pawaia** [**Pawaia**] is spoken by people at Namaina, Keka, Taraha, Sira and Sesa, as well as being understood at Yo, to the east. However, Sesa is clearly in the Mikaruan Family, which is in turn only remotely related to the Pawaian Group. The blank area on the map between the Purari and Vailala Rivers is most likely Pawaian territory.

12. The *AR* list was collected at a village called Uo-Ho. Orio is near the now extinct village of Uri mentioned by Hides (1938) and marked on early maps.

13. **Sau** (Samberigi) villages which are eastward understand **Polopa**. Tiri, Tomo, and Waraga. The **Wiru** (*W-C* Family, Wurm 1960) and **Polopa** have social contact, but neither **Wiru** nor **Sau** show more than a remote lexical relationship with **Polopa**.

14. Interpreters who were used for several of these lists were from the Samberigi Valley (the **Sau** language), indicating that if a **Sau** speaker could understand **Foroba**, i.e. his nearest Mikaruan neighbour to the east, he could also understand other Mikaruan dialects or languages of the area. Apparently government officers asked what other villages spoke the language being collected and these names are usually listed at the top of the lists in the *AR*. However, it is questionable that **Foroba** speakers also reside in Dono, Iangorigi, Wariga, Suguburu, and Warerigi, or that some of these are anything more than the **Sau** words for the areas. **South Kewa (Pole)** speakers call an isolated sub-dialect of their language in the Kerabi Valley area "Yangori".

15. Voegelins (1965:60) follow Loukotka (1962:415) in postulating a Karima Phylum, despite the fact that they did not know where its member languages were located. As has been shown, the languages are closely related linguistically and are along the Kikori River.

16. **Dumu** has been perpetuated since Bevan first recorded some words and expressions in 1890 (see, for example, Ray

1907:322, Capell 1962:138; Voegelins 1965:39). Klieneberger (1957:36) correctly lists **Dumu** and **Kibiri** as the same language, in that Bevan's short vocabulary and the *AR* list are almost identical. Part of the confusion is one of language names and naming: Bevan thought **Dumu** referred to a group of people or a village, but as Beaver has shown (1914:136), the word simply meant 'bush'.

17. Voegelins (1965:12ff) follow Loukotka (1962:415), who speculated wildly when he suggested that **Kutubu (Foi)**, **Sesa-Ibukairu**, **Ro-Keai-Bara**, **Foraba**, and **Pawaia** constitute a Sesa group. Aside from **Kutubu** and **Pawaia**, which are related only as possible language isolates in Wurm's *ENGH* Phylum (Wurm, forthcoming), all other languages are outlined in the Mikaruan Family. There is nothing to support Voegelins' suggestions that "further work may show that languages of the group [Sesa] are members of a family, rather than language isolates" (p.13). Pawaian and Mikaruan show slight relationship (less than 5% [165]) and this is probably simply the result of borrowing.

18. W. and J. Rule of the Unevangelized Field Mission (*UFM*) have studied **Foi** for a number of years. Vocabulary has been extracted mainly from their unpublished M.A. theses and then compared with other materials. The area Williams mentions is the upper Mubi (around the present *UFM* Orokana mission station), but the *AR* reports refer to the lower Mubi near the Gulf District border at the Kikori River. Voegelins (1965:13) mention 6 dialects of **Foi**, but 4 of them are simply Williams' villages in the present Orokano area. Voegelins also speak of the dialects of **Kutubu** and **Foi**, but Williams says these are the same.

19. In 1961 Brown *et al* recorded materials from a language which they called **Lorabada** or **Lou** from the village of Uriri. This is also the **Tate** language. Hogbin (1964) includes **Tati** speakers from Uriri village within the same culture group as the **Elema**. All reports indicate that **Tate** speakers also speak **Elema**.

20. The *AR* 1922:18-19 describes a tribe called the **Opau** and shows how it may have originally come from the Purari River area to Pollard's Peak, Keuru, and near Kerema, as well as

spreading north to the Lohiki River. This would be in the area west of the Nabo Range, near where the **Mai-hea-ri** list was taken. The **Opau** and **Mai-hea-ri** could refer to the same group.

21. Not 15,000 people, as reported by Capell (1962:137) and repeated by the Voegelins (1965:40). According to *AR* (1965-1966) only 18,363 people live in the whole Kikori sub-district. The 4000 figure is estimated by J. Cribb.

22. J. Cribb calls the **Porome** dialect in this area the **Kibiri**. To avoid confusion with the **Kibiri** of the Kikorian Family, Cribb's **Kibiri** is called **Veiru**. Apparently it is spoken by the villages of Tipeiowo (formerly Karatiwo, according to Cribb), Doibo, Paile, Koiara, and Babaguina.

23. Austen's **Turamarubi** covers all of his **Kiwai** tribes (1934:24). The name means Turama people (cf. Beaver 1914). Austen mentions an additional Kiwaian language: the **Baru** of the Gama estuary (in the Western District), which appears to be a part of Wurm's **Turama Kiwai**.

24. On the basis of information from J. May of the *SIL*, a language called **Kasua** is spoken on the upper reaches of the Kikori River. This language is approximately 15% [165] related to **Fasu**. **Kasua** and **Kasere** appear to be related, so that Kikorian and Kutubuan may be more closely related than now suspected. A language called **Dibiasu** (*AR* 1924-5:74) on the upper Bamu (Western District) shows some possible affinity to the Bamu-Turaman Family, as well as with Voorhoeve's Phylum.

25. Dog's teeth were an important item of trade along the Purari River (Williams, 1924). However, Pawaian has different words for dog from those shown in Chart 1.

26. **Kaluli** and **Beami** are languages in Voorhoeve's Pare-Samo-Beami-Bosavi Family.

27. These, along with the **Naiakaia**, are nomadic tribes listed in Hides. The *AR* 1926-7:36 refers to a "nomadic tribe of Papuan gypsies" on the course of the upper Vailala River and calls them the **Nahikai-a**. Both groups are probably the same and therefore Pawaian.

28. Capell does not describe this group in detail but I have placed the name as a variant within the area it most likely represents.

29. Not a composite dialect of Akiave, Mikaravi, and Namau - as the *AR* suggests. Williams (1940:25) calls the whole Toaripian Family area the **Elema**.

30. Williams (1924:3) also refers to some trading partners of the **Koriki** people by the name of the **Koropenairu**. This may be the **Ipikoi**.

31. A tribe "far up the Kikori", said to be enemies of the **Foi**. This may be a dialect of the **Kasere**.

32. Part of this group may not speak **Koriki** (Holmes 1913: 124).

33. If **Morigio Islands**, **Baru**, **Umaidaj**, and **Wariadai** all prove to be closely related, they can collectively be called **Morigio**.