

The Ghost Islands of the Carolines

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Abstract

The native names of three islands of the Carolines have been misapplied on modern maps to neighboring islands, each name displacing the correct name of the island to the east. These names, in altered form, are Gaferut, West Fayu, and Pikelot. The name of a fourth, mythical place has been similarly misapplied to the westernmost of the three, Gaferut. The first error seems to have been made in 1804 by Don Luis de Torres, who misunderstood the information supplied him on his voyage of discovery by a Woleai navigator. The second error, which occurred in 1905, seems attributable to District Magistrate Arno Senfft, who apparently mistook sailing directions given him by a Lamotrek man to the mythical island of Kaafifór (cognate to Gaferut) as applicable to a real place. Kaafifór is supposed to lie northeast of Yap; it has vanished, due to fear of the Spanish, but it reappears now and then; possibly there is a real basis for this myth. It may be the same place as Sepin, which is also said to have disappeared, but which Yapese identify with Hunter's Reef.

This paper is concerned with three islands on the northern fringe of the Caroline archipelago, in the Pacific Ocean, a few degrees north of the equator. The three islands, all uninhabited, are to be found on the map (Fig. 1) under the names Pikelot, West Fayu, and Gaferut, in that order from east to west. We are also concerned with a fourth, mysterious place, still further west, which is largely mythical but which may possibly once have really existed. These places, running in an east-west line, have undergone a peculiar shift in their names in consequence of which they are designated on our maps not with their actual native names but with those of their neighbors.

The names Pikelot, West Fayu, and Gaferut, except for the prefix "west" in one of them, are spellings representing approximations by European ears to native Carolinian names.¹ They are recognizably close to what a linguist would make of them. But the islands designated by those names on our maps are not the same as the islands so designated by the natives of the Carolines. This fact struck me with force during my anthropological field work on the island of Puluwat in 1967. There the island Pikelot is called *Piik*; West Fayu is called *Pikeelú*; and Gaferut is

¹ In this paper, place names, when italicized, are generally native names, spelled as recorded either by myself or other writers. When names are not italicized they are in the forms given on modern maps. Names included within quotations from published sources are given as those sources give them.

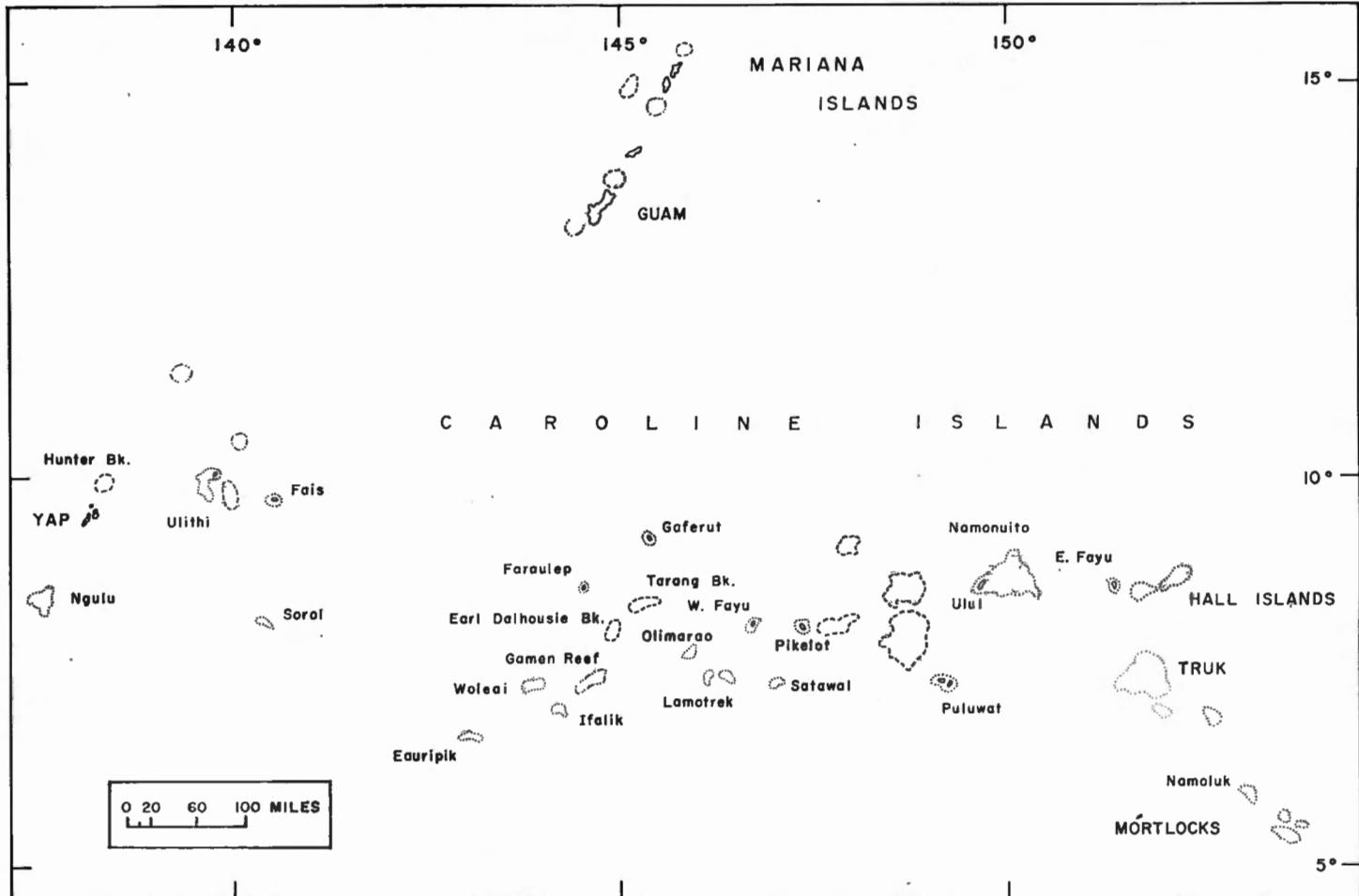


Fig. 1. The Caroline Islands, showing places referred to in the text.

called *Faayee*, in which word is recognizable the name Fayu. Said to be located still further west is the mythical place, called *Kaafirór*, this word being the Puluwatan cognate form of *Gaferut*.²

If one examines these names it looks as though the whole set of four has been picked up, moved over one place to the east, and set down again, so that each of the three real islands is labelled on the maps by the native name of its neighbor to the west, the westernmost one taking the name of its still more westerly mythical neighbor.

The anomaly is not peculiar to Puluwat. It is shared by all the central and western Carolines, from Truk to Yap, the names differing only slightly, according to dialect. I have briefly touched upon this matter twice before (Riesenbergs and Kaneshiro, 1960: 285; Riesenbergs, 1972: 43). Alfred G. Smith (1951: 28) has also drawn attention to it. Smith has defined a major dialect area of the Carolines, called "the Woleai," consisting of the languages spoken on Eauripik, Faraulep, Ifaluk, Elato, Lamotrek, and Satawal, as well as Woleai atoll itself. (Puluwat, though closely related, belongs with Pulusuk and Pulap to a separate dialect area; and to the west of "the Woleai" are Ulithi, Ngulu, Fais, and Sorol, forming still a third such area). In the orthographic system that Smith has devised for "the Woleai," he spells Gaferut's native name as *Fayaew*, West Fayu is *Pigailoe*, and Pikelot is *Pihg*—all close to the forms I collected at Puluwat.

The several authors of the various volumes of the Hamburg expedition of 1908–10 that deal with the islands of "the Woleai" give cognate forms in various spellings for the dialects of each of these islands. In addition, beyond "the Woleai," the words *Faiau*, *Pikēlo*, and *Pik* are recorded at Fais by Krämer (1937: 346, 384); *Fētū* occurs on Ulithi (Damm, 1938: 353); and *Fayāu* on Yap (Müller, 1918: 289–93). And in the other direction, to the east, we have *Faju*, *Pigālo*, and *Pig* from Namonuito (Krämer, 1935b: 233); *Fauyau* from the Mortlocks (Kubary, 1880: 297); *Fauyēū* (Girschner, 1912: 180) or *Fauyéu* (Krämer, 1935b: 106) from Namoluk; and, at Truk, *Pikené* and *Piik* (Goodenough, 1966: 99) or *Pikela* and *Pik* (Krämer, 1935a: 301).

To be sure, often the authors who have recorded these names are unaware that their Carolinian informants apply them differently than our cartographers do. Thus Burrows (1953: 338), in tabulating the sailing directions given to him by his informants on Ifaluk, goes astray in trying to match native place-names with seemingly cognate forms on our maps. One example: his description of the course to Ifaluk from "Faiau" (which he evidently assumes is the same as West Fayu) makes use of the star called Metremeital; the course to this star is followed for 5 miles, then the star Tubwulmetara for 2 miles, then Tubwul'ipu for 2 miles more, after which Ifaluk is supposed to be in sight. These three sidereal positions are in our astronomical terms Crux with Alpha Centauri at meridian, the setting of Lambda

² In an earlier work (Riesenbergs, 1972) I used a somewhat different orthography for these place names, but since I wrote that paper a dictionary of Puluwatan has been published by Dr. S. H. Elbert, who was my colleague in the field at Puluwat in 1967. I rely on his spellings except for the form *Faayee*, which is of my own construction from what appear to be two alternative forms in the dictionary.

