"NO TOBACCO, NO HALLELUJAH": MISSIONS AND THE EARLY HISTORY OF TOBACCO IN EASTERN PAPUA

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According to myths and legends told by some peoples of New Guinea, tobacco is an ancient and indigenous plant, having appeared spontaneously in a variety of ways. In other instances, the plant and the custom of smoking it are said to have been established by local culture heroes, while still other traditions prosaically cite adoptions from neighboring groups. On the basis of oral history alone, then, one might conclude that New Guinea tobacco appeared in widely scattered locations in the mythic past, and its distribution at the time of European contact is explainable as simple diffusion within the region.

Although some researchers speculate that one or more indigenous tobaccos existed in New Guinea (e.g., Feinhandler, Fleming, and Monahon 1979), the consensus among scholars today is that there is no solid evidence for the presence of tobacco anywhere in New Guinea prior to the beginning of the seventeenth century (Haddon 1946; Riesenfeld 1951; Marshall 1981, 1987). Instead, a comprehensive review of the botanical, ecological, ethnographic, ethnohistorical, historical, and linguistic evidence (Hays n.d.) leads to the conclusion that the only tobacco reported from anywhere in New Guinea is the New World plant *Nicotiana tabacum* L., and that the custom of smoking is unlikely to predate significantly tobacco's first notice in the historical record, for northwestern Irian Jaya in 1616 (Schouten [1619] 1968:70, 72–73). Tobacco and tobacco smoking doubtless were introduced either directly or

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indirectly by Europeans following their entry into what is now insular Indonesia. Subsequent diffusion and multiple reintroductions resulted in the widespread, though not universal, distribution of tobacco when a significant and sustained European presence began in the late nineteenth century.

The current ubiquity of tobacco smoking in Papua New Guinea—which is nearly matched by contemporary missionaries' opposition to the practice—can be especially misleading, since (in at least some parts of the country) both the custom *and* negative mission attitudes towards it are relatively recent developments. In this article I shall survey the historical record for coastal Eastern Papua (earlier known as British New Guinea); that is, the region from Yule Island southeastward to the "Papuan Tip" and the Massim, and northward along the coast to present-day Morobe. My concern is to elucidate the role played by early missionaries in the adoption and spread of what many later would consider a reprehensible habit.

Tobacco in Eastern Papua

Consistent with the proposal of a general eastward and southeastward diffusion gradient, the areas of New Guinea where the *absence* of tobacco smoking was most conspicuous at the time of "first contact" are in the southeastern quadrant of Papua New Guinea, or what I refer to here as "Eastern Papua." It is notable that in the records of the coastal exploration of HMS *Rattlesnake* (e.g., Stanley 1849; MacGillivray 1852), despite numerous contacts with and observations of the people from Cape Possession to Redscar Bay, Orangerie Bay, and the Louisiade Archipelago, there is no mention whatsoever of tobacco or smoking among the native population. This contrasts with the detailed descriptions given of smoking and smoking implements observed by the same explorers among Cape York Aborigines and Torres Strait Islanders (Moore 1978). Furthermore, when Captain John Moresby sailed HMS *Basilisk* up the coast of northeastern Papua in 1873, local people everywhere rejected offers of tobacco (Comrie 1877:108). While such records may leave much to inference, other reports are unambiguous and can be used to reconstruct the situation in the late nineteenth century for many language groups, which in some cases were experiencing extremely rapid changes (see Appendix).

Despite the incompleteness of the information available, the general picture seems clear. Unlike the situation elsewhere on the island of New Guinea, with only a few exceptions in the interior (e.g., Mekeo, Moun-

tain Koiari, and groups around Kokoda), neither the cultivation nor the smoking of tobacco had yet diffused to most of Eastern Papua by the last three decades of the nineteenth century, when a sustained European presence began. Instead, we find an almost continuous string of absences, or very recent arrivals, along the entire coastline and on the adjacent islands. It may be true, as Mac Marshall has suggested (pers. com., 1990), that Europeans' interest during this period in maintaining a trade monopoly limited Papuans' exposure to tobacco plants and to knowledge of cultivation techniques, but in any event the incidence of tobacco *smoking* increased rapidly.

"The God of the Motuites"

The Australian explorer/adventurer Theodore Bevan recounts that "in the autumn of 1884 I made up my mind to visit New Guinea. It was described as a land of gold, yet where a fig of tobacco would buy more than a nugget of the precious metal had power to purchase" (1890:3).

Indeed, one of Bevan's predecessors, Octavius Stone, had found that in the Hanuabada of late 1875 the people "seem[ed] madly fond of *kuku* [the Motu word for 'tobacco'], and would pawn their very clothes for it if they wore any" (1880:55). According to Stone:

> Even little babies learn to utter the word *kuku* before *tinana*, "mother." I never knew a people so fearfully fond of this weed. *Kuku* is their god, whom alone they worship and adore. The word *kuku* escapes their lips more than any other in the course of the day, and is ever in their thoughts. Its praises are sung in their *hehonis*, or night-chants, and your health is smoked with it in the daytime. . . .
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> . . . It is the cause of joy, the cause of sorrow, the cause of friendship, the cause of enmity, the cause of content, and the cause of discontent. (1880:89)

An accompanying engraving is captioned "TWIST TOBACCO, OR KUKU, THE GOD OF THE MOTUITES" (Stone 1880:89).

The "Motuites" were not unique in their rapid adoption of and obsession with European trade tobacco. By 1911–1912, only twenty years after the administrator, Sir William MacGregor, found it impossible to get Goodenough Islanders to accept tobacco in trade (see Appendix), Jenness and Ballantyne discovered a radically changed state of affairs among the Bwaidoga:

> Two things appear to the native almost as necessary as his food—betel-nut and tobacco. Abundance of both makes life rosy, their absence robs it of all pleasure. Sometimes the natives assert that they could not live if they were deprived of tobacco. A man would often come to us and say, "My tobacco was all used up, so I stayed at home in my hamlet. My strength all left me; I existed, and that was all. At last I thought to myself, 'I will go to my father [i.e., the Rev. Ballantyne] and he will give me some tobacco.' " (1920:163)

Even if some hyperbole is granted in the above claims, it must be conceded that on the coastline of British New Guinea in the late 1800s, twist tobacco was indeed worth more than its weight in gold and, like beer in modern-day Papua New Guinea, eminently more portable, divisible, and consumable. As Otto Finsch described it, the American twist tobacco (which was often soaked in molasses or rum) took "a form like a thin stem of sealing wax, and constitutes a pressed black mass that is broken apart with a sharp instrument. Each piece has two overlapping braided halves and is easily divided. 22 to 26 pieces are counted per pound" (1888:58–59).

