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Maggie Brady; Vic McGrath

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Making *Tuba* in the Torres Strait Islands:

The Cultural Diffusion and Geographic Mobility of an Alcoholic Drink

MAGGIE BRADY AND VIC McGRATH

THERE IS RELATIVELY SCANT EVIDENCE OF THE INDIGENOUS PRODUCTION AND consumption of intoxicating drinks on the Australian mainland prior to the arrival of outsiders; indeed it is commonly, and erroneously, believed that Australian Aboriginal peoples had not mastered the technique of fermentation. In fact, some groups were aware of this process and produced mildly intoxicating drinks from natural flora.¹ Makassan *bêche de mer* fishermen from southern Sulawesi had introduced arrack (a spirit distilled from various palm juices) to northern coastal Aboriginal groups from around 1720, but there is no evidence that these trepang fishermen, or indeed Aboriginal people themselves, ever distilled arrack on Australian soil. In the Torres Strait, however, Torres Strait Islanders learned and adopted introduced techniques not just for fermentation, but for distillation, in order to produce a quasi-indigenous alcoholic beverage. The drink was known as *tuba*, and its production followed contact with outsiders from Southeast Asia and the Pacific (see Figure 1). Although it was not made prehistorically in the Torres Strait, *tuba* was 'indigenous' in that its manufacture was made possible through received local knowledge, its ingredients were extracted from locally grown and harvested coconut palms (*Cocos nucifera* L.), and its consumption became entwined with Indigenous economic and social values. The knowledge of how to produce *tuba* came from elsewhere, and the spread of this knowledge is an example of drug diffusion. This paper explores the possible vehicles for its diffusion, which came about as part of a broader 19th-century process of internationalisation in the Torres Strait.

The Diffusion of Tuba Production and Consumption

Drug and alcohol researchers often utilise diffusion of innovations theory — a theory based primarily on ideas of imitation and social contagion — in order to

¹ Maggie Brady, *First Taste: how Indigenous Australians learned about grog* (Canberra 2008); John MacPherson, 'The use of narcotics and intoxicants by the native tribes of Australia, New Guinea, and the Pacific', *Sydney University Medical Journal*, May (1921), 108–22.