Scorpii, and the setting of Crux, respectively, and they would represent successive compass directions of 193° , 233° , and 206° . To actually follow such a course of three legs from West Fayu would land one on the north coast of New Guinea. But the directions work perfectly if we understand "Faiau" not as West Fayu but as Gaferut; "Faiau" (or similar spellings) being Gaferut's true native name. If the departure point is Gaferut instead of West Fayu, the first leg takes one directly to Tarang Bank, the second one thence to Earl Dalhousie Bank, and the third to Gamen Reef and to Ifaluk.³

Quoting from Smith (p. 28): "Two uninhabited islands and an atoll in the northeastern part of 'the Woleai' . . . are generally listed as 'Pikelot' (or 'Pikenot'), 'West Fayu' (or 'Fayau'), and 'Gaferut' (or 'Garefut'). 'Pikelot,' however, was never the name of the island so indicated. All local informants who recognize the name at all recall it only as that of a small island in 'West Fayu' atoll which was blown off the map by a typhoon many years ago. But everyone knows *Pihg*. 'West Fayu' itself is not the name of the atoll to which it is applied in publications, nor could it be the name of any atoll.⁴ It is rather the name of the *island* generally labelled 'Gaferut' or 'Garefut.' The adjective 'West' in 'West Fayu' atoll is only a cartographer's device for distinguishing it from an uninhabited island also called 'Fayu' [meaning East Fayu] nearly four hundred miles to the east which belongs to a very different group of islands as locally recognized. 'Gaferut' in turn is a bast-

³ The distances Burrows records for the three legs are wildly inaccurate, regardless of whether one takes Gaferut or West Fayu as the departure point. Instead of 5, 2, and 2 miles, the three distances from Gaferut to Ifaluk are actually 61, 23, and 68 miles, respectively. It is difficult to understand why Burrows makes no mention of this considerable discrepancy. However, he does note (p. 95) that his chief informant, Tom, had many lapses of English, including confusion of "north" with "south." Possibly Tom was using the English word "mile" as the equivalent of the Carolinian unit known as "*etak*" (Puluwat), "*hatag*" (Woleai), etc. "*Etak*" is explained by Gladwin (1970: 183–188) as follows: if one is sailing from one island to another, a third specified island about fifty or so miles to one side of the line of travel is used as a reference point; when this reference island has in the course of the voyage "moved" backward from the bearing of one of a series of navigation stars to the bearing of the next star of that series, an *etak* is completed. "Thus the number of star positions which lie between the bearing of the reference island as seen from the island of origin and its bearing as seen from the island of destination determines the number of *etak*" or segments of the voyage. Since an *etak* averages about 10 miles in length—though it may be much more—Tom's "miles" as recorded by Burrows do actually work out arithmetically, at least for the first two legs of the Gaferut-to-Ifaluk voyage, if we accept them as meaning *etaks*.

⁴ The reference here seems to be to the distinction between an isolated island and an atoll. Smith does not say so, but the word *Fayu* (or variant spellings) is usually translated as "one rock" or "one coral," and he apparently implies that it could not therefore have been attached to an atoll. But the distinction between island and atoll is not very important among these three tiny, desert places, and I doubt whether a Carolinian would make this kind of distinction among them. According to Bryan (1971), Pikelot, which has no lagoon, has a land area of .035 sq. mi. and a reef area of .361 sq. mi.; Gaferut has a land area of .0426 sq. mi., a reef area of 1.07 sq.mi., and a depression in the reef of .0098 sq. mi. which might by some be regarded as a lagoon; West Fayu might be called an atoll, though it consists of only one island of .024 sq. mi. on a reef (area not given) with a lagoon containing 2.178 sq. mi. None of the three comes at all close to the conventional picture of an atoll consisting of a ring of islands around a central lagoon.

ardization of a Yapese name, even though Yap has only remote concerns for that island. ‘Gaferut’ belongs to ‘Faraulap’. . . . No local people ever use the name ‘Gaferut’ or ‘Garefut,’ and only a few recall it after lengthy discussions over a chart.”

Smith’s information about native terminology for the islands we are considering, so far as the dialects of ‘the Woleai’ are concerned, is thus in accord with mine in the Puluwat dialect. But I must differ with Smith in two matters. In spite of what he says, the word *Pikelot* (or variations thereof) is a legitimate, though not common, name. Because I collected only the form *Piik* for the island labelled *Pikelot* on the maps, I at first regarded the latter as a European corruption of the native name of West Fayu, which is *Pikeelú* in the Puluwat dialect (*Pikēlo*, *Pigailoe*, etc. elsewhere). I speculated that it might be the spelling of the explorers Freycinet (1826) or Duperrey, the last letter in French being silent. However, subsequently I learned that my colleague at Puluwat in 1967, Dr. S. H. Elbert, collected, in addition to the word *Piik*, its synonym *Pikollot*, which I never heard.

The word *Piik* generally has the meaning of “islet.” Krämer (1937: 124–5) offers the translation of the last syllable of the name *Pikelot* as the name of a fish, *lot*. The published literature attests plentifully to the word’s authenticity at many of the islands and gives the following spellings: *Pigelot* (at Puluwat), *Pikelōt* (at Elato), *Pikelot* (at Lamotrek, Woleai, Fais, and Truk), *Pikēlot* and *Pikenot* (both at Woleai), *Pikelōat* and *Pukuollot* (both at Namoluk), *Pugelōt* (at Ulithi), *Pigennot*, *Pigēnnot*, and *Pēgēnnot* (all at Ifaluk), and *Pikonot* (at Truk). (Damm, 1935: 55–6, 95–6, 100–6, 198–9; Damm, 1938: 353; Krämer, 1935a: 301; Krämer 1935b: 106; Krämer, 1937: 32, 123, 167, 273–4, 346; Alkire, 1970: 46; Alkire, 1973; Girschner, 1912: 180; Burrows, 1953: 338 ff.; Elbert, 1947: 166.)

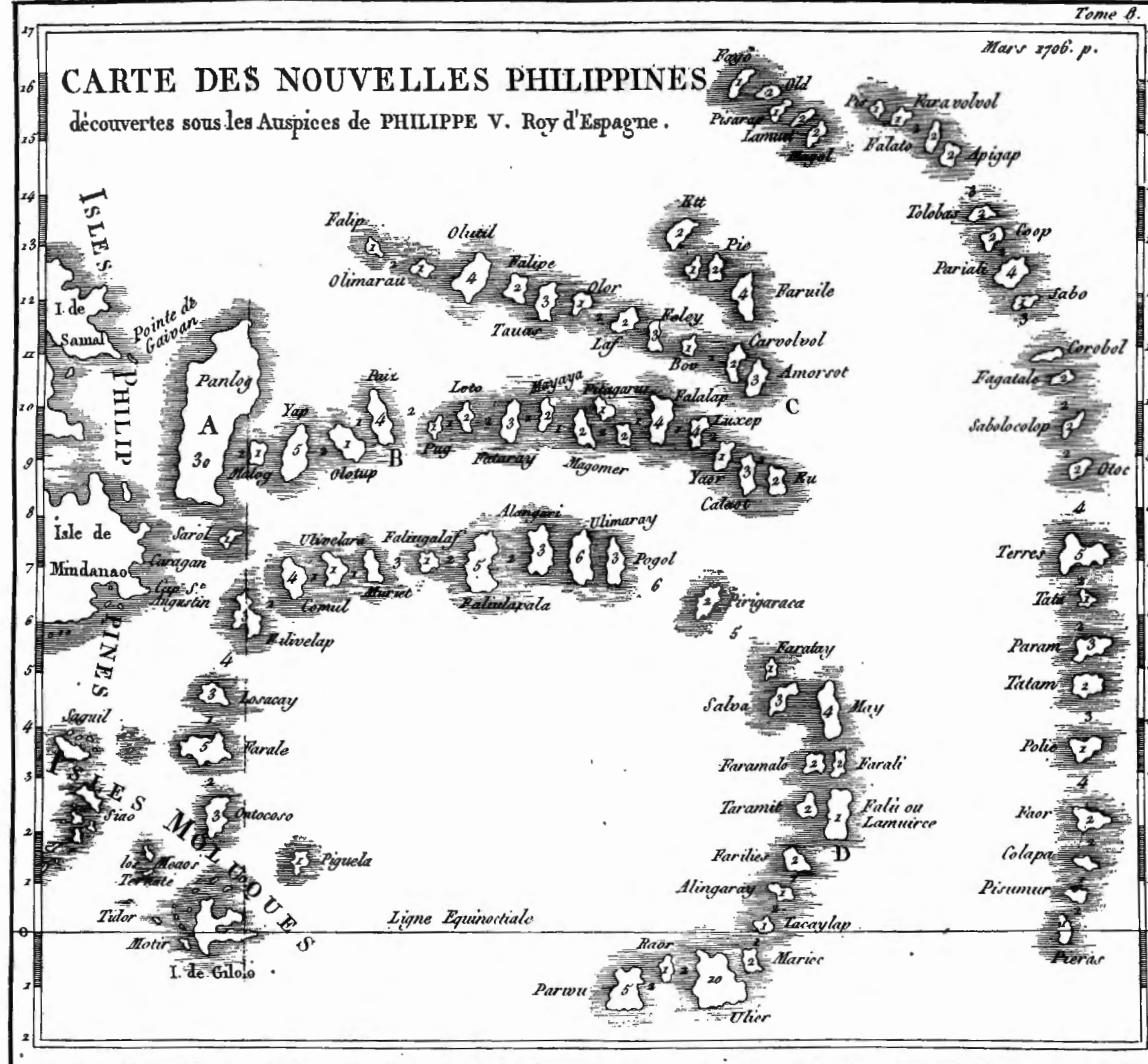
As for my other difference with Smith, it has to do with his claim that the word Gaferut is unknown to Carolinians. On the contrary, this word, in one form or another (*Kaafirór* at Puluwat), is the name of the fourth, mythical island, allegedly located to the northwest of the Gaferut of the maps. However, I will defer additonal comment on this place until the real islands have been discussed.