At about the same time, the trader Pitcairn reckoned the cost as high: "Trade tobacco costs in Queensland, say 1s. 3d. per lb., then there is the transit, say 1d. per pound, and New Guinea duty of 1s., so it costs you 2s. 4d. per lb. on board" (1891:141). Somewhat later, the Anglican missionary Chignell (at Wanigela from 1907–1914) estimated the cost of twist similarly at "about a penny halfpenny" per stick, or about thirty-odd cents per pound (1915:133).

What could be obtained for these "costly" sticks? Food, certainly: in the 1890s the London Missionary Society (LMS) obtained sago from Purari Delta people at a rate of "one stick of trade tobacco for one bundle of sago" (Holmes 1924:231); in the Samarai of 1897, at the Kwato Mission school, "a stick of that black-looking tobacco would buy as much food as you wanted, and if you had a pocket full you would be rich!" (Thompson 1900:17); on Sud-Est (Vanatinai) in 1883, the labor recruiter William Wawn bought fish "at the rate of one stick of twist tobacco (eighteen sticks to the pound) for eleven fish, the whole lot for elevenpence-halfpenny" (quoted in Lepowsky 1982:328); and at turn-of-the-century Wanigela, one stick of tobacco yielded a local trader "ten or twelve pounds of native sago, or thirty pounds of taro or bananas or yams. As much tobacco as would fill a clay pipe [would] purchase sev-

eral crabs, or as many prawns as even [the trader] would care to eat at a single sitting" (Chignell 1915:60). Rates paid by the Anglican mission itself were:

> a stick of tobacco, which costs about a penny halfpenny, for twenty-five to thirty pounds of taro or yams, and the same for fifteen coconuts, or for eight or ten pounds of sago, though when sago is very plentiful, and the supply everywhere greater than the demand, we expect to get half as much again for our tobacco. A turtle is worth four or five sticks. . . . A wallaby fetches two or three sticks at ordinary times, but much less when the big hunts are going on, and game is plentiful. (Chignell 1915:133)

Coconuts for food or as a source of copra could also be obtained, though the rates varied considerably. At Tauwara in Milne Bay in January 1891 MacGregor complained that

> the price they receive for their copra is far from encouraging; they get two-fifths of a pound of trade tobacco for a full sack of copra. If they sell the cocoanuts, they get for twenty-eight cocoanuts the twenty-fifth part of a pound [i.e., one stick] of tobacco. It is wonderful that they care to take so much trouble for such poor returns. (1892c:32)

But these returns were good compared with the rates in Misima in the 1890s, where goldminers paid one stick of tobacco for forty coconuts (Nelson 1976:40).

Labor, too, could be purchased with twist tobacco, at the rate of one stick a day for hunting murderers on Vanatinai in 1886 (Lepowsky 1982:328), or as much as three sticks per day for "ordinary work" at the mission stations in the Delena district in 1896–1912 (Dauncey 1913:81) or construction work at Dinawa in 1902 (Pratt 1906:111). And by 1911–1912, on Goodenough Island "two sticks of tobacco a day [was] considered high wages, and a man [would] often work for only one" (Jenness and Ballantyne 1920:164).

Nor might it be stretching the truth to say, as did Pitcairn of coastal natives of the late 1880s, that the people "would sell their souls for tobacco" (1891:85).

Mission Use of Tobacco

Shortly after R. W. Thompson arrived in 1897 at the LMS mission among the Roro at Maiva, he became aware of the extension of tobacco's buying power beyond the meeting of everyday subsistence needs.

> The teachers naively submitted to us the question of the expediency of following something like the plan which they said was adopted by the [Sacred Heart Mission] Roman Catholic priests. According to their description, it was the practice of the priest to go through the village on Sunday morning with a basket containing a supply of tobacco. He promised a piece of tobacco to every man who attended service, and, in consequence, his ministrations were greatly esteemed by a considerable number of the heathen. Our good friends felt that they could not adequately contend against such competition as this unless we could see our way to provide them with similar means of tempting the people to their services! I need scarcely say that we did not accede to the request. (Thompson 1900:76)

While Thompson may have been shocked at such a proposal, his own mission, like others, had long depended on trade tobacco in its work. G. R. Askwith, on a tour of inspection with newly appointed Special Commissioner Sir Peter Scratchley, summarized the situation as of 1885: "Tobacco was of the greatest importance. At Port Moresby the [LMS] mission house really lived by tobacco. . . . At the mission house no service could be secured without payment in tobacco, which was really the current coin of the country" (quoted in Chalmers 1887:84).

The extent of the missionaries' reliance on tobacco was readily admitted by W. G. Lawes (who established the mission at Port Moresby in 1874), when he responded to criticism from within the LMS.

> The quantity of tobacco used is large in the aggregate, but it has to be divided among twenty teachers and missionaries. Each teacher uses about one hundred and twenty pounds of tobacco a year. It is really the currency here; houses and churches are built with it, boats are pulled by it, gardens and fences made with it; it is our wood and water, our fruit, vegetables, and fish; it is the sign of peace and friendship, the key which opens the door for better things, and . . . the shortest

> way to a New Guinean's heart is through his tobacco-pipe. (Quoted in Lovett 1903:216)

In the light of such observations Basil Thomson's judgment that "the success of the Mission in many places is in proportion to the amount of tobacco distributed" cannot be disputed (1889:528).