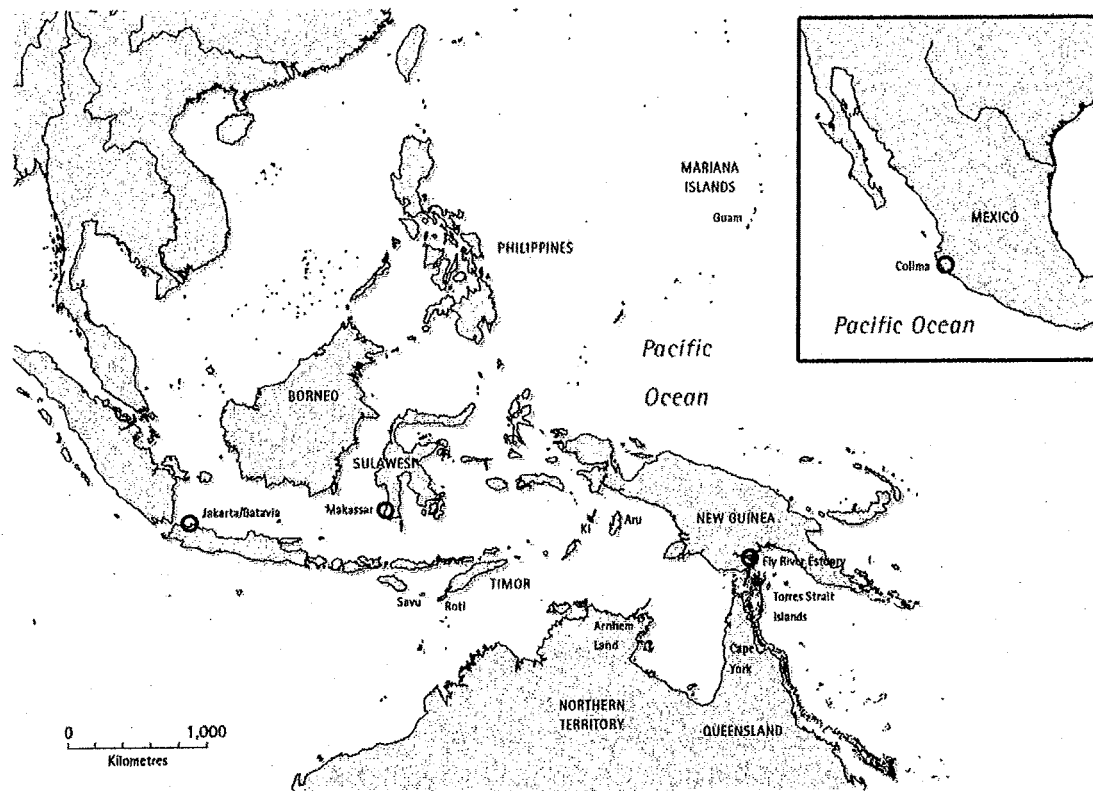


FIGURE 1: Map showing main locations mentioned in text. Courtesy of John Hughes, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra, Australia.

understand the adoption and diffusion of new drug substances.² Refinements of the diffusion model suggest that there are a number of necessary characterisations for the adoption of an innovation (such as a new drug substance), which include: its perceived advantage over existing or alternative products; its compatibility with existing social values; how easy it is to observe the use of the new product; and the risks involved in experimental use.³ In the case of *tuba*, the diffusion of knowledge about its production techniques, and hence the diffusion of consumption itself, were the result of socioeconomic developments, colonisation and the widespread geographic movements and migrations that have characterised the centuries following Magellan's crossing of the Pacific. Traditionally, other drug substances used in parts of the Pacific and Southeast Asia included kava and betel nut, which were differentially distributed, geographically and socially.⁴ Neither kava nor betel were consistently adopted as drug substances by Torres Strait Islanders,⁵ but the production and

² Roberta Ferrence, 'Diffusion theory and drug use', *Addiction*, 96 (2001), 165–73; Manoj Sharma and Amar Kanekar, 'Editorial: diffusion of innovations theory for alcohol, tobacco and drugs', *Journal of Alcohol and Drug Education*, 42:1 (2008), 3–8; Christopher J. Smith and Robert Q. Hanham, *Alcohol Abuse: geographical perspectives* (Washington DC 1982).

³ Roberta Ferrence, *Deadly Fashion: the rise and fall of cigarette smoking in America* (New York 1989), 15.

⁴ Mac Marshall, 'A Pacific haze: alcohol and drugs in Oceania', in V.S. Lockwood, T.G. Harding, B.J. Wallace (eds), *Contemporary Pacific Societies: studies in development and change* (Englewood Cliffs NJ 1993), 260.

⁵ Alfred Cort Haddon, *Reports of the Cambridge Anthropological Expedition to Torres Straits*, vol. 4: *Arts and Crafts* (Cambridge 1912), 143.

consumption of *tuba* was clearly imbued with features that made it attractive to new users; after all, adopters have to *want* to emulate and imitate the use of a new item.

The spread of the technical knowledge of *tuba* fermentation and distillation to the Strait was a manifestation of *relocation* diffusion, that is, when individuals move from one place to another (in this case, from one country to another), exporting a particular habit or trait to the new location.⁶ Factors contributing to the adoption of innovation in general, and to the adoption of *tuba* in particular, include its perceived advantages (sweet and refreshing in one form, mood-altering and intoxicating in another); the fact that its production was easy to observe, thus allowing for imitation; and the low risks associated with experimentation. Over time, the manufacture and consumption of *tuba* became incorporated into the social and economic life of the people living on some of the Central and Eastern Islands and Horn Island in the Torres Strait.

Tuba is a term still used today in the Torres Strait to describe the fermented beverage known generally in the Indian subcontinent, the Pacific and Southeast Asia, as toddy. *Tuba* is a Tagalog term from the Philippines meaning 'fermented coconut milk', a term also used in the Mariana Islands and in Mexico.⁷ The Tagalog *tuba* appears to be unrelated to the same term used generically on the Malay Peninsula and in Borneo for several poisonous plants including *Derris elliptica*, used as a fish poison and insecticide.⁸ In the Torres Strait, *tuba*⁹ describes the pale liquid juice or sap that seeps from a cut made in the unopened fructifying bud of a coconut palm. Collected straight from the tree, the juice contains no alcohol, but left for a few days it ferments, making it sour and mildly alcoholic. The fermented *tuba* can then be subjected to a further process, that of distillation. This makes a strong clear liquor referred to in the Torres Strait as 'steamed *tuba*'. In the Philippines, this distilled liquor is known as *lambanog*; while in Indonesia and Southeast Asia generally, it is known as *arrack*.¹⁰

Tuba in the Torres Strait

Although they no longer consume it, present-day Torres Strait Islanders are able to provide detailed accounts of the production of different strengths of the *tuba* beverage and the different uses they made of it: 'You used it on the day; or for yeast; and for the hard stuff [spirit].' In 2004 the authors interviewed a number

⁶ Smith and Hanham, *Alcohol Abuse*, 26.