The first occurrence that I have found of the native name *Faayee*, or something similar, is in connection with Father Paul Clain (or Klein), who encountered at Samar, in the Philippines, a group of Carolinians who had been cast ashore there in December, 1696, when a storm blew them from their course during an intended return journey from Lamotrek to Fais. In a letter that Clain wrote in 1697 to the Father-General at Rome, Gonzales, are the names of 32 islands obtained from these castaways (or possibly from an earlier group of castaways of 1678). Many of the names are difficult to recognize. A “*Pic*” occurs, possibly corresponding to my Puluwatan name, *Piik* (=Pikelot); but there is also “*Piculat*,” this last undoubtedly *Pikelot*, since unlike “*Pic*” it is correctly described as inhabited only by birds. *Faayee* (=Gaferut) is not on Clain’s list (unless it is his “*Piylu*”; this may be, since Fais is given as *Paiz*, and Faraulep is *Piraulop*). And my Puluwatan name *Pikeelú* (=West Fayu) is also lacking. But both names appear in a related document. A map (reproduced here as Fig. 2) which bears the date 1706 is apparently based on

Mars 1706. p.

CARTE DES NOUVELLES PHILIPPINES

découvertes sous les Auspices de PHILIPPE V. Roy d'Espagne.



information from the 1696 castaways, who when questioned a second time had made a rough chart by means of pebbles in the sand. Eighty seven islands are shown on the map. Many of the names of the list of 32 are not included; many are not recognizable; most are out of position and relationship and distorted in size. But on the map, though much too far to the southwest, almost in the Moluccas, is a "Piguela"; and far to the north—indeed, the northernmost place shown—is an island labelled "Fayo." (Clain, 1697; Krämer, 1917: 14-32; Lessa 1962: 318-9, 323-4; Hezel and del Valle, 1972: 28-9).

The next map (Fig. 3) we have of the Carolines, and the first comparatively accurate one, also shows this last name. It is the map of the Jesuit missionary, Cantova. In a well-known letter (Cantova, 1722) written from Guam to Father d'Aubenton in France, dated 20 March 1722, he describes the arrival at Guam the previous June of two canoes containing 30 people in all, driven by storm from their intended passage between two Carolinian atolls, Faraulep and Woleai. Cantova spent eight months with the castaways and his letter, based on what he learned from them, is a first-rate ethnographic description. Also, a map was drawn. He had not yet set foot in the Carolines, and was not to do so for another ten years, when he was murdered at Ulithi, but the map, based entirely on what the Carolinians told him, is surprisingly accurate. Of our four place names, only one⁵ occurs, *Faayee*, here spelled *Fahueu*. Though it is placed about two degrees too far north and one degree too far west, there can be no doubt that the island we call Gaferut is meant, not the one we call West Fayu. Gaferut's nearest neighbors, Faraulep and Olimarao, are indicated in correct relationship to it, and both are almost exactly as far out of position north and west as Gaferut. Cantova evidently oriented the islands of the Carolines from the position of Faraulep, which Juan Rodriguez, who discovered that island in 1696, had erroneously set down one to two degrees too far north.⁶

Maps of the Caroline Islands made during most of the next two hundred years were usually copies of Cantova's map. Most of them show an island as Cantova does in correct, triangular relationship with Faraulep and Olimarao, in Gaferut's position, and give it its correct Carolinian name, *Fahueu* in Cantova's spelling.

⁵ There is also a *Puc*, northwest of *Lamurrec* (Lamotrek), on Cantova's map. But this cannot be our *Piik*. Lamotrek atoll contains three principal islets; the largest one bears the same name, Lamotrek; six miles across the lagoon from it, and in fact to its northwest, is the islet whose name Smith spells *Bvhg*, other spellings in Bryan being *Pugue* and *Puch*. This undoubtedly is Cantova's *Puc*.

Pig, translatable as "islet," occurs as a place name of islets in Ulithi and Faraulep atolls too, and there is a *Pike* or *Pige* in Satawan. With the addition of suffixes to the basic word there are at least 24 other occurrences of it as place names in the Carolines, according to Bryan.

⁶ On Cantova's map longitudes are given east of Cape Espiritu Santo, Samar Island, in the Philippines. After making adjustment, I estimate his position of Faraulep as 11°N, 143°20'E, Greenwich meridian. Krusenstern (1824: 321) makes it between 10 and 11 degrees of latitude, but in another place (*idem*, p. 356) he puts it between 9 and 10 degrees. Faraulep is actually at 8°35'-37'N, 144°32'-34'E. (These, and all other coordinates given in this paper as true positions of islands, are taken from Bryan's Guide, 1971).

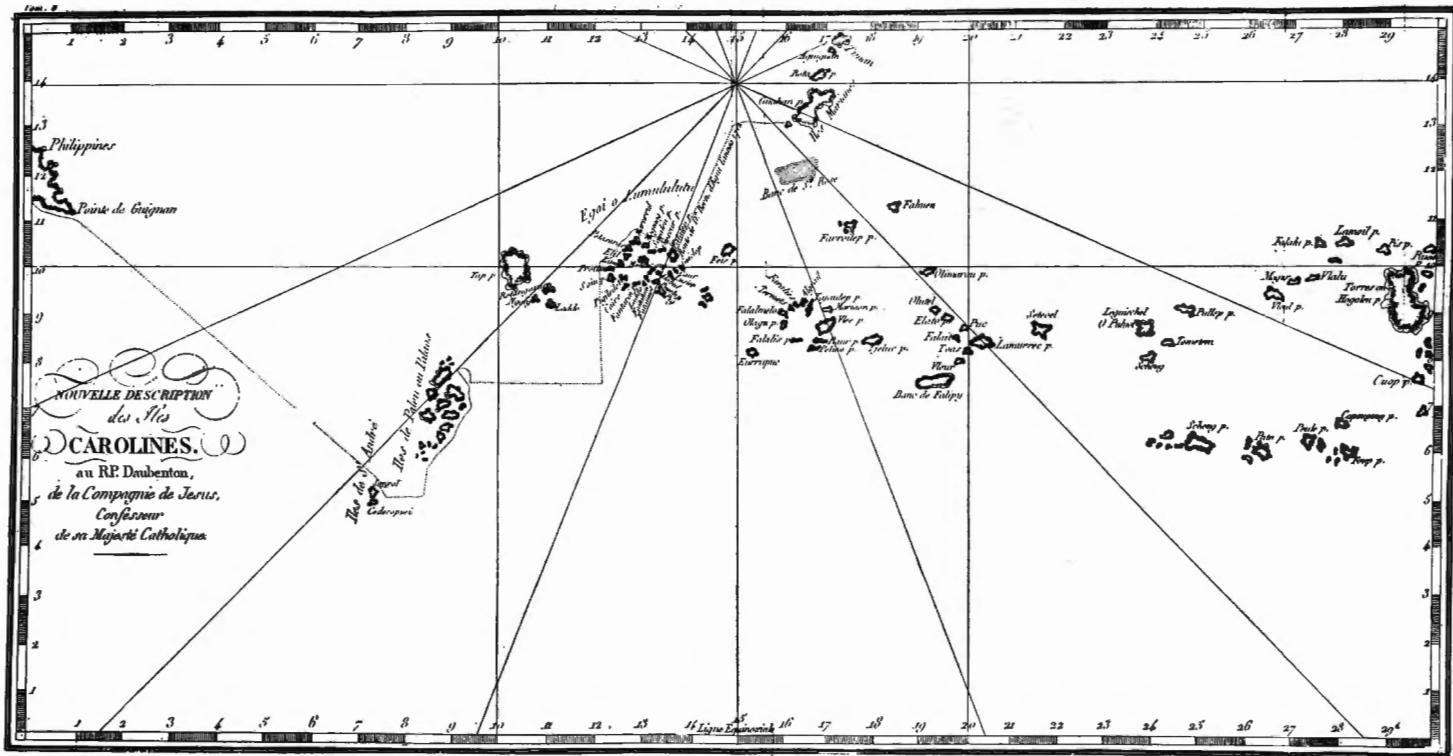


Fig. 3. Jean-Antoine Cantova's map, 1722 (Lettres édifiantes).