The dependence of missions and local people on trade tobacco was sometimes criticized, or at least was the basis of complaints. From an administrator's viewpoint, it was sometimes a wasteful distraction; thus Sir William MacGregor lamented of the Suau of Logea Island in late 1890 that they spent "far too much time in going backwards and forwards to Samarai trying to sell such things as shells, pumpkins, cocoanuts, &c., for tobacco. . . . They almost always sell their produce for tobacco" (1892b:28). And Assistant Resident Magistrate A. C. English despaired over conditions in the Rigo district:

> In my opinion, one of the greatest curses to the native is trade tobacco. He will go to work for a few weeks or months and earn a few pounds; then returns to his home and leads the life of a gentleman. He is able to purchase with the tobacco he buys the best of food and luxuries, and leads a most immoral, lazy, and sluggish life. While tobacco remains the currency, as it is now, I see no hope of improvement in the labour conditions with the native. (1905:23)

In 1926, among the Suau, F. E. Williams heard other complaints of social disruption:

> One old man, explaining why so many more people died nowadays, said very shortly that it was due to tobacco. Expanding his answer somewhat he said that tobacco was the ruin of women's virtue. Whereas in his youth women's favours were not easily obtained, it was now only necessary to go into the garden and show a stick of trade twist. Tobacco led to adultery, and adultery to death by sorcery. (1933:6)

As was the case regarding alcohol and kava use elsewhere in the Pacific (Mac Marshall, pers. com., 1990), Protestant missionaries were divided on the topic of tobacco smoking. So far as some were concerned, there was something unseemly about winning souls through tobacco.

Thus, just as R. W. Thompson was repelled at the thought of bribing villagers to attend church, in early 1883 Samuel Macfarlane, a pioneer missionary with the LMS, "raised an objection to what he considered an excessive use of tobacco in the work," and Chalmers's biographer, Richard Lovett, agreed that "at first sight it must be admitted that it is hardly in accordance with the views of the average British supporter and friend of missionary efforts to believe that tobacco can be an effective evangelizing agent" (Lovett 1903:215).

But Lawes's official response in a letter home stressed both its effectiveness and the *economic necessity* of its use:

> I have no predilections in favour of the weed. I am a non-smoker, I have never had cigar or pipe in my mouth, and until I came here had never handled a piece of tobacco. But I entirely fail to see either the harm done by it to the natives, or the possibility of substituting anything else for it. If we dispensed with the use of it, the expenses of this mission would be increased at least twelve-fold. We should have to give a tomahawk which cost a shilling where we now give tobacco which cost a penny. And even then we could not manage, for you cannot divide a tomahawk as you can a stick of tobacco. . . .
>
> It is better, we think, to get the supply of tobacco as we have done, and let the teachers have all they want. It is impossible for them to do without it. They can only raise a very small quantity of native food, but they need never be without it if they have tobacco. The people will work readily in fencing, building, and all kinds of labour, and the women will keep them supplied with wood and water for tobacco, when nothing else will induce them to move. (Quoted in Lovett 1903: 216–217)

In 1884 Chalmers joined with Lawes in writing to the directors of the LMS:

> I would say, leave the tobacco question alone; we only can manage it. I use the weed myself, and have found it a good friend in many strange places and amongst very peculiar people. Mr. Macfarlane has been leading you astray in saying that at the east end [of the southern coast] the work was done without missionaries or tobacco. The statement is altogether inaccurate. . . . Tobacco is and has been as much used at the east end

> as here [in the Port Moresby area], and perhaps much more. Mr. Macfarlane's own teachers have again and again said, "Suppose no tobacco, no man come church or come see us." (Quoted in Lovett 1903:218)

The LMS did not abandon its extensive use of trade tobacco, which dated from the beginning of their ministry in the 1870s (and much earlier elsewhere in the Pacific), when the people around Port Moresby "received their entire supply of tobacco through the Mission, and their name for the Mission vessel [was] 'The Tobacco Ship' " (Turner 1878: 494). Nor were the other missions in Papua any different; they simply left less documentation.

Missions as Promoters of Tobacco Use

It seems clear from missionaries' own accounts that it would have been difficult, if not impossible, for them to have functioned in the Eastern Papua of the late nineteenth century without employing the "currency" of trade tobacco. Yet it could also be said that this was partly a circumstance of their own making, a previously unexamined proposition, perhaps because of the complexity of the issues involved and the scarcity of direct evidence.

Scholars such as Whiteman are undoubtedly correct in noting the tremendous impact on Melanesians' lives of Western material objects introduced by traders, including tobacco, of which many "islanders became so desirous . . . that their want soon became a need, a need that could only be satisfied through exchange with Europeans" (1983:110). Shineberg has characterized well the complicated linkages within the growing world system that motivated this promotion of dependency: "Traders sold tobacco for Pacific islanders to smoke in order that the Chinese might burn sandalwood in order that Australians might drink tea" (1967:151). In Whiteman's view, then, the missions were unavoidably caught up in the consequences and constraints arising from the earlier, and still ongoing, activities of European traders; thus "the missionaries were necessarily forced into a mold of having to 'trade' with the islanders," though there were occasional exceptions, such as G. A. Selwyn, head of the Melanesian Mission in the 1840s, who "refused to trade tobacco," but did not draw the line at "fish-hooks, metal tools, cloth, and 'trinkets' " (Whiteman 1983:110). Such exceptions, apparently, were not to be found among the Marists in the Solomons (see Laracy 1976:71–72), and I have learned of none in Eastern Papua.

Others, such as Lepowsky for Vanatinai, have documented the introduction of tobacco and matches as well as instruction in how to use them by nonmissionary Europeans, assuming the same motive as that attributed to traders elsewhere in the Pacific: "By creating a desire for tobacco among the islanders, the early traders in the Louisiade Archipelago and other Papuan islands could insure that the local inhabitants would be eager to barter with them whenever they appeared" (1982: 327). Sometimes, however, the tactic was not immediately successful, as Austen relates for the Trobriand Islands, where tobacco smoking was a late adoption (see Appendix):

> When Whitten and Oskar Solberg had a trading station on the north-west end of Kiriwina, they could not get the natives to smoke, until one day Whitten persuaded one of the Toliwaga chiefs to have a draw from his cigarette. After that, smoking spread all over the island, and to-day the Trobriander is the most inveterate smoker throughout Papua. (1945:24)

Speaking generally of the use of Western goods by the Melanesian Mission, Whiteman has argued that "given the cultural context in which they first contacted the islanders, they seem to have had little alternative" (1983:110–111). But how true was this of Eastern Papua, at least with regard to tobacco smoking?

Apart from abortive attempts in 1847–1855 on Woodlark Island by the Society of Mary and the Milan Foreign Missionary Society, the first missionaries in British New Guinea were those of the LMS (Langmore 1989). Working from a base in the Torres Strait established in 1871, Polynesian teachers were settled at Katau (in the Trans-Fly region) and Redscar Bay in 1872, followed by teachers at Anuapata (Port Moresby) in 1873. The Rev. W. G. Lawes arrived in Port Moresby the following year and began a lengthy stay (until 1906), during which time Port Moresby became a center for mission exploration. Over the period 1874–1880 thirteen LMS stations were established, including ones on Yule Island (1875) and Teste Island and South Cape (1877), soon to be followed by many more, at Delena, Maiva, Gabadi, Hula, Kerepunu, and Aroma, until virtually the whole length of the Papuan coast was served by LMS stations.