⁷ Anna Shukul, *Dictionary of Torres Strait Creole* (Kuranda 2004); Alfredo E. Evangelista, 'Tempered intemperance: *tuba*-drinking in a Tagalog community', *Philippine Sociological Review*, 21 (1973), 5-28; I.H. Burkill, *A Dictionary of the Economic Products of the Malay Peninsula* (Kuala Lumpur 1966); Henry J. Bruman, 'Early coconut culture in Western Mexico', *Hispanic American Historical Review*, 25:2 (1945), 212-23.

⁸ John D. Gimlette, *Malay Poisons and Charm Cures* (Singapore 1991), 236.

⁹ Pronounced 'tooba'.

¹⁰ *Arrack* and its derivations such as *raki*, are terms having direct associations with distillation, as they derive from the Arabic *araq* ('sweat') referring to the droplets of rising wine vapours that condense. Alfred Russel Wallace in *The Malay Archipelago* (Singapore 1989), 485, wrote that the *arrack* he tasted on islands such as Aru was as strong as West India rum, that is an alcohol content of at least 40%.

of people now resident on Thursday Island (some of whom were born on eastern islands in the Torres Strait) about their memories of *tuba*. According to Dan McGrath of Thursday Island (then an elderly man, now deceased, with some Filipino heritage), the first, non-alcoholic-stage juice was good with a half-ripe mango, which you dipped into *tuba* like a sauce: 'If you chop into a coconut tree the juice is sweet. You could get it straight off the tree. That's *tuba*.' Bua Mabo from Murray Island [Mer] named the bud: 'that thing when it burst out, young one — *giru*¹¹ . . . you cut the point off and tie a rope down and bend it, and chop it off, until the juice run out. We used a sunshine milk tin.' The daughter of Jimmy Mills, a Samoan coconut grower, recalled that, on Nagir Island, teenage boys would cut the flower stalks.

They used jam tins to collect the juice — before it starts to swell up they tie knots in it to stop it. You had to cut it every day, catch the juice. Then tie it up, and catch again. The juice was sweet at first, like a soft drink at first. My grandfather used to send young ones up [the trees].

People making the second stage stored their *tuba* in bottles or big clay stoppered pots, which were sometimes buried while the liquid fermented. After one or two weeks, the drink was said to taste like beer or vinegar; in this form it has an alcohol content of approximately 3–4%.¹² Apart from drinking fermented *tuba*, Islanders also had fond memories of eating bread made with the fermented *tuba*, which served as a ready-made raising agent.

My boy! That's the stuff! Bottle up for couple days in beer bottle; then use as a yeast for bread. Number one my boy! I got taste for that bread! I prefer my mother's *tuba* bread to any in a bakery. The yeast is home made!

Distilling methods were basic:

The other one is called 'steamed *tuba*'. The Singhalese¹³ call it arrack [which] was more distilled than what he [the Filipino] made. His was a rough and ready job. Arrack looks like that would be done with a proper still; but on Horn and Murray [Islands] it was pretty crude.

. . . the rest [of the *tuba* was used] for steaming. He makes a big bamboo, at the end there's a long thing for the drips and a big drum and he boils it up. Another bamboo goes up and steam goes through the bamboo and it catches it. It's very clear, like gin.

The alcohol content of this 'rough and ready job' could be at least 50%, and several people we interviewed remarked on its potency: 'Like straight gin'; 'We only take that much [mimes a finger] in the glass — like metho! Steamed *tuba* — you must add water to it, it's clear. Couldn't drink it neat.'

During World War II, Horn Island in the Torres Strait became an important northerly airbase for Allied aircraft flying between Australia and New Guinea,

¹¹ *Giru* = Meriam Mer for 'coconut shoot'. See Anna Shnukal, *Dictionary*.

¹² Mac Marshall, personal communication 2 November 1994.

¹³ Sri Lankans were part of the Torres Strait workforce from at least 1877; in the early 1900s there were 50 Singhalese living on Thursday Island, see Anna Shnukal and Guy Ramsay, 'Tidal flows: an overview of Torres Strait Islander-Asian contact', in A. Shnukal, G. Ramsay and Y. Nagata (eds), *Navigating Boundaries: the Asian diaspora in Torres Strait* (Canberra 2004), 42.

and thousands of US and Royal Australian Air Force men passed through the base. Steamed *tuba* became a valuable commodity during these years, as it could bring in much-needed cash to Island communities. As was the case elsewhere in the Pacific during the war,¹⁴ Island men sold distilled *tuba* liquor to American servicemen for a good price, for, as one man quipped, 'No pension in those days, you had to make a quid somehow!'