(Spellings on these later maps are *Fahau*, *Fahuen*, *Fahao*, *Fahuco*, *Faijo*, *Fayo*, *Fallao*, etc.) Only two of the maps belonging to the Cantova tradition that I have consulted indicate islands at the positions of West Fayu and Pikelot.⁷

Following Cantova no further original information developed concerning the islands of our interest until 1787 (date on Luito's map and also in Krusenstern 1819: 93, and 1824: 322; Chamisso 1821: 111 and Kotzebue 1821: 240 give it as 1788). It must be remembered that no European had yet seen any of these islands. In that year, on May 26, two canoes containing 13 people arrived at Guam from Lamotrek after a six-day voyage. The name of one of these people is given as Tamar Umal Luyto. On the map drawn from this man's information he is called "Tamun (Capt.) Umal Luito." (He is referred to as Tamor by Arago 1823: 13, but this, like Tamar and Tamun, only means "chief.") Luito gave the governor of Guam, Don Jose Azlegui y Leon (as the name appears on the map; Krusenstern 1824: 322 calls him Don Juan Azliqui) a list of names of islands of the Carolines. Among them are three of our four names, *Pig*, *Piguela*, and *Fayao*. All three are called uninhabited, as indeed they are today. The map that the governor prepared from Luito's information is reproduced here as Fig. 4.

This map is even more accurate than Cantova's. All of the islands shown are identifiable and are in approximately correct relationship. Luito was a Lamotrek man. The anthropologist William Alkire, who worked at Lamotrek in 1962-3, records there the name *Fayu* (alternatively *Fao*) for Gaferut, *Pigailo* or *Pikhailo* for West Fayu, and *Pig* or *Pikh* for Pikelot (Alkire, 1965: 135; 1973). These names are virtually identical to Luito's *Fayao*, *Piguela*, and *Pig* respectively, as well as to the ones I obtained in 1967 at Puluwat: *Faayee*, *Pikeelú*, and *Piik*.

Luito had found his way to Guam by following the directions given in an old chant, thus apparently resuming a commerce that had once existed but been interrupted by the Spanish conquest of the Marianas. Being received kindly, he returned the following year, this time with four canoes, and received permission to visit annually to trade. Unfortunately, on their way home the islanders disagreed about the route, they became separated, and none ever returned to his native island. Don Luis de Torres, later to be second-in-command to the Governor, was living at Guam at the time of these visits. When he called at Woleai in 1804 he discovered that the failure of Luito and the others to get home again had been laid to the Spanish at Guam. On learning what had actually happened the interrupted relationship was resumed.⁸

Torres and company were the first Europeans, so far as we know, to visit any of the islands that are the subject of this paper, though possibly the American

⁷ A partial enumeration of these maps that I regard as following the Cantova tradition includes: Vaugondy (1756), Arrowsmith (1798) and later editions, Cadell and Davies (1806), Sotzmann (1810), Pinkerton (1811) and later, Delamarche (1816), Thomson (1817), Burney (1817), Brué (1822), Castellano (1828), Malte-Brun (1828), Vallardi (1837), Stieler (1839), Lehuby (1841), Herisson (1841). The Stieler (1932-34) map is the latest one that I have found of this type.

⁸ So say the published accounts, but it is not explained how Torres found out about the disagreement and separation if all the Carolinians were lost at sea.

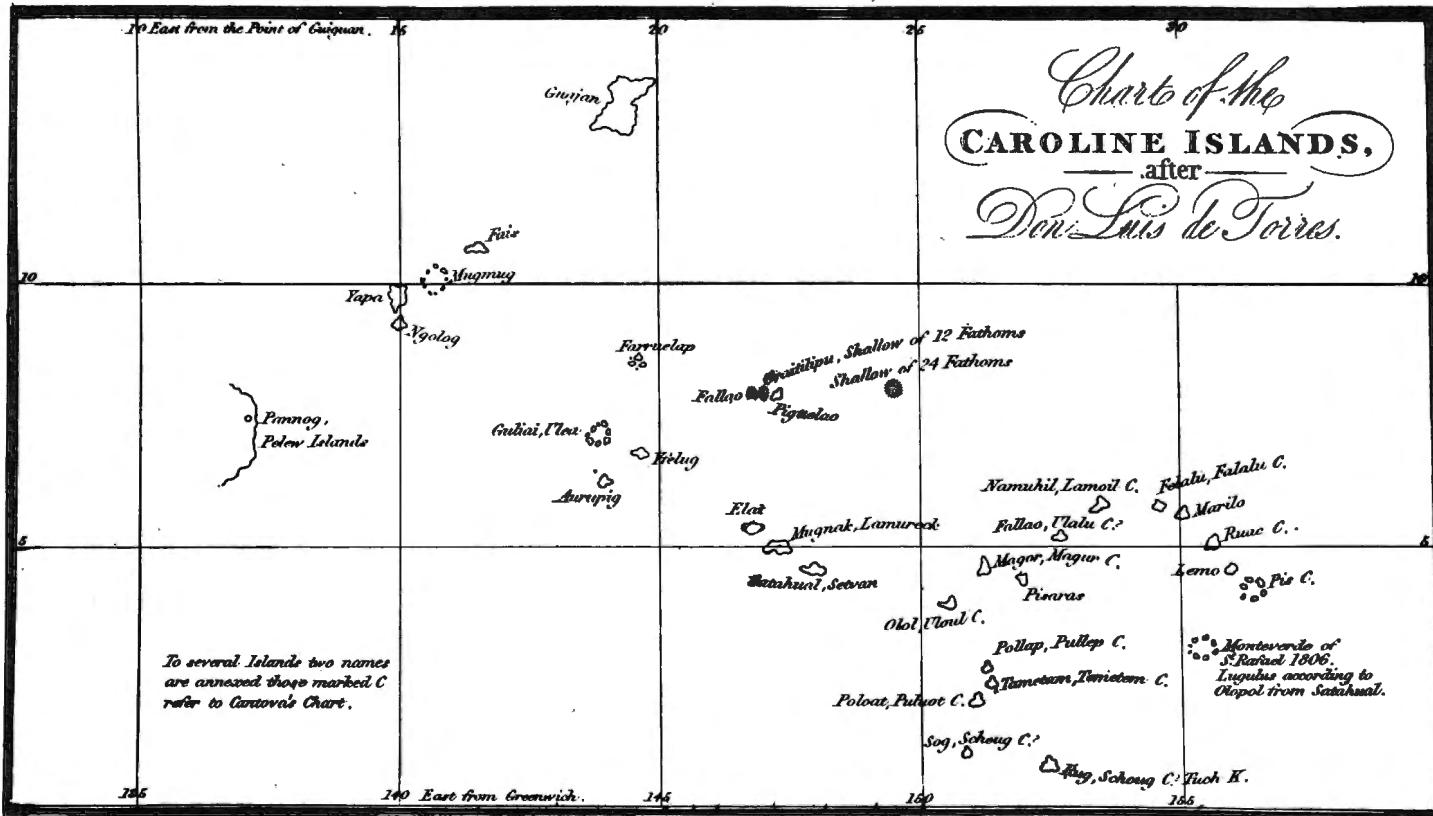
vessel, the *Lydia*, which may have discovered Pikelot, preceded him by three years, as mentioned later. Torres's voyage in 1804 resulted from a chance opportunity. Our information comes not directly from him but from the account he gave to Chamisso. A Boston ship, the *Maria*, under an American captain, Samuel William Boll (Chamisso, 1821: 111) or Samuel Williams (Arago, 1844: 20) departed from Manila (in 1812 according to Arago, in 1808 according to Freycinet, both obviously wrong) by order of the Governor General. The intention was to make a survey of economic potentialities in the Carolines. The account by Chamisso, (1821: 112) is that the *Maria* left Guam in 1804 to discover trepang. He names the supercargo as Thomas Borman. While at Guam a number of passengers were taken aboard, among them Torres, who wanted to see the islanders he had last seen fifteen years before and to persuade them to renew their visits to Guam.

It is not clear how many places were visited on this voyage. Kotzebue (1821: 244) says Torres saw "many islands belonging to the Carolinas." We are told that the positions of four were determined, "according to the journal of Don Luis," as Chamisso reports. Whether Boll or Borman made the determination is uncertain. The map that Torres drew is reproduced here as Fig. 5. "*Farroilap*" (Faraulep) is given at 8°3'N, 144°30'E (close to the true position of 8°35'-37'N, 144°32'-34'E); "*Ulea*" (Woleai) is given at 7°00'N, 144°E (actually 7°19'-23'N, 142°49'-55'E); the name "*Piguelao*" is applied to what we know as Pikelot, which is placed at 8°6'N, 147°17'E (Pikelot is actually at 8°5'N, 147°38'E); and "*Fallao*" (evidently West Fayu) at 8°5'N, 146°45'E (West Fayu being actually at 8°4'-6'N, 146°42'-46'E). In addition, the positions of two shoals were determined.⁹

It is important for the reader to realize what Torres has done here, as we have related it in the last paragraph. It is at this point in history that the name shift occurs. "*Fallao*", which is the name given by Carolinian natives to the island we call Gaferut on our maps, is misapplied now to the island we call West Fayu, the name which thus becomes established. "*Piguelao*," which is the correct Carolinian name of what we call West Fayu, is misapplied by Torres and company to the Pikelot of our maps. (Torres does not record the words Pikelot or *Piik* or any variants of them.)