In 1885 the hegemony of the LMS on the south coast was challenged by the arrival of Fr. Henri Verjus, of the Sacred Heart Mission (SHM), on Yule Island. The SHM quickly explored Mekeo, Kuni, and Roro country, and their presence as well as interest shown in British New

Guinea by others gave impetus to a "gentlemen's agreement" reached in June 1890. Negotiations among Sir William MacGregor (the administrator), Lawes of the LMS, the Rev. George Brown (general secretary of the Methodist Overseas Mission Board), and the Rev. Albert Maclaren (representing the Australian Board of Missions) established respective "spheres of influence." To the LMS was allocated the south coast all the way to the eastern tip (with the SHM given free reign over the interior of the mainland opposite Yule Island); the Louisiades and D'Entrecasteaux were awarded to the Methodists; and the vast northeastern region from Cape Ducie to the Mambare River was to be the province of the Anglicans.

The Methodists and Anglicans proceeded quickly to settle their allotted areas (Wetherell 1977). The former established W. E. Bromilow and teachers at Dobu, S. B. Fellows and J. Watson at Panaete, teachers at Teste Island, and J. T. Field at Tubetube—all in 1891. In 1894 Methodist teachers were set up on Misima, and Fellows was transferred to Kiriwina, followed by lay missionary Glew on Woodlark Island in 1897. For the Anglicans, Maclaren reconnoitered the northeast coast in 1890. In 1892 the Rev. Copland King was firmly settled at Dogura, and in the next two years Polynesian teachers were installed at Taupota, Awaiama, and Boiani. In 1898 stations were established at Wanigela and Mukawa, with another at the mouth of the Mambare River in 1899. By 1901 the Anglicans had eleven functioning coastal stations.

While American (and possibly other) whalers were exploiting the waters of the Massim and off the eastern coast of Papua as early as the 1830s, there is little indication that their presence had much effect on the local people's awareness of or interest in Western goods. It is possible that they were the Europeans who introduced tobacco and smoking to Vanatinai, but oral traditions to that effect cited by Lepowsky (1982: 327) are not corroborated by any other evidence, and the historical record suggests that there, as elsewhere in the islands, tobacco was a recent arrival in the 1880s (see Appendix).

Missionary activity was late in Eastern Papua compared with the rest of the Pacific, but in the period 1871–1900 there was little if any "mold" into which missionaries were forced to fit, except as they may have *presumed* one from their previous experiences elsewhere in Melanesia and Polynesia. This was especially true for the LMS, early representatives of which made many "first contacts" in their extensive exploration of the south coast.

It is at least suggestive to note the pattern of recorded absence and subsequent recorded presence of Papuans' knowledge of and interest in

tobacco smoking in relation to the periods of initial mission activity and settlement, as shown in Table 1 (see Appendix for specific cases). With regard to the LMS "sphere of influence," we might infer from the records of Stanley's exploration that tobacco was still unknown all along the south coast from Yule Island to East Cape in 1849, and historical sources indicate absences in numerous locations into the early and mid-1870s. In contrast, definite appetites for trade tobacco were recorded nearly everywhere by 1891; that is, after about two decades of LMS (and six years of SHM) exploration and settlement. What I have referred to here as the "northeastern" coast was Anglican territory, beginning with Maclaren's exploration in 1890 and settlement by missionaries and teachers starting in 1892. Almost certainly the Anglicans arrived in virgin territory so far as tobacco smoking was concerned, but by the end of the 1890s this was no longer true. And in the Massim—where the Methodists' "sphere" began effectively in 1891—again we find the absence of smoking into the late 1880s, then its presence almost simultaneously with the Methodists' arrival and expansion.

This concordance provides only circumstantial evidence, perhaps, as the missionaries were not the only agents of change in the region in the late 1800s. Indeed, in a few locations "native tobacco" was diffusing into the region at about this time. Although this affected primarily the groups (Mekeo, Kuni, and Roro) being missionized by the SHM priests, it is possible that the Koiari or other inland peoples had recently introduced the custom of smoking to Motu groups by the time Lawes arrived in 1872 (see Miklouho-Maclay 1886:352, n. 3), and certainly the Motu could have spread it far and wide on their *hiri* trading expeditions. In any case it was promptly superseded nearly everywhere by a preference for twist tobacco.

From the beginning, too, not only missionaries but administrators were exploring Eastern Papua and using trade tobacco (where there was a demand for it) in barter for food and services. Also, as early as 1878 gold prospectors were numerous along the Laloki River, as they were in the late 1880s and 1890s at Cloudy Bay, Milne Bay, Misima, Sud-Est, and the Mambare and Gira rivers (Nelson 1976). Prospectors and miners were often supplied by local white traders, and all of these parties doubtless fostered the spread of trade tobacco among the local populations.

Only in the case of the Wamira, in the Milne Bay area, is there an explicit claim in the literature that tobacco was first introduced directly by missionaries (Kahn 1986:51). Kahn's assertion is probably based on local accounts of the arrival in August 1891 of the Anglicans Maclaren

TABLE 1. **Latest Absences and First Presences of Tobacco Smoking**

Location/Group	Absence[a]	Presence
London Missionary Society "Sphere," 1872–1900		
Yule Island	1876	1879
Mekeo	[1849]	1890s[b]
Kuni	[1849]	early 1880s?
Nara	[1849]	1878
Redscar Bay	[1849]	1872 (new)
Port Moresby	[1849]	1875
Laloki River	ni	1877
Rigo	[1849]	1905
Hood Bay	1876	1878
Aroma	1878	ni
Kalo	[1849]	1881
Orangerie Bay	1873	1890
Basilaki Island	1880 (some)	1891
Tubetube	1873	ni
Anglican "Sphere," 1890–1900		
East Cape	1873	ni
Wamira	[1873]	1891 (new)
Rawden Bay	1885	ni
Cape Vogel	[1873]	1890 (new)
Collingwood Bay	1890	1894
Holnicote Bay	1890	ni
Gona Bay	1893	ni
Orokaiva	arrived late 1880s?	
Lower Kumusi River	1894	ni
Douglas Harbor	1890	ni
Mambare River (mouth)	[1873]	1896 (new)
Lower Gira River	[1873]	1897 (new)
Methodist "Sphere," 1891–1900		
Misima	1888	late 1890s
Vanatinai	[1849]	1883
Rossel Island	1885	1892
Gawa Island	ni	1893
Kiriwina	late 1880s	1891
South Normanby Island	1888	ni
North Normanby Island	1888	1888
Southeast Fergusson Island	ni	1888
Fergusson Island	1888	1895
Goodenough Island	1891	1911

ni = no information; new = recently arrived

Sources: See Appendix.