All the men of Darnley — myself, my father, my grandfather, only money we got during the war [was from selling steamed *tuba*]. We flogged it to the Yanks, ten pounds for a 26 oz bottle. As long as it left my hands, my mother got breakfast, dinner and lunch, because the trochus not worth anything, beche de mer not worth [anything]. Yanks and Aussies — Aussies worked for the Yanks, 'mosquito fleet'. They normally stopped at Darnley.

Tuba was also sold to other Islanders as a means of earning cash, but many Islanders made the drink for their own use or as a means of showing hospitality to guests. Ina Titasay reported that her father made *tuba* 'just for his guests, long before the war — he didn't sell it. No, he didn't sell it. To visitors, offer a drink.'

Social Rules around Tuba Consumption

There were both formal and informal social controls on the consumption of *tuba*. As with other parts of Australia, the peoples of the Torres Strait, to varying degrees and based on their ethnicity, were subject to alcohol prohibitions imposed by the Queensland state government. The Licensing Act of 1885 instituted fines for any liquor seller who supplied liquor to any 'Aboriginal native of Australia, or half-caste of that race, or to any Aboriginal native of the Pacific Islands, or Polynesian born in the Colony, or any half-caste of that race'.¹⁵ Alcohol was banned on all islands designated as 'Aboriginal reserves'.¹⁶ *Tuba* production was one way of sabotaging the official restrictions on alcohol consumption (restrictions lasted until 1961); one man explained in 2004 that his eldest brother had made *tuba* 'because no grogs that time.' *Tuba* itself was prohibited officially in 1933, when J.W. Bleakley (Chief Protector of Aboriginals in Queensland 1914–42) reported that drinking *tuba* had a 'prejudicial effect on the habits and health of the native'.¹⁷ He noted the native fondness, or even craving, for strong liquor. 'To add to this difficulty,' he wrote,

The natives had discovered, perhaps before the coming of the white man, a means or method of brewing a very potent spirit of their own which they called *Tuba*, from the juice extracted from the budding cone of the coconut palm. It was found necessary to

¹⁴ Edwin M. Lemert, 'Forms and pathology of drinking in three Polynesian Societies', in M. Marshall (ed.), *Beliefs, Behaviours and Alcoholic Beverages: a cross-cultural survey* (Ann Arbor 1979), 198.

¹⁵ 'Aboriginal native' in this definition included Torres Strait Islanders; see John McCorquodale, *Aborigines and the Law: a digest* (Canberra 1987), 54.

¹⁶ Anna Shnukal, 'Confluence: Asian cultural contributions to *ailan pasin*', in A. Shnukal, G. Ramsay and Y. Nagata (eds), *Navigating Boundaries: the Asian diaspora in Torres Strait* (Canberra 2004), 258.

¹⁷ John William Bleakley, 'Aboriginals', *Reports upon the operations of certain sub-departments of the Home Secretary's Department* (Brisbane 1934), 10.

sternly prohibit its manufacture or use, because of its harmful effect upon those indulging in it.¹⁸

Indeed, European superintendent-teachers who provided oversight of local affairs on the Islands forbade the making of *tuba*, as they disapproved of its intoxicating effects and were concerned that its production would create a shortage of coconuts needed for other purposes. According to Anna Shnukal, this interdict merely drove production underground, and consumption took place out of sight of the superintendents.¹⁹ Some island councils also attempted to control the production of *tuba* when it appeared to interfere with peoples' work in their gardens. One way around these local attempts at control was to provide a socially acceptable reason for wanting to produce *tuba*: as a result, some people said they needed *tuba* for bread-making, and the local council apparently gave them the benefit of the doubt. Banning *tuba* as well as other forms of alcohol inevitably meant that some people took to consuming methylated spirits, which was a noted problem in the Strait.²⁰ Having learned of methylated spirits while in gaol ('in the calaboose'), some Darnley Islanders declared that drinking meths involved less work than making *tuba*: 'You don't have to climb coconut!'