But where did Torres learn these names—incorrectly as it turned out—for the islands West Fayu and Pikelot, which had never been seen before except by indigenes of the Carolines? Perhaps from Clain's map, though this is so distorted that it would seem impossible to connect names and islands properly. Not from Cantova, certainly, who does not give a name anything like *Piguelao*. Furthermore, Chamisso (1821: 113), who refers to the "very remarkable" coincidence of Torres's map with that of Cantova, says explicitly that the latter map was unknown to Torres. Perhaps there were Carolinians aboard the *Maria*, who had joined the vessel when she stopped

⁹ The account of this voyage of the *Maria* as given by Krusenstern (1824: 356) contains a number of confusions. He says the determination of these positions was made by "the American Captain Borneman," presumably meaning the supercargo Thomas Borman. In reference to "*Fallao*" he says "no doubt it is Cantova's *Falalu*," but in Cantova it is clear enough that *Falalu* is the Fananu of our maps, an island in Nomwin atoll (Cantova's *Lamoil*).



London Published by Longman & Co. Oct. 8th 1822.

Fig. 5. Luis de Torres' map, 1804 (Kotzebue, vol. 3).

at Woleai or Faraulep, or who had been on one of their visits to Guam and had been taken aboard there, though Chamisso does not so report; but it is unlikely that such Carolinians would not have recognized the two desert islands and given Torres and Boll the correct names. But Chamisso does tell us that Torres's chart was drawn up from information given to him of sailing courses known to the most experienced navigator at Woleai, who also gave him the names of all the islands he knew. So it is probable that it is only a matter of misunderstanding and misapplication of those names by Torres. It is also to be recalled that Torres was on Guam when Luito arrived from Lamotrek in 1788, and he probably saw the map that Governor Azlegui drafted on the basis of Luito's information. On that map are shown, in approximately correct position, "Fayao," "Piguela," and "Pig," as already described. Not having found Gaferut, to which the name "Fayao" (spelled "Fallao" by Torres) should have been applied, the first uninhabited place the *Maria* came upon in that general direction presumably was mistaken for it and got the name instead. The second uninhabited place then got the name "Piguela" (given as "Piguelao" in Torres's spelling); this was Pikelot.

The name Pikelot, as already mentioned, is not on Torres's map. Whether Boll or Torres heard the word we do not know, but later comers did, and the resemblance between it and *Pikeelú* (*Pigailoe*, *Piguelao*, etc.) being close, no doubt assumed that they were the same. As for the name *Piik* (or variant), if it was among the names given to Torres by the most experienced navigator of Woleai, as related above, Torres does not mention it; but it is, in the form *Pig*, on the Luito map, where Torres may have seen it. We do know that the *Maria* explored the seas beyond Pikelot, to the east, since a shoal was discovered at 8°20'N, 149°E; possibly Captain Boll was looking for the third uninhabited island when he came upon this shoal. At any rate, the set of islands now having been moved over one place, *Piik* fell off the map at the eastern end—though, as we will see, it remained a puzzle, and Lutké hunted for it later.

We now return to the subject of Gaferut. We have not yet mentioned the role that island played in the annual visits of the Carolinians to Guam, described earlier in connection with Luito and the resumption of these visits. Chamisso's account (1821: 114–5) is as follows: "Since the voyage of Don Luis [Torres] . . . the Carolinians coming to Guahon [Guam] become yearly more numerous. Their fleet of boats from Ulea [Woleai] and the surrounding groups, consisting of Lamureck [Lamotrek] and Setoan [Satawal], collects at Lamureck. The voyage is undertaken from thence in the month of April; the distance to Fayo [meaning Gaferut], the desert island, where they stop for some days, is reckoned to be two day's voyage, and from Fayo to Guahon three days. They return likewise by way of Fayo and Lamureck."

Kotzebue (1821: 242) gives a similar description: beginning in 1805 "eighteen canoes assemble every year at the island-group of Lamureck, thence they sail to Fojo [Gaferut] (a desert island, according to the description, lying to the north of Lamureck,) which they reach in two days, rest there, and then the fleet sails in three

days to Guahon."

So far so good; the descriptions by Chamisso and Kotzebue are completely accurate if we understand by the names *Fayo* and *Fojo* the place our maps today mistakenly label as Gaferut. But the incorrect attachment by Torres of the name to what we now call West Fayu gave Chamisso, and others who followed him, considerable trouble. Cantova's map places "Olimarau" (Olimarao) northwest of "Lamurrec" (Lamotrek), about half-way to "Fahueu" (meaning Gaferut) nearly in a straight line. Cantova is quite correct except that Olimarao is much closer to Lamotrek than to Gaferut. But, says Chamisso (1821: 124) this is "a situation which must be incorrect, as [Olimarao] is never touched at on the voyage [of the Carolinians] from Lamureck to Fayo and Guahon; and . . . there is no room between Lamureck and the northern desert for another group. We should look for Ollimarau to the east or north-east of Setoan [Satawal]." His reasoning would have been correct if the "*Fayo*" where the voyaging Carolinians rested had been West Fayu, as Torres and he thought, instead of Gaferut. The same problem needlessly troubles him when he says that "the voyage from [Lamotrek] by Fayo to Guahon in two or three days must have been incorrectly divided, as you ought to reach Fayo in one day."

We should also mention, in connection with Kotzebue's voyage, the information provided by Kadu and Edock, two men of Woleai who, with two others, had been storm-driven from their homeland and after many months had drifted ashore in their canoe at Aur, in the Marshall Islands, three or four years before the *Rurick* arrived at that island in 1817. Kadu joined the Russians for a time and his adventures are told in considerable and romantic detail by Chamisso, but they need not concern us here. Chamisso records Kadu's version of Torres' names "*Piguelao*" and "*Fallao*" as "*Bigelle*" and "*Fayo*." From the statements of the other Woleai man, Edock, a chart of the Carolines was drawn, which is published in Vol. II of Kotzebue and is reproduced here as Fig. 6. On it we find a "*Bigali*" and a "*Fageieu*," the latter name put closer to Gaferut's position, where it should properly be, than to West Fayu's.

All that we have said in previous pages about Torres and his visit to the Carolines derives from the report of the Russian expedition of 1815–18. But the information provided about the islands of our particular interest is only second-hand, obtained from Torres while the *Rurick* was in Guam; the vessel did not itself visit the Carolines. Similar second-hand information is given us by Jacques Arago (1823: 29; 1844: 20), the artist who accompanied Freycinet on the voyage of the corvette *Uranie* in 1817–20. This French expedition's only direct contact with the Caroline Islands, a very brief one, was when it sailed north through the chain past Pulusuk, Puluwat, and Pulap, on its way to Guam. But with the voyage of Louis Isadore Duperrey on the corvette *Coquille*, 1822–25, we can record the second European visit, so far as we know, to one of the desert islands of our concern. On July 3, 1824, the *Coquille*, after leaving Truk, passed Pikelot. Duperrey seems to have been in some doubt as to which island this was; he says (1828: 71): "Cette

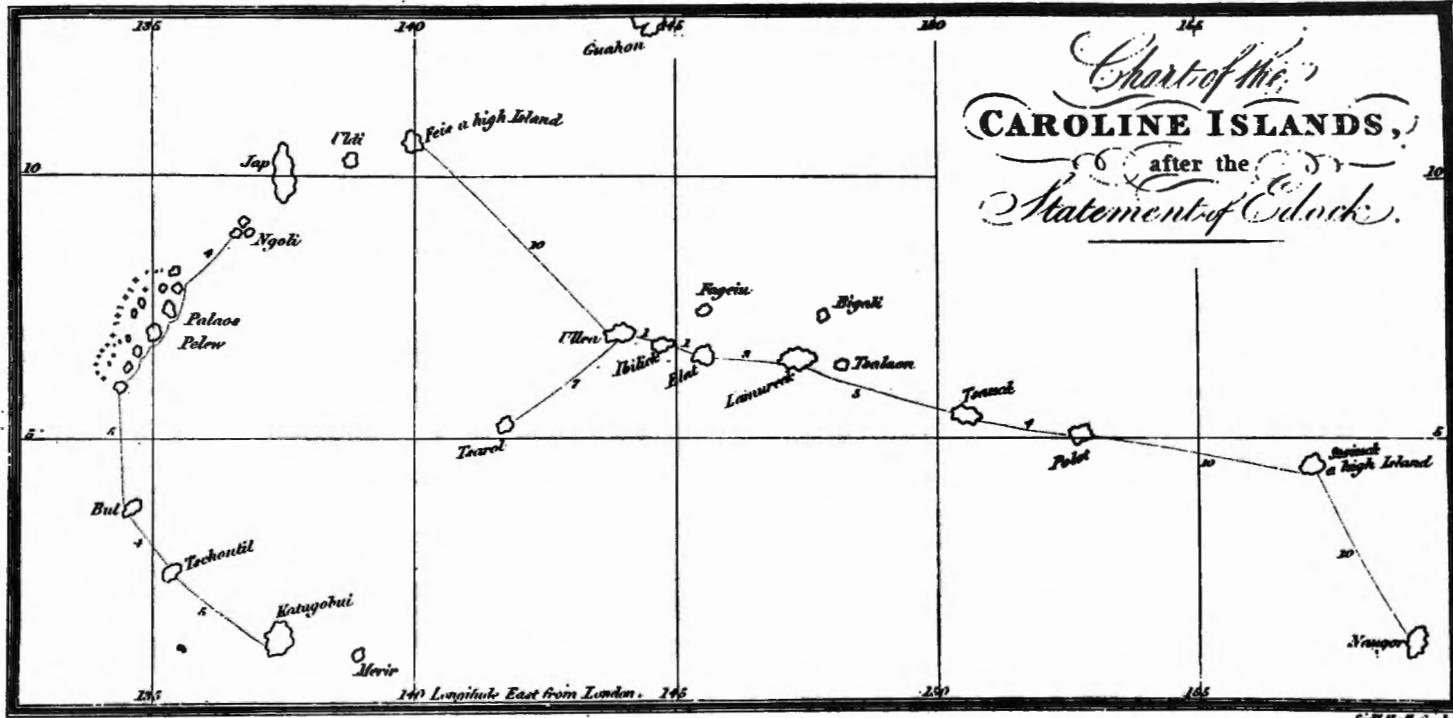


Fig. 6. Edock's map, 1817 (Kotzebue, vol. 2).