[a]Bracketed date indicates presumed absence based on global statements by Stanley (1849) or Comrie (1877).

[b]Twist preferred.

and King, who greeted the people of Wamira village by reading from a book (probably the Bible) and giving the headman some tobacco (Wetherell 1977:21). Such "opening gifts" were, in fact, common during the initial explorations by the LMS missionaries Chalmers and Lawes. For example, Chalmers reports that in his 1878 exploration of the inland Koiari villages: "On their first meeting with us they were somewhat troubled, but after a little tobacco smoke had a wonderful effect in assuring them we were friends" (1887:73). In this instance the Koiari were already familiar with smoking and were cultivating and trading their own tobacco, but in other cases LMS missionaries were making "first contacts" with peoples who did not yet know tobacco. In such instances the practice of immediately distributing trade tobacco—perhaps based on previous success in the islands of Melanesia and Polynesia—may well have involved numerous first contacts of another kind.

Certainly the record left by missionaries is replete with accounts of the casual disbursement of twist tobacco, not only in payment for food and services, but as a gesture of goodwill. Thus Gill describes the scene from shipboard at Kapakapa in February 1881 with "Mr. Chalmers occasionally throwing a handful of small pieces of tobacco into the sea. Men, women, and children all dived down [from their canoes] for the coveted prize, and in a friendly way contended with each other for it" (Chalmers and Gill 1885:283). Nor do we find any indications of the early missionaries' discouragement of tobacco smoking. As Lawes was quoted earlier, he "entirely fail[ed] to see . . . the harm done by it to the natives" (Lovett 1903:216), and this clearly was a widespread view, continuing into the next century. Thus Chignell reports the Anglican mission policy at Wanigela in 1907–1914: "Our station boys must get permission before they begin [to smoke], but the privilege is granted to them as soon as they are of an age when they would be allowed to smoke if they had still been living at home in the village" (1915:137).

It may be that in many instances trade tobacco and the practice of smoking were first introduced into Eastern Papuan communities by traders and others with only material profit as a motive, and that the early missionaries were thus placed, like their counterparts in island Melanesia, in a "cultural context" that provided "little alternative" (Whiteman 1983:110–111). But, even if unwittingly, by example and as direct suppliers (at considerable profit), the missionaries of Eastern Papua clearly were a major force in supporting and spreading the custom. They thereby contributed, ironically, to the success of what is now seen more often as a rival, "the god of the Motuites."

APPENDIX

Historical Record of Tobacco Absences and Presences (by Language Group) in Eastern Papua, 1849–1900

South Coast

TOARIPI: James Chalmers, with the LMS in the late 1870s, reported: "Only recently have they used tobacco" (1897:331).

RORO: On Yule Island and the mainland opposite "the use of tobacco was unknown" in 1845, according to Jukes (quoted in Riesenfeld 1951:81), as it also was in 1875 (Stone 1880: 187) and 1876 (Turner 1878:494). Not until Chalmers's visit in 1879 was its use recorded (Riesenfeld 1951:81). By the time of Henry Dauncey's ministry (beginning in 1888), tobacco had become the "real currency" of the area (Dauncey 1913:81).

MEKEO: While they had their own tobacco, by the 1890s a preference was shown for "the manufactured article" (Kowald 1894:114).

KUNI: Among these inland neighbors of the Mekeo the custom of smoking was believed by the SHM missionary Egidi to have been introduced in the early 1880s (Riesenfeld 1951:82).

NARA: Chalmers found them to be smokers in 1878 (1887:74).

GABADI: At Redscar Bay, Owen Stanley had found a demand for calico and hoop iron in 1849, but he does not mention tobacco (MacGillivray 1852). By 1872 LMS missionary Gill reports: "A few Redscar natives use tobacco, but do not seem to care much about it" (1876:253).

MOTU: In coastal villages abutting the territory of the Koita the explorer Octavius Stone found a demand for tobacco, beads, and cloth in 1875 (1880:33), and in Port Moresby "the first words [he] heard in landing were *kuku* ['tobacco' in Motu], *kuku iasi*" (1880:39). One gets a clear sense from Turner (1878:494) that when he began a six-month residence in March 1876 he believed smoking to be a recently adopted introduction by "foreigners." In any case, by October 1877 the men, women, and children of Port Moresby were smokers (Chalmers and Gill 1885:32).

KOIARI: Among the inland (or Mountain) Koiari both sexes smoked as early as 1875 (Stone 1880:124). Along the Laloki River, Morton gave beads, turkey red calico, hoop iron, and stick tobacco as payment in 1877, finding the people "as inveterate smokers as the coast natives" (1885:81). While they cultivated their own tobacco and traded it with coastal tribes (Lawes 1879:375), at Uakinumu in 1879, through a local medium, a "spirit dilated at length on the good qualities of foreign tobacco and the badness of the native stuff, and wound up by asking for some foreign" (Chalmers and Gill 1885:109).

HUMENE: There is an absence of early records, but by 1905 trade tobacco was used as "currency" in the Rigo district (English 1905:23).

KEAPARA: At Hood Bay tobacco was not used in 1876 (Turner 1878:494); by 1878 it was considered a "smoking region," though in the Aroma district "smoking was [still] not known" (Finsch 1914:305). In Kalo by February 1881 "[t]he one cry was, *Kuku!*" (Chalmers and Gill 1885:292–293).

Southeast Peninsula

Speaking generally, the LMS missionary Samuel Macfarlane wrote with reference to the early 1870s: "On the south-east peninsula [smoking] is a recently acquired habit. They did

not know the use of tobacco when we first met them. They have learnt to smoke from foreigners. . . . Wherever it came from, the habit is now [late 1880s] universal amongst all the tribes with which we are acquainted" (1888:125–126).