Informal rules included local social disapproval of women drinking fermented or distilled *tuba*. Indeed, consumption by women of any alcoholic beverage — not only *tuba* — was, until the 1960s, thought to be inconsistent with notions of proper Christian behaviour, despite the acceptability of confirmed church members having a mouthful of wine in communion. The age of 17 was the 'coming of age' for young men, at which time they were permitted to drink *tuba*; however, the Anglican ministers were strictly against *all* kinds of alcohol. Notwithstanding the concerns of religious and government authorities about the supposedly harmful effects on those indulging in *tuba*, Torres Strait Islanders today have largely positive memories of the way in which *tuba* was consumed. Josephine David-Petero recalled that her grandfather made *tuba*, shared it with the Rotumans, and described it as 'happy drinking, *kai kai* pig, dance!' It was the current *younger* generation that was 'no good' at drinking. Another account tells of the village men on Horn Island returning along the beach in the moonlight from Uncle Vecinti's place, 'happily intoxicated' on his *tuba*.²¹ Interviewees observed that drinking *tuba* was never a daily focus, and that it was consumed 'just like white people drink wine when you go to dinner at their place. A few sips and be happy, because it was real powerful stuff!'

¹⁸ John William Bleakley, *The Aborigines of Australia: their history — their habits — their assimilation* (Brisbane 1961), 294.

¹⁹ Shnukal, 'Confluence', 248.

²⁰ C. and L. Rees, *The Coasts of Cape York: travels around Australia's pearl-tipped peninsula* (Sydney 1960); Bleakley, *The Aborigines*.

²¹ Mary Bowic and John Singe, 'The Galora Family of Horn Island'. *Torres News*, 31 (1993), 12.

The History of Palm-based Drinks

The production and use of fermented toddy in the Pacific and in Southeast Asia has a long history.²² It was made in the Philippines in the 16th century, when Ferdinand Magellan first landed in what he referred to as the 'Archipelago of Saint Lazarus'. He had achieved what Columbus had attempted before him: sailing west to reach the East Indies. More or less by accident, he encountered the Marianas (the 'Ladrones') and the Philippines. On 16 March 1521, Magellan arrived at one of the Philippine islands and, in exchange for red caps, mirrors, combs, bells and ivory, was given fish, bananas, coconuts and a jar of local 'palm wine'. Antonio Pigafetta, the surviving diarist of that voyage, provides what must be one of the earliest written descriptions of the process of collecting the juice:

That liquor is sweet but somewhat tart, and [is gathered] in canes [of bamboo] as thick as the leg and thicker. They fasten the bamboo to the tree at evening for the morning, and in the morning for the evening.²³

The 'palm wine' they drank could have been fermented toddy, but 'wine' (*vino*) in Spanish can also refer to a distilled drink,²⁴ and one translation of Pigafetta's account mentions that the local people called it *uraca*, that is, arrack, the strong distilled spirit.²⁵ If this is the case, then it provides evidence that the technique of distillation was already familiar to people in this region prior to the arrival of the Spanish. In Europe, the first formulae for distilled liquor were published in the 1550s, in association with alchemy,²⁶ while the Chinese knew of distillation much earlier, in the Eastern Han period (25–220 CE) and Arab chemists in the 8th century.

The knowledge of how to make 'palm wine' travelled with Filipinos to the Chamorro people of the Marianas Islands from about 1668 onwards.²⁷ By the time the Louis de Freycinet expedition visited Guam in 1819, the Chamorro were distilling 'aguardiente'²⁸ from coconut toddy. On that expedition, artist and midshipman Alphonse Pellion made an illustration of Chamorros at work with a rudimentary still on Guam, and Jacques Arago, also a draftsman on the *Uranie*,

²² On the Indian subcontinent, toddy tapping and the making of palm wine were known before the 1st century AD, see Om Prakash, *Food and Drinks in Ancient India* (Delhi 1961).

²³ Charles E. Nowell (ed.), *Magellan's Voyage around the World: three contemporary accounts: Antonio Pigafetta, Maximilian of Transylvania, Gaspar Correa* (Evanston 1962), 133.

²⁴ Daniel Zisumbo-Villarreal, Fernando Gonzalez-Zozaya, Angeles Olay-Barrimentos, Laura Almendros-Lopez, Patricia Flores-Perez, Patricia Colunga-GarciaMarin, 'Distillation in western Mesoamerica before European contact', *Economic Botany*, 63:4 (2009), 421.

²⁵ Nowell, *Magellan's Voyage*, 132. Paige's translation of Pigafetta's account refers to 'palm wine', see Antonio Pigafetta, *The Voyage of Magellan: the journal of Antonio Pigafetta*, trans. Paula Spurlin Paige (New Jersey 1969), 35.