Saint Hall, Simola

Fig. 6. Edock's map, 1817 (Kotzebue, vol. 2).

petite île . . . est peut-être *Piguelao* de la carte de dom Luiz de Torres, mais il m'a paru plus exact de la croire *Bigali* de la carte d'Edock." But René P. Lesson, Duperrey's lieutenant, had no doubt that at least Torres's and Kadu's names applied to the same place; he says of the island (1839: 533): "C'est *Piguelao* de Don Luis De Torrés, le *Bigellé* du carolin Kadou. . . ." All of these variant forms, of course, should properly apply to the place our maps designate as West Fayu, but the men of the *Coquille* here fasten them on Pikelot; Torres's original error, compounded by Kotzebue and Chamisso, is now, by Duperrey's time, fully established.⁴

The island appears on Duperrey's map with the name *Bigali*. Krusenstern, not having seen the map and not having found a name in Duperrey's text, decided that the island needed one, so he called it *Coquille*, after the French vessel, hence that name became established in the gazetteers too, even though Krusenstern later acknowledged his over-hastiness.

The position established by the *Coquille* for Pikelot is curiously inexact. The correct position, as given by Bryan, is 8°05'N, 147°38'E. But from the French expedition we have at least three different observations:

8°21'18"N, 147°44'40"E (adjusted from 145°24'40"E, Paris meridian)—

Duperrey, 1829: 96

8°11'53"N, 147°20'10"E—Duperrey, 1828: 71, 102

8°12'30"N, 147°49'03"E (adjusted from 145°29'03", Paris meridian)—

Lesson, 1839: 533

Finally we have the report of the Russian expedition under Frédéric Lutké (or Fedor Petrovich Lütke) on the *Seniavine*, 1826-29. Lutké (1835: 107-8) tells us that on February 22, 1828, "Poursuivant notre route à l'ouest, nous retrouvâmes . . . les îlots Pyghella et Faieou, que don Louis Torrès avait aussi vus, et qu'il appelle *Pigouelao* et *Faliao*. Le premier avait été déjà vu par le capitaine Duperrey." Lutké's lieutenant, F. H. von Kittlitz (1858: 124), calls them "*Pyghellá*" and "*Fajahú*". In the Lutké atlas, on Plates 19 and 31, these two places are shown, one labelled "*I. Fayeou Occid.*", the other as both "*I. Pyguélé*" and "*Pyguella*." They are, of course, the West Fayu and Pikelot of our present-day maps, the coordinates shown being 8°3'N, 213°10'W (=146°50'E) and 8°6'30"N, 212°16'W (=147°44'E), respectively. But also, further east, is the notation "*I. Pighe?*" entered at approximately 7°50'N, 148°40'E. This is obviously the misplaced *Pig* of Luito's map; the question-mark after the word "*Pighe*" on Lutké's map reflects his puzzlement and confusion. The description by Nozikov (1945: 40) of the day's events is of the same order: "On 10th February [Russian calendar], having explored the uninhabited islets of Pigue and Faleu, discovered by Torres, the *Senyavin* turned northwards to the Marianas Islands." Coello's 1852 map, based partly on Lutké, contains, in about the same position as on Lutké's map, the entry "*Pig* (*Py F.D.*)"; it also shows "*Fahieu Occidental*" and "*Biguela*." (*Py F. D.*=position and fathoms doubtful).

Confusion does not end here. The alleged island of Lydia also enters into consideration. Krusenstern (1824: 355), quoting Espinosa, says that the American

vessel *Lydia* in 1801 saw an island at $8^{\circ}36'N$, $147^{\circ}14'E$.¹⁰ If this is a genuine discovery, the island, though incorrectly placed, was doubtless Pikelot, and Torres, three years later, was not the first European to have seen it. Elsewhere (1824 Supplement, p. 137) Krusenstern refers to this island as named Lydia and puts it at $8^{\circ}38'N$, $147^{\circ}10'E$, and in his Atlas he shows an "*I. Lidia P.D.*" in that position. (P.D.=position doubtful.) Other cartographers were quick to copy, with anarchical results. The Gotha: Justus Perthes 1872 map shows as three islands "West Faiu," "Lydia (Pikela)", and "Pikelot (Coquille)." The Südseehandbuch of the German Reichsmarine-Amtes of 1913 lists as four separate places "Pikelot," "Pigalo (Pikela, Pik, Lydia)," "West-Fáju," and "Grimes (Gaferut, Faiu)." Stieler's Hand-Atlas, 1932/34, Map 88, shows "Faijo" correctly in Gaferut's position, but also has a "West Fajo," a "Pikelot (Lydia)", and also a "Pigelot." In Meinicke's inventory of islands of the Carolines (1876: 357) there occurs utter confusion of these names in the listings of two places: "Pikelot (Pigela, Pigali), von Duperrey 1824 entdeckt", at $8^{\circ}7'N$, $147^{\circ}44'E$; and "Pik (Pikela), nach dem Schiff, das sie 1801 auffand, Lydia benannt", at $8^{\circ}38'N$, $147^{\circ}13'E$. Meinicke has here distinguished as two islands Pikelot and Pik, which are one; he has given two more synonyms for one and one for the other, all three of which synonyms actually apply to quite another island; and his second island is erroneously positioned. Sharp (1960: 187), relying on Meinicke, further compounds the problem by referring to Faraulep (which is two to three degrees west of the islands we are considering) as "presumably the 'Pik' or 'Lydia' reported by the vessel *Lydia* in 1801." Brigham (1900), Findlay (1851); and other directories only worsen the confusion, and the latest of these, Bryan's Guide (1971), includes all of the various names as synonyms of one another.

No doubt the reader at this point shares in the confusion produced by the plethora of names. In the hope of lightening his burden we provide here a table of such names:

¹⁰ I cannot verify this reported discovery by examination of the *Lydia*'s logbook, which is held by the Peabody Museum of Salem, Mass. There is but one remark concerning the Carolines in the abstracts of the *Lydia*'s voyage of 1801. On December 27, 1801, the note is made, "saw a small Island on [sic] of the Carolinas," and the coordinates given are $3^{\circ}50'N$, $152^{\circ}25'E$. But this is far from the position given by Krusenstern. The latitude $3^{\circ}50'N$ is exactly that of the atoll of Nukuoro. The longitude is $2\frac{1}{2}$ degrees too far west for Nukuoro, a serious error, but there is no other island that could possibly be made to fit. In any case, the errors in the *Lydia*'s abstracts are consistent. The previous observation, made December 19 at Squally Island, is also off, the position recorded being $1^{\circ}36'S$, $148^{\circ}56'E$. Here again the latitude is correct, but the longitude is one degree too far west for Emirau, if that is what is meant by Squally; if it is Tench Island, the discrepancy is nearly two degrees.

While I cannot verify what Krusenstern states, it is well to place on record here that it was the *Lydia*, Captain Moses Barnard, that discovered Nukuoro, contrary to the generally accepted view (e.g., Sharp, p. 189) that it was the Spanish vessel *La Pala*, Captain Monteverde, in February, 1806.