SUAU: Owen Stanley (1849) makes no mention of the presence of tobacco in Orangerie Bay in 1849; and in January 1873 d'Albertis found the following situation: "They also accepted some tobacco, in the same ignorance as to its uses [as was true of ship's biscuit], and when I showed them how we used it, they gave it back. From this we may infer that the use of the tobacco plant are [*sic*] unknown to these natives, or that, if known, it is not appreciated" (1881 [1]:184–185).

By the end of 1890, at the extreme eastern end of Suau territory, Sir William MacGregor was complaining (1892b:28) that the people of Logea Island were continually going back and forth to Samarai, eager to sell anything they had for tobacco, and at the Kwato mission in Samarai tobacco was being used as "small change" by 1897 (R. W. Thompson 1900:17).

KEHELALA: In 1880 Miklouho-Maclay visited on Basilaki Island "some hill villages . . . where the natives where [*sic*] completely unacquainted with tobacco and smoking" (1886: 352, n.1). By January 1891 at Tauwara copra was regularly exchanged for trade tobacco (MacGregor 1892c:32).

Subsequent records are all consistent with the common picture disclosed by Moresby's 1873–1874 exploration on HMS *Basilisk* from Tubetube to East Cape and up the coast to the Huon Gulf: "The use of betel was universal all along the coast, but no other form of stimulant was observed; tobacco in any shape they would not touch, and were evidently unacquainted with its use" (Comrie 1877:113).

WEDAU: In Wamira village, according to Kahn, tobacco was "introduced by the first missionaries in 1891" (1986:51).

GAPAPAIWA: In Rawden Bay in 1885 Forbes found cloth and beads welcome, but steel unknown, and "of the use of tobacco they were quite ignorant" (1886:45). Elsewhere in Goodenough Bay, at Kwamana village, MacGregor found the same to be true in August 1895 (1897b:7).

MUKAWA: Off the Cape Vogel region in 1890 MacGregor reports of the people of Ataiyo village, Kairaga Island, that "they are beginning to learn the use of tobacco, but at that time they were not very desirous of obtaining it" (1892a:11).

Northeastern Papua

UBIR/MAISIN: In the bight of Collingwood Bay, MacGregor found in 1890 that "they did not know the use of iron or of tobacco" (1892a:14), but in Dako in April 1894: "Not only had these natives learned to respect and trust the white man, but they had also been taught the accomplishment of smoking tobacco, formerly unknown to them" (MacGregor 1894c:37).

NOTU: In Holnicote Bay in 1885 Forbes (1886:45) found that the use of tobacco was unknown, as MacGregor (1892a:13–14) reported later to be true of Augo village and others up the coast in 1890. In Gona Bay as late as September and October of 1893 MacGregor found that they "do not seem to know or to use tobacco in any form. This district appears to be the only one on the mainland of the Possession in which this plant is unknown" (1894a:5) (but see below).

OROKAIVA: Among the inland villages in 1923–1925 tobacco had arrived through native trade routes from the Kokoda region within memory of living informants (Williams 1928: 120; 1930:66).

AEKA: Of the villagers on the lower Kumusi River in early 1894 MacGregor writes that "They have no tobacco in their gardens, and did not know it" (1894c:34).

BINANDERE: South of Douglas Harbour in mid-1890 MacGregor found that villagers were ignorant of iron and that tobacco was unacceptable in barter (1892a:16). He wrote of Eruatutu village at the mouth of the Mambare River in early 1896: "Tobacco being new to them—unknown till our first arrival there—they do not as yet attach much value to it" (MacGregor 1897c:50). And, of the lower Gira River in mid-1897: "When we first visited the north-east coast rivers, they had no tobacco, and did not seem to know it. Tobacco appears to be grown now in every village" (MacGregor 1898:31).

Massim

MISIMA: The accounts of Owen Stanley's exploration in the Louisiades in 1849 (Stanley 1849; MacGillivray 1852) made no mention of tobacco. In addition, MacGregor made no reference to tobacco smoking in his account of this area in 1888 (Haddon 1946:190) and, given his attention to this matter elsewhere (see above), this may imply absence. In any event, by the late 1890s miners were routinely obtaining coconuts with trade tobacco (Nelson 1976:40).

SUD-EST: According to oral traditions, the first Europeans to visit Vanatinai distributed tobacco and matches and showed the people how to smoke (Lepowsky 1982:327). In 1883 the labor recruiter Wawn bought fish with trade tobacco, and the latter was the "chief article of barter" by 1889 (Lepowsky 1982:328).

YELE: Rochas reported ignorance of tobacco on Rossel Island in 1859 (Armstrong 1928: 197), and by 1885 Captain Bridge of HMS *Dart* found that "One or two of them knew the words 'tobacco' and 'pipe', to the use of which most of them were evidently unaccustomed" (Armstrong 1928:204). By July 1892 MacGregor seemed pleased to report: "They have taken kindly to tobacco, and will consequently be willing to trade" (1894d:7).

MUYUW: On Kawa (Gawa) Island in September 1893 MacGregor found that the people were "fond of tobacco, but do not know it as a plant" (1894b:20).

KILIVILA: According to Austen: "In the early '70's and '80's of last century, whalers calling at Kiriwina often paid for things with tobacco, but usually it was thrown away as the people did not understand smoking" (1945:24). Similarly, on Kiriwina in the late 1880s Pitcairn found that tobacco was "unknown here, and they would not accept any" (1891: 141). By July 1891, however, MacGregor found the Kiriwina villagers of Kaibula to be "passionately fond of tobacco" (1893:4), and in Nabai in the same month bêche-de-mer was being exchanged for tobacco from a European trader (1893:5).

BUNAMA/DUAU/SEWA BAY: Closer to the mainland, the situation on Normanby Island was more complex and various. In 1888 MacGregor visited it (probably the south coast) and found that the people "knew nothing about tobacco, pipes, nor matches, and did not seem to wish in the least to have anything belonging to us" (quoted in Haddon 1946:193). But in October of that same year Thomson found astonishing diversity: "At a spot not ten miles from a tribe that would barter all they possessed for tobacco and pipes, were people so ignorant of their use that they put the tobacco into a bottle we had given them, poured water upon it and drank off the compound" (1889:536).

DOBU: Among Dobu-speakers of the northern end of Normanby Island MacGregor found people eager to trade for tobacco in 1888 (Haddon 1946:193). In southeastern Fergusson Island in that same year Thomson experienced people "clamouring for tobacco, which they preferred to all other European articles" (1889:536).