²⁶ Patrick Dillon, *The Much-Lamented Death of Madam Geneva: the eighteenth-century gin craze* (London 2002), 2.

²⁷ Mac Marshall and Leslie B. Marshall, 'Opening Pandora's bottle: reconstructing Micronesians' early contacts with alcoholic beverages', *Journal of the Polynesian Society*, 84 (1975), 442.

²⁸ *Aguardiente* was the term widely used to refer to any strong or distilled liquor, meaning literally 'burning water' from the Spanish *agua ardiente*, see Joan Druett, *Rough Medicine: surgeons at sea in the age of sail* (New York 2000), 237.

documented the term *touha* there for 'cocoa-nut wine'.²⁹ By the 1820s, whalers were beginning to call in at the Marianas, becoming an additional vehicle for the diffusion of *tuba* and *tuba*-based *aguardiente* to virgin populations. In 1832, Thomas Beale, employed as a surgeon on a number of British sperm whaling expeditions, wrote of his whaler's visit to Rota in the Marianas and described the toddy-cutter's technique for harvesting the juice. The delicious juice, he said, was much used by the inhabitants themselves, 'who obtain from it the ardent spirit'.³⁰ Beale also observed that the drink was much sought after by English sailors, who eagerly watched the activities of toddy-cutters. By the 1860s, a distillery for making *aguardiente* comprised the only industrial establishment in the Marianas.³¹

The rapid diffusion of the knowledge of these drinks seems to have coincided with the movements and activities of a motley group of beachcombers, ships' deserters, whalers and other seafarers in the Pacific in the 1830s and 1840s. Facilitated by these movements, the sequential development in the technique of producing stronger liquor from a mild one that had taken place in the Marianas was repeated elsewhere. Once people knew how to ferment coconut toddy, they soon moved on to the process of distillation, as Mac and Leslie Marshall observe.³² For example, when the United States South Seas Exploring Expedition commanded by Charles Wilkes arrived in the Gilbert Islands in 1841, it found people producing sweet (non-alcoholic) toddy; however, by the 1850s having learned from beachcombers, the islanders were fermenting *and* distilling it.³³ From the Gilbert Islands the knowledge of how to make fermented toddy spread to Nauru, where beachcombers distilled it.³⁴

European Interest in Palm Toddies

Exploring the possibilities for future economic development in tropical Australia in the late-19th century, George Windsor Earl wrote enthusiastically that nearly *every variety* of palm was able to produce large quantities of saccharine juice. These palms were used by local people in different regions of Southeast Asia for the manufacture of sugar³⁵ and as the basis for alcoholic beverages of varying strengths. Indeed, more than a century earlier, 18th-century European travellers and scientists had recorded in their diaries and logbooks detailed observations of the manufacture of toddy, 'palm wine' and arrack from many different species of palm in different locations. In September 1770, for example, on the island of Savu west of Timor, officers from the *Endeavour* saw large groves of fan palms (*Borassus flabillifer*) that were used to make toddy.³⁶ In Timor with the Baudin

²⁹ Jacques Arago, *Narrative of a Voyage around the World* (Amsterdam and New York 1971), 280.

³⁰ Thomas Beale, *The Natural History of the Sperm Whale* (London 1973), 340.

³¹ Marshall and Marshall, 'Opening Pandora's bottle', 443.

³² *Ibid.*, 456, 443.

³³ Mac Marshall and Leslie B. Marshall, 'Holy and unholy spirits: the effects of missionization on alcohol use in Eastern Micronesia', *Journal of Pacific History*, 11:3 (1976), 143.

³⁴ Nancy Viviani, *Nauru: phosphate and political progress* (Canberra 1970).

³⁵ G. Windsor Earl, *Handbook for Colonists in Tropical Australia* (London 1882), 152.