Names on modern maps, approved by U.S. Board on Geographic Names, and so indicated in Bryan's Guide.	Native names, Puluwat dialect.	Native names in other Carolinian dialects, as reported in published literature.	Other names applied in past.
Pikelot	Piik (rarely, Pikollot)	Pihg, Pik, Pig, etc.; (Pikelot, Pikenot, Pigelot, etc.)	Piculat, Bigellé, Bigali, Pyghella, etc.; Coquille; Lydia.
West Fayu	Pikeelú	Pigailo, Pikélo, Pikené, etc.	Piguela, Pigaño; Fayo, Fahueu, Fallao, etc.
Gaferut	Fayee	Fayaew, Faiau, Faju, etc.	Fahueu, Fayo, Faheu, etc.; Grimes; High.
—	Kaafírór	Gaferut, Gaverót, Gáferudj, Kaferuch	—

We now turn to *Kaafírór*, the mythical place, whose name has on our modern maps somehow become attached in the form Gaferut to the real island that Carolinians call by the name *Faayee* or variants thereof. This real island had been placed approximately correctly as far back as 1722 on Cantova's map, and its Carolinian name (*Fahueu* in Cantova's spelling) correctly attached to it. But the first European to see this place, so far as the records reveal, did not arrive until 1841. All of the literature on the subject of the discovery of Gaferut awards the honor to one Captain Grimes. The *Salem Register* of December 13, 1841 (in Ward, 1967: 3) states: "Captain Grimes of the *Jean*, from China, discovered a small island in lat 9° 16' N. long 145° 43' E., which was not laid down in the chart.—The island appeared to be about six miles in circumference, and was entirely uninhabited." A like description is given in other newspapers of the day, in various editions of the Pacific Islands Pilot, and by Norris (1852: 334). Findlay (1886: 1004) adds more information: "Grimes Island.—From a report in the *China Mail*, Captain Grimes, of the ship *Jean*, discovered, in 1841, a high and well-wooded island, of 6 miles in circumference, in lat. 9°16'N, long 145°43'E. It was again seen, in 1855, by Capt. Vice, of the French ship *Chili*, in lat. 9°15', long 145°11'.... It has since been announced as High Island, in lat 9°11', long. 145°45'..."

The names Grimes Island and High Island have always been accepted as synonyms for the island later called Gaferut. The coordinates given in the foregoing descriptions are close enough that no other place could have been intended. Yet there is something wrong here. Gaferut is not a high island. The central part of the island rises no more than 5 meters above low tide (Sachet, 1961: 12–13). The Pacific Islands Pilot (6th Ed., 1933: 503) does say that the trees rise to 65 feet in height, so perhaps this was meant, but Niering (1961: 6) reports that "the general vegetational aspect is that of a low, relatively open forest, 12 to 25 feet in height." As for the reported six miles of circumference, by the most generous measurement, taken on the outer margins of the surrounding reef, I make it less than two miles.

But regardless of these inaccuracies, we still do not know how the name Gaferut got on the map; and the point remains that the island we call by that name is not so called except by ourselves. That name properly belongs to a mythical or semi-

mythical Pacific version of the German Germelshausen, the Irish Brigadoon.

According to Puluwat legend, the mysterious, ghostly *Kaafírór* vanished together with its people early in the time of the Spanish occupation of the Marianas. The people, my informants say, were similar to those of Yap in language and culture. When they heard about the doings of the Spanish and their cruelties to the Chamorros they decided to disappear, together with their island, rather than face the possibility of a similar fate. But occasionally *Kaafírór* and its people reappear.

Elbert (1971: 50) says: "Kaafírór, according to Tilime [a Puluwat man], is a land to the west of Puluwat; it lies between Yap and Fais. People never go there. They see it on the horizon and when they get near it disappears." Ochs (n.d.: 218) says: "There are numerous references to this island in Puluwatan sea lore, all indicating its position northeast of Yap. Most say the island, once the home of the Yapese, sank into the sea. Toaru [a Puluwat man] says it is a ghost island that disappears and reappears, but he does not know where (except for its star-route). . . . There is a possibility the position given for this island may be a navigational reference point, wholly abstract. . . ." Thomas Gladwin's notes, taken in 1967 from his Puluwat informant, Hipour, read: "Kaferuch [Gladwin's orthography] is an island north of Ulithi and Yap which disappeared and has not been heard from since the Spanish times. At that time people came from there to Yap; the Yapese told them of the ease of obtaining iron tools, etc. [in the Marianas], but they did not want any part of a foreign power. They returned to their island and have not been heard from since."

These accounts all come from Puluwat people, but similar traditions occur elsewhere. Senfft (1906: 284), who like others confuses the legendary place with the Gaferut of the maps, says that the natives of the West Carolines never visit the island out of fear, and that they call it "devil's island." We know, of course, that he is talking about *Kaafírór* without realizing it, since Gaferut was indeed visited; it was used as a stopover place on the annual visit to Guam, as described earlier in this paper.

One of the islands of "the Woleai" is Ifaluk. Among the star-courses tabulated by Burrows in his Ifaluk ethnography (1953: 342), the one to be followed in sailing from Yap to "*Gaverót*" (Burrows's spelling of the name in the Ifaluk dialect) is given as the horizon position of the star Tagaliwileugo. This is the rising of Alpha Ursae Majoris, which is at 27° from Yap. Burrows evidently assumes *Gaverót* to be the Gaferut of the maps, for he is puzzled by this compass position and says that Gaferut is actually "about east by south from Yap" (in fact it lies at about 92°). But 27° puts the mythical island, which is clearly what Burrows's informant meant by the name *Gaverót*, squarely where it should be; the rising of Alpha Ursae Majoris is precisely what my Puluwat informants told me in 1967 was the star to follow from Yap to *Kaafírór*. Burrows quotes, without comment, his English-speaking Ifaluk informant, Tom, as saying of the island, "steamer and canoe come close, go down in water." Evidently this was meaningless to Burrows, but it is quite in accordance with the other accounts of the reputation that the mythical people of *Kaafírór* have

for desire to avoid foreign contact.

There is another story, told on Yap, about another vanished land. Miklukho-Maclay (1878: 45), Hernsheim (1884: 28), Christian (1899: 310), and Born (1903: 137) all refer to a tradition of a now sunken land which lay north of Yap and which was in communication with it. They give its name as *Sepin* or *Saiping*. It was the ancestral home of the people of Rumung, in northernmost Yap. During an earthquake it disappeared, and when canoes sailed north again to seek it they found only scattered islands, and these too then vanished. Three of these authors identify the sunken place with Hunter Bank, which lies 20 miles north of Yap and has a least depth of 12 fathoms. Hernsheim says that the catastrophe occurred three generations before his time. A fifth authority, Senfft (1905b: 140), tells us that in his day there were numbers of Yapese still alive who had been to the vanished island, which he too calls *Sepin*, while it still existed, and that it had disappeared only 50 or 60 years before.

It is of incidental interest here that among the list of 32 islands of the Carolines furnished to Father Paul Clain in 1697 by the two canoe-loads of Carolinians, supposedly from Fais, driven ashore at Samar in the Philippines the previous December, one inhabited island bears the name of *Saypen*. This place does not appear on Clain's map, but in a letter of 1703, written by Fathers Medel and Serrano, the same castaways are said to have come from an island called *Saipen* (Krämer, 1917: 32).

Another writer, Müller (1918: 131, 304–5, 370) gives many details about the vanished land, whose name he writes as *Sēpīn*, and which he too identifies with Hunter Bank. Its inhabitants spoke the dialect of Rumung and were reached from Rumung by means of sailing canoes; a type of yam was imported to Yap from there; the author of certain important Yapese customs originated there; six prominent spirit beings also had their origin there; a certain stone, which was a present from a magician in *Sēpīn* to another magician in Dugor, Yap, served to guide canoes on their course to *Sēpīn*; a chief of Rumung named Ria is said to have sunk *Sēpīn* by means of magic, and if someone uses the name of the vanished place near his grave, huge clouds of mosquitoes will appear.

The missionary Walleser (1913: 628–629) provides further information about the mysterious land of *Sipin* or *Sépin*, as he variously writes it. The inhabitants of the island, again located north of Yap, are heavenly spirits, ruled by the god Yelafáz. (This is the trickster-god known elsewhere in the Carolines as Olopat, Orofati, etc.)

The tale of the vanishing island is also related by Krämer (1937: 114). He, however, connects it to our *Kaafirór*. In discussing the island of Lamotrek he says (my translation): "the clan Mongaulifadj [Mongonifar, as I recorded it on Puluwat in 1967], which comes from Puluwat . . . must be traced back to the island of Gáferudj [Krämer's orthography, Lamotrek dialect, corresponding to Puluwatan *Kaafirór*] to the north of Yap—probably Sēpen—which on clear days was visible from the northern tip, from Rumung. . . . It is said that the island Sēpen still existed in 1830 and occupied the position of Hunter Reef." From the context it would appear

that he obtained the story of *Gáferudj* from Lamotrek people, but made the connection with *Sépen* himself, possibly from his knowledge of the Yapese story about that place.

Kubary (1888: 7; 1895: 4, 25) does not repeat the story of the sunken place. Instead he tells us the tradition of a land named *Sepin* (elsewhere *Sejin* and *Saepin*) to which a Rumung man went and whence he procured pieces of aragonite, the material of the famous stone money of Yap. This event took place long before the Yapese began to go to Palau to quarry the stone, as they did in historical times. This *Sepin*, says Kubary, seems to be Saipan in the Marianas.

This suggestion about Saipan is also taken up by Krämer (1937: 346). In discussing the tribute that the central Caroline Islands once paid to Yap, he mentions a place named *Saipen* as such a tributary island, and in a footnote to that he wonders whether Saipan in the Marianas is meant or whether it is "Sépen, a former atoll named Gáferudj, presumably Hunter Reef." (Father Francis Hezel has written me that it would be understandable that the Yapese regarded Saipan in the Marianas as a tributary island if a large number of Woleai people and other Carolinians had already migrated to that island, as they did do in the 19th Century).