YAMALELE: Elsewhere on Fergusson Island, in November 1888, Thomson found people

who "knew nothing about tobacco, beads, or the ordinary articles of trade, nor did they seem to care for anything we could give them" (1889:537); while on the Buinai River in the interior in July 1895 MacGregor found a few tobacco plants in cultivation, although he "could not learn where they had procured the seed" (1897a:5).

BOSILEWA: Again on Fergusson Island, in Hughes Bay in late 1888, Thomson notes that the people "appeared to care nothing for beads, tobacco, nor knives, but were pleased with small strips of Turkey red" (1889:538).

BWAIDOKA: Finally, on Goodenough Island in July 1891, MacGregor encountered people from the island of Wagipa, who "will not take tobacco, and it is more difficult to trade with them than with most other natives" (1893:2).

NOTE

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I am indebted to Matthew Smedts, a Dutch journalist, for the title of this article. According to him (Smedts 1955:49–50), in the early 1950s a "Capaukoo" (Kapauku) man in the Wissel Lakes area of Irian Jaya (then Dutch New Guinea) responded "no tobacco, no hallelujah" when asked why the people had stopped attending church after the local American Protestant missionaries abruptly ended their practice of distributing cigarettes to all who attended Sunday services. That incident shows that the practices and attitudes discussed in this article are by no means confined to Eastern Papua or to the time period considered here.

REFERENCES CITED

Armstrong, W. E.
1928 *Rossel Island: An Ethnological Study.* Cambridge: Cambridge University Press.

Austen, Leo
1945 "Cultural Changes in Kiriwina." *Oceania* 16:15–60, pl.

Bevan, Theodore F.
1890 *Toil, Travel, and Discovery in British New Guinea.* London: Kegan Paul, Trench, Trubner & Co.

Chalmers, James
1887 "Explorations in South-Eastern New Guinea." *Proceedings of the Royal Geographical Society*, n.s. 9:71–86.
1897 "Toaripi." *Journal of the Royal Anthropological Institute* 27:326–334.

Chalmers, James, and W. Wyatt Gill
1885 *Work and Adventure in New Guinea 1877 to 1885.* London: The Religious Tract Society.

Chignell, Arthur Kent
1915 *An Outpost in Papua.* 2d ed. London: Smith, Elder & Co.

Comrie, P.
1877 "Anthropological Notes on New Guinea." *Journal of the Royal Anthropological Institute* 6:102–119, pl. 1, chart.

d'Albertis, L. M.
1881 *New Guinea: What I Did and What I Saw.* 2 vols. London: Sampson Low, Marston, Searle & Rivington.

Dauncey, H. M.
1913 *Papuan Pictures.* London: London Missionary Society.

English, A. C.
1905 "Assistant Resident Magistrate's Report for Rigo District of the Central Division." British New Guinea, *Annual Report for the Year Ending 30th June, 1905,* App. C, pp. 22–24.

Feinhandler, Sherwin J., Harold C. Fleming, and Joan M. Monahon
1979 "Pre-Columbian Tobaccos in the Pacific." *Economic Botany* 33:213–226.

Finsch, Otto
1888 *Samoafahrten: Reisen in Kaiser Wilhelms-Land und Englisch-Neu-Guinea in den Jahren 1884 u. 1885 an bord des deutschen Dampfers "Samoa."* Leipzig: Ferdinand Hirt & Sohn.
1914 *Südseearbeiten: Gewerbe- und Kunstfleiß, Tauschmittel und "Geld" der Eingeborenen auf Grundlage der Rohstoffe und der geographischen Verbreitung.* Hamburg: L. Friederichsen & Co.

Forbes, Henry O.
1886 "North-East Coast: Memo." British New Guinea, *Report for 1885,* pp. 45–46.

Gill, William Wyatt
1876 *Life in the Southern Isles: or, Scenes and Incidents in the South Pacific and New Guinea.* London: The Religious Tract Society.

Haddon, A. C.
1946 *Smoking and Tobacco Pipes in New Guinea.* Royal Society of London, Philosophical Transactions, Series B, 232. London.

Hays, Terence E.
n.d. "Tobacco in New Guinea: A Study in Cultural Dynamics." MS, in author's possession.

Holmes, J. H.
1924 *In Primitive New Guinea: An Account of a Quarter of a Century Spent amongst the Primitive Ipi & Namau Groups of Tribes of the Gulf of Papua, with an Interesting Description of Their Manner of Living, Their Customs & Habits, Feasts & Festivals, Totems & Cults.* New York: G. P. Putnam's Sons.

Jenness, D., and A. Ballantyne
1920 *The Northern D'Entrecasteaux.* Oxford: Clarendon Press.

Kahn, Miriam
1986 *Always Hungry, Never Greedy: Food and the Expression of Gender in a Melanesian Society.* Cambridge: Cambridge University Press.

Kowald, C.
1894 "Account of a Visit to the Villages on the Upper Angabunga River." *Annual Report on British New Guinea from 1st July, 1892, to 30th June, 1893*, App. Z, pp. 107–114.

Langmore, Diane
1989 *Missionary Lives: Papua, 1874–1914.* Pacific Islands Monograph Series, no. 6. Honolulu: University of Hawaii Press.

Laracy, Hugh
1976 *Marists and Melanesians: A History of Catholic Missions in the Solomon Islands.* Honolulu: University Press of Hawaii.

Lawes, W. G.
1879 "Ethnological Notes on the Motu, Koitapu, and Koiari Tribes of New Guinea." *Journal of the Royal Anthropological Institute* 8:369–377.

Lepowsky, Maria
1982 "A Comparison of Alcohol and Betelnut Use on Vanatinai (Sudest Island)." In *Through A Glass Darkly: Beer and Modernization in Papua New Guinea*, ed. Mac Marshall, 325–342. Boroko: Institute of Applied Social and Economic Research.

Lovett, Richard
1903 *James Chalmers: His Autobiography and Letters.* 5th ed. London: The Religious Tract Society.

Macfarlane, Samuel
1888 *Among the Cannibals of New Guinea: Being the Story of the New Guinea Mission of the London Missionary Society.* London: London Missionary Society.

MacGillivray, John
1852 *Narrative of the Voyage of H.M.S.* Rattlesnake *Commanded by the Late Captain Owen Stanley, R.N., F.R.S. (During the Years 1846–1850).* 2 vols. London: T. & W. Boone.