³⁶ John Clawte Beaglehole (ed.), *The Endeavour Journal of Joseph Banks 1768-1771*, vol. 2 (Sydney 1963), 162.

expedition, François Péron described sap extraction from the *latania* palm, which produced an 'agreeable' syrup, a fermented drink, and a 'potent, intoxicating liquor, which takes the place of both our wines and our spirits'.³⁷ In Makassar in 1856, Alfred Russel Wallace described the sugar-palm (*Arenga saccharifera*) from which were made sugar and palm wine, *sagueir*. Wallace observed that *sagueir* 'takes the place of beer'.³⁸ More recently, on the island of Roti, anthropologist Jim Fox³⁹ described palm syrup from the lontar palm (*Borassus sundaicus* Becc.) being distilled into 'gin'. In the Philippines, Evangelista noted institutionalised and daily consumption of fermented sour *tuba* made from the sap of the Nipa palm (*Nipa fruticans*).⁴⁰

In their journals of the *Endeavour* voyage of 1770, Joseph Banks and James Cook each provided detailed accounts of how palm toddies were made. They had just sailed along the east coast of Australia, through the Torres Strait, and were *en route* to England. That September, Joseph Banks wrote about production of palm wine on Savu:

The excellence of the Palm wine or Toddy which is drawn from this tree [the fan palm] makes however ample amends for the poorness of the fruit: this is got by cutting the buds which are to produce flowers soon after their appearance and tying under them a small basket made of the leaves of the same tree, into which the liquor drips and must be collected by people who climb the trees for that purpose every morning and evening.⁴¹

Cook's journal for 21st September 1770 noted the 'emence Number of Palm Trees' on Savu, from which was extracted a 'sweet, agreeable, cooling Liquor. What they do not immediately use they boil down and make Syrup or Sugar of, which they keep in Earthen Jarrs'.⁴² Sydney Parkinson made a pen and wash drawing of a man climbing such a tree with collecting baskets suspended on his shoulders.⁴³ Three months after calling at Savu, Banks described the production of drinks with varying ingredients and alcohol contents in Batavia (now Jakarta), made on this occasion from the sugar palm (*Arenga saccharifera* Labill.). There was 'sweet palm wine', *Tuackmanise*, virtually straight from the tree and not at all intoxicating; there was 'strong palm wine', *Tuack cras*, and 'yellow' wine, *Tuack cuning*, both of which were both fermented, astringent-tasting, flavoured with herbs and roots and 'intoxicating in a pretty high degree'. *Tuack* was also made

³⁷ François Péron, *Voyage of Discovery to the Southern Lands*, bk 4, trans. C. Cornell (2nd edn, Adelaide 2003), 189–90.

³⁸ Wallace, *Malay Archipelago*, 239.

³⁹ Jim Fox, *Harvest of the Palm: ecological change in eastern Indonesia* (Cambridge MA 1977), 103.

⁴⁰ Evangelista, 'Tempered intemperance'.

⁴¹ Beaglehole, *Endeavour Journal*, 162.

⁴² Captain W.J.L. Wharton (ed.), *Captain Cook's Journal during his First Voyage round the World made in HM Bark 'Endeavour' 1768–71* (facsimile edn, Adelaide 1968 [London 1893]), 344.

⁴³ Sydney Parkinson, pen and wash, 'A chief's house in the Island of Savu near Timor', September 1770, from idem, 'A Collection of Drawings made in the Countries Visited by Captain Cook in his first Voyage, 1768–1771', British Library, Add. ms 23920f.31, record no. 6927, reproduction available via <http://www.captcook-ne.co.uk/ccne/index.htm> (accessed 4 October 2010).

from coconut trees, but the liquor was primarily used as an essential ingredient for 'good' distilled arrack.⁴⁴

Mariners of the day welcomed the sweetness of fresh palm juice and coconut milk after long months at sea and in common with other visiting ships, the *Endeavour* loaded gallons of syrup and palm wine (that is, fermented toddy) on board as an antidote to scurvy and for other assumed healthful qualities. Indeed, even in the 1920s, fresh toddy from coconut palms was endorsed officially as a source of vitamin B for malnourished islanders on Nauru. It was made into an emulsion with fresh yeast and cod liver oil, was administered to Nauruan mothers and babies, and apparently reduced the death rate from beri-beri.⁴⁵

The Agents of Diffusion to the Torres Strait

So when and how did the drink itself, and the means and knowledge of fermenting and distilling it, reach the Torres Strait Islands? It is hard to determine exactly when production techniques were adopted there. Visiting Erub [Darnley] island in the Strait in 1845, John Sweatman observed that the natives did not appear to be aware of the means of making toddy 'like the Malays', although they drank the milk of the green coconut and also cultivated tobacco.⁴⁶ Alfred Haddon, leader of the Cambridge Anthropological Expedition to Torres Straits, reported firmly in 1898 that no fermented liquor 'has ever been made and till the European arrived none was drunk' in the Torres Strait.⁴⁷ This is surprising, as Haddon's expedition spent considerable time on Murray Island (where *tuba* was made eventually, and which has dense coconut groves), so one can only assume that, unless it was hidden from these visitors, the drink was made there after 1898. Bleakley though, had wondered if *tuba*-making preceded the arrival of Europeans.⁴⁸