There is also a discussion by de Beauclair (1963: 152) of the question of whether the vanished island can be identified with Saipan. She says, "According to tradition Sepin was once inhabited by people who spoke the Rumung dialect. They were in possession of strong magic, and the island could submerge and reappear at their will. Unwanted visitors were kept off by high waves and mislead [sic] by the light of mysterious fires. . . . The people of Yap object [to the view that *Sepin* and Saipan are synonymous], Saipan, which is well known to them, [being] spoken of as Saipoll."

I would certainly agree with the Yapese who refuse to identify *Sepin* with Saipan. *Sepin* is an important place in Yapese tradition. The many details given about it by Müller, Walleser, and de Beauclair, as described above, are evidence of that fact. If it is indeed the same as Saipan it is the only place in the Marianas that has such significance; the larger, nearer, more populous, more prominent island of Guam has none of this traditional importance.

But as to the separate question of whether the place called *Sepen*, *Saipen*, etc. at Yap and the place called *Kaafirór*, *Gáferudj*, etc. in the Central Carolines are the same, possibly Krämer is correct when he makes that suggestion. Both are legendary, sunken islands. Both supposedly lie northerly of Yap. The people of both places have a desire to avoid foreign contact. Yet the two in some respects seem to be different traditions. Father Francis Hezel, at Xavier High School on Truk, writes me as follows: ". . . the legends relating to these two islands appear to be quite distinct, as far as I can make out from conversations with the boys here. Almost all the boys from the Central Caroline atolls have heard of the disappearing island of *Kaafiror* or *Gaferuch*, but none of them are familiar with the island of *Sepen* off Yap. The Yapese boys at the school, on the other hand, all are familiar with the myth of the people of *Sepen* who (according to the most common version

here) met in council with the other Yapese to determine what course of action they would take when they first heard of the imminent coming of the white men and their reputed interest in seizing power over the islands. The people of *Sepen*, who were renowned for their magic, offered the others the chance to disappear under the sea. It was turned down by the rest, but the people of *Sepen* pulled off the trick on their own island—the story goes—so that they vanish at the approach of a vessel. The Yapese claim that lights from the island are sometimes visible in the evening, however. None of the Yapese boys has heard of *Kaafiror*."

Perhaps a real island did once exist at what is now Hunter Bank, and perhaps this is the source of the *Sepen* story. But Hunter Bank is only 20 miles from Yap. If this place is also *Kaafiror*, then the Central Carolinians have moved it to a position about 125 miles to the northeast, as we will see.

During my 1967 field work at Puluwat I recorded a number of mnemonic systems and imaginary devices used by the native navigators to help them to arrange and organize the enormous stock of geographical and astronomical items of information that they possess (Riesenbergs, 1972). One of the conceits that they thus employ is called the Lashing of the Breadfruit Picker. The navigator imagines himself to be standing on some island and reaching out with a breadfruit picker (which is a long pole with a hook on the end) under a particular star (one among the 32 star bearings that are used for navigation) to one place after another until the inventory of known places, real or imaginary, under that star is exhausted and he comes to the end of the known world. Or the breadfruit picker may be turned in a new direction, under another star. The inclusive term for such inventories is the Lashing of the Breadfruit Picker, but each inventory included in this category has its own name. One of them is the Breadfruit Picker of the Chief of *Kaafiror*. Here the image consists of the chief, standing on *Kaafiror*, reaching out his breadfruit picker on the bearing of one of the 32 navigation stars to an island or islands on that course, then hooking some desirable object, which is specified by name, and drawing it back to *Kaafiror*; this action is then repeated for the successive navigation stars around the compass. The complete inventory is thus a list of bearings radiating out from *Kaafiror* and one or more places found on each of those bearings.

Among these bearings, some 23, involving 11 star positions, lead one to places I can identify. By back-charting from such places under the opposite bearings it is possible to draw lines so that they intersect at the presumable position of *Kaafiror*, where the chief stands. Unfortunately for our purpose the narration of inventories and bearings in this system is given in terms of the middle of three stars; a bearing includes not just the named star but one star to each side of it. The back-projections are thus pairs of radii rather than lines. Nevertheless, there is an area of intersection which is included within all the sets of rays; it falls at about $11^{\circ}32'N$ and $138^{\circ}47'E$, which is indeed north and east of Yap, where the Puluwat navigators say *Kaafiror* is supposed to be.

In these waters the bathymetric charts (which are admittedly imperfect) indicate only depths of 1800 fathoms or more. But 40 minutes to the southeast of

the intersection area, at about 11°20'N and 139°20'E, a shallow of 25 fathoms depth appears. The bearings I have used to establish the area of intersection being so imprecise, this shallow is probably acceptable as *Kaafirór*.

A depth of only 25 fathoms is quite enough to give some surface indications: coloration, wave phenomena, perhaps fauna. Is this the explanation of the ghost island? Some lost traveller, perhaps en route from Yap to Guam, seeing and remembering these phenomena, later reifying them as an inhabited land? Or is it possible that a real island once existed here, as the Carolinians say? The Breadfruit Picker of the Chief of *Kaafirór* is only one of many mnemonic systems included within the rubric known as the Lashing of the Breadfruit Picker, and that group of systems is only one of many kinds of mnemonic devices. Any Carolinian navigator worthy of the name can give a whole set of radiating courses under all the navigation stars from every island of the Carolines, not just from *Kaafirór*. Such inventories of knowledge are extremely practical and vitally important to a Carolinian sailor. But what useful purpose can be served by learning such courses from an imaginary place? Yet navigators do learn them, together with the courses from real islands, and they make no distinction among them. It is perhaps not altogether in the realm of fantasy to speculate that the curriculum of the schools of navigation was established in a time when *Kaafirór* was more than a discolored patch of water.

But how did this ghost-island's name erroneously become attached on present-day maps, in the form *Gaferut*, to the real place known to Carolinians as *Faayee*, *Fayaew*, etc.? We have identified Torres as the culprit responsible for the name shifts in the instances of West Fayu and Pikelot. In the case of *Gaferut* the guilty party seems to be Arno Senfft, who was the District Magistrate at Yap in the early years of German administration of the Caroline Islands. In August, 1903, Senfft made a visit of inspection to the western Carolines. He says that he was told that the chief of Lamotrek held domain over several other islands, among them places named *Pikola*, *Pikolot*, and *Westfayu*.¹¹ These three names, if we eliminate the German prefix "west," are the native names of the three real islands that we have been discussing all this while (*Pikolot* being the alternative name of *Piik*). It was apparently a Lamotrek man who gave these and other names, including the name that Senfft writes as "Gaferut". (Krämer, 1937: 114 writes the Lamotrek form of the name as *Gáferudj*, which is much closer to Senfft's "Gaferut" than the forms further east, such as the *Kaafirór* in the Puluwat dialect).

But Senfft seems not to be concerned that he has more names than he has islands to fit them to. As I have already described, he (1906: 284) refers to a "devil's island" which the natives never visit, but makes the error of identifying it with the Grimes Island of the maps of his time and says that it is called *Gaferut* by the natives. This "devil's island" is, of course, the mythical place known as *Kaafirór* (or variant). It thus seems to be Senfft who first applied this name to Grimes=Faayee. And only then, apparently, was it taken up by cartographers.

¹¹ Senfft (1904a: 13). In Senfft (1905a: 56), where the same information is given, the three names are spelled *Pikela*, *Pikelot*, and *West-Faju*.

How did Senfft come to make such an error? He made his visit to Gaferut in December 1905 in the course of a second tour of inspection. The Lamotrek man who had given him the names of the various islands may well have done so in the form of one of the mnemonic systems I have mentioned previously, such as the inventory called the Lashing of the Breadfruit Picker. If so, *Kaafirór* would have been included without differentiation from real places. Both the mythical *Kaafirór* and the real *Faayee* (or Gaferut) lie to the northwest of Lamotrek. My Puluwat informants (Riesenbergs, 1972: 44) gave me the course from *Kaafirór* to Lamotrek as the rising of Antares, or 117° . I do not have the star for the reverse voyage, but by adding 180° the derived course would be 297° . The nearest position to that in the Carolinian star-compass is the setting of the Pleiades, at 294° , which is close enough in view of the imprecise way in which the Lashing of the Breadfruit Picker courses are described by the native navigators. A straight line drawn on the chart from Lamotrek to the ocean shallow which I have suggested may be meant by *Kaafirór* produces a course exactly 297° from Lamotrek.

Now Gaferut lies not at 297° from Lamotrek but at 327° . But it is the only island to be found in that general direction from Lamotrek other than Faraulep and Olimarao, both of which were already known by those names to Senfft (1904a:13; 1904b: 193). The name *Faayee* (the native name of Gaferut) was known to him too, but his predecessors and the cartographers had already mistakenly preempted that name for West Fayu. Evidently, then, Senfft, finding in this area only what was then called Grimes Island, and having been told of a "devil's island" called Gaferut, decided that these were one and the same. I have found the name Gaferut in no published articles earlier than Senfft's. It was probably from those articles that the German cartographers got the name. Thus we have, for example, Sievers and Wegener (1914: 364), in their compilation of then-German possessions, discussing "*Faijo, Grimesinsel, besser wohl Gaferut genannt . . .*" (that is, "probably better called Gaferut.") And so it was that the error became established.

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