MacGregor, William
1892a "Despatch Reporting Visit of Inspection to North-East Coast of the Possession." British New Guinea, *Annual Report from 1st July, 1890, to 30th June, 1891*, App. D, pp. 10–18.
1892b "Despatch Reporting Visit of Inspection to Mugula (Dufaure Island) &c." British New Guinea, *Annual Report from 1st July, 1890, to 30th June, 1891*, App. H, pp. 28–30.
1892c "Despatch Reporting Administrative Visits to Tagula and Murua, &c." British New Guinea, *Annual Report from 1st July, 1890, to 30th June, 1891*, App. I, pp. 31–32.
1893 "Despatch Reporting Visits to the D'Entrecasteaux and Trobriand Groups." *Annual Report on British New Guinea from 1st July, 1891, to 30th June, 1892*, App. A, pp. 1–7.
1894a "Despatch Reporting Inspection of the North-East Coast of the Possession." *Annual Report on British New Guinea from 1st July, 1893, to 30th June, 1894*, App. A, pp. 1–8.
1894b "Despatch Reporting Visit to the D'Entrecasteaux and Neighbouring Islands."

Annual Report on British New Guinea from 1st July, 1893, to 30th June, 1894, App. D, pp. 16–21.

1894c "Despatch Reporting Visit of Inspection to the North-East Coast." *Annual Report on British New Guinea from 1st July, 1893, to 30th June, 1894*, App. F, pp. 30–37.

1894d "Despatch Reporting Visit to Various Islands at the Eastern End of the Possession." *Annual Report on British New Guinea from 1st July, 1892, to 30th June, 1893*, App. B, pp. 3–7.

1897a "Despatch Reporting Visit to Dobu and Duau Islands." *Annual Report on British New Guinea from 1st July, 1895, to 30th June, 1896*, App. B, pp. 3–6.

1897b "Despatch Reporting Visit to Murawawa Bay and Baunia Bay." *Annual Report on British New Guinea from 1st July, 1895, to 30th June, 1896*, App. C, pp. 6–11.

1897c "Despatch Reporting Visit of Inspection to Mambare River District and Other Places." *Annual Report on British New Guinea from 1st July, 1895, to 30th June, 1896*, App. J, pp. 49–52.

1898 "Despatch in Continuation of Report of Ascent of Mambare River to Effect Punishment of Murderers." *Annual Report on British New Guinea from 1st July, 1896, to 30th June, 1897*, App. H, pp. 29–36.

Marshall, Mac

1981 "Tobacco." In *Historical Dictionary of Oceania*, ed. Robert D. Craig and Frank P. King, 288–289. Westport, Conn.: Greenwood Press.

1987 "An Overview of Drugs in Oceania." In *Drugs in Western Pacific Societies: Relations of Substance*, ed. Lamont Lindstrom, 13–49. ASAO Monograph no. 11. Lanham, Md.: University Press of America.

Miklouho-Maclay, N. de

1886 "List of Plants in Use by the Natives of the Maclay-Coast, New Guinea." *Proceedings of the Linnean Society of New South Wales* 10:346–354.

Moore, David R.

1978 *Islanders and Aborigines at Cape York: An Ethnographic Reconstruction Based on the 1848–1850 'Rattlesnake' Journals of O. W. Brierly and Information He Obtained from Barbara Thompson*. Canberra: Australian Institute of Aboriginal Studies.

Morton, Alexander

1885 "Notes of a Trip to the Islands of Torres Straits and the South-east Coast of New Guinea." Geographical Society of Australasia, New South Wales Branch, *Proceedings* 1 (1883–1884): 65–84.

Nelson, Hank

1976 *Black White & Gold: Goldmining in Papua New Guinea 1878–1930*. Canberra: Australian National University Press.

Pitcairn, W. D.

1891 *Two Years among the Savages of New Guinea, with Introductory Notes on North Queensland*. London: Ward & Downey.

Pratt, Antwerp Edgar

1906 *Two Years among New Guinea Cannibals: A Naturalist's Sojourn among the Aborigines of Unexplored New Guinea*. London: Seeley, Service & Co.

Riesenfeld, Alphonse
1951 "Tobacco in New Guinea and the Other Areas of Melanesia." *Journal of the Royal Anthropological Institute* 81:69–102, map.

Schouten, Willem C.
[1619] *A Wonderful Voiage Round About the World.* The English Experience, no. 4.
1968 New York: Da Capo Press.

Shineberg, Dorothy
1967 *They Came for Sandalwood: A Study of the Sandalwood Trade in the South-West Pacific.* Melbourne: Melbourne University Press.

Smedts, Matthew
1955 *No Tobacco, No Hallelujah: A Tale of a Visit to the Stone Age Capaukoos.* London: William Kimber.

Stanley, Owen
1849 "Journal of Owen Stanley, Captain of H.M.S. *Rattlesnake*, 3 June–2 Oct., 1849." Typescript. University of Papua New Guinea Library, New Guinea Collection AL37.

Stone, Octavius C.
1880 *A Few Months in New Guinea.* London: Sampson Low, Marston, Searle & Rivington.

Thompson, R. Wardlaw
1900 *My Trip in the "John Williams."* London: London Missionary Society.

Thomson, Basil H.
1889 "New Guinea: Narrative of an Exploring Expedition to the Louisiade and D'Entrecasteaux Islands." *Proceedings of the Royal Geographical Society*, n.s. 11:525–542, map ff. 580.

Turner, William Y.
1878 "The Ethnology of the Motu." *Journal of the Royal Anthropological Institute* 7: 470–499.

Wetherell, David
1977 *Reluctant Mission: The Anglican Church in Papua New Guinea, 1891–1942.* St. Lucia: University of Queensland Press.

Whiteman, Darrell L.
1983 *Melanesians and Missionaries: An Ethnohistorical Study of Social and Religious Change in the Southwest Pacific.* Pasadena, Calif.: William Carey Library.

Williams, F. E.
1928 *Orokaiva Magic.* Territory of Papua, Anthropology Report, nos. 6–8. London: Oxford University Press.
1930 *Orokaiva Society.* Territory of Papua, Anthropology Report, no. 10. London: Oxford University Press.
1933 *Depopulation of the Suau District.* Territory of Papua, Anthropology Report, no. 13. Port Moresby: Government Printer.