These skills could have accompanied new arrivals in the Torres Strait from any one or from several regions, especially during the mid- to late-19th century when the Torres Strait was in effect an international diving and maritime hub. Originally, Torres Strait Islanders were a Melanesian people with two major language groups dividing east from west; people in the southernmost islands are related to the Aboriginal groups of Cape York on the mainland, but connections with New Guinea were of much greater cultural and economic significance than those with Cape York.⁴⁹ Apart from castaways, the first strangers to stay in the

⁴⁴ Beaglehole, *Endeavour Journal*, 215.

⁴⁵ *Ibid.*, 157; Thomas Beale, *The Natural History of the Sperm Whale* (London 1973); Nancy Viviani, *Nauru: phosphate and political progress* (Canberra 1970), 66.

⁴⁶ Jim Allen and Peter Corris (eds), *The Journal of John Sweatman: a nineteenth century surveying voyage in north Australia and Torres Strait* (Brisbane 1977), 77. However, Darnley Island people did learn to make toddy (i.e. *tuba*) eventually.

⁴⁷ Haddon, *Reports of the Cambridge Expedition*, 140.

⁴⁸ Bleakley, *Aborigines of Australia*, 294.

⁴⁹ Anna Shnukal, 'Pacific Islanders and Torres Strait 1860-1940', *Australian Aboriginal Studies*, 1 (1992), 14; Lindsay Wilson, *Thathilgaw Emeret Lu: a handbook of traditional Torres Strait Islands material culture* (Brisbane 1988), 15.

region for any length of time were colonial fishermen (seeking the sea slug, *bêche-de-mer*), who gathered and processed it for the Asian market. Turtle, *bêche-de-mer*, pearl and trochus shell were to be found in the waters of the Torres Strait, offering rich opportunities for ship-owners and traders in the mid-19th century. As these industries rapidly developed, with the first *bêche-de-mer* stations starting up in 1864,⁵⁰ and a commercial pearling station commencing in 1868, hundreds of seamen, divers and other workers were drawn to the region or were taken there by European captains. They came from Ceylon, Singapore, Java, the eastern Indonesian islands of Ambon, Banda and Sulawesi, from Borneo, Timor, Malaysia, Japan, the Philippines (until 1898 a Spanish colony) and the Marianas, eventually comprising what Regina Ganter has called the 'polyethnic north' of Australia.⁵¹ The colloquial use of 'gloss' terms for peoples of different nationalities at that time now make it quite difficult to pin down the originators of *tuba*-drinking in the Strait. In the 19th and early-20th century, Europeans often simply referred to such peoples as 'Malays', and Torres Strait Islanders followed suit, referring to 'Malaya men'. This was an omnibus geographical and racial term that obscures rather than specifies their geographical origins.⁵² 'Manila men' was a more specific local term used in the Strait (and was more common than 'Filipino') to refer in general to people from the Philippines, but also to those from the Marianas and Guam.

Knowledge of palm toddy fermentation and distillation could have reached the Torres Strait from several directions, including the 'Malay archipelago' to the west, where palm toddies were distilled and consumed widely as arrack.⁵³ Makassans and Buginese from Sulawesi were among the many 'Malays' who worked, sailed and finally settled in the Torres Strait in the late-19th century; several Makassan men fathered children on Badu Island between 1891 and 1921.⁵⁴ In the 18th and 19th centuries, many of these maritime peoples commonly drank rough arrack produced and sold informally in their villages; it was made from toddy derived from the sugar palm (*Arenga saccharifera*) which grew in substantial plantations around Makassar. Makassar itself was a busy maritime trading hub, described by Wallace as 'one of the great emporiums of the native trade of the Archipelago'⁵⁵ into which high-quality arrack was also imported from Dutch manufacturers in what was then Batavia in Java.

⁵⁰ Steve Mullins, 'The Torres Strait beche de mer fishery: a question of timing', *The Great Circle: Journal of the Australian Association for Maritime History*, 14:1 (1992), 22, 23.

⁵¹ Regina Ganter, *Mixed Relations: Asian-Aboriginal contact in north Australia* (Perth 2006).

⁵² Anna Shnukal, "'They don't know what went on underneath': three little-known Filipino/Malay communities of Torres Strait", in A. Shnukal, G. Ramsay and Y. Nagata (eds), *Navigating Boundaries. The Asian diaspora in Torres Strait* (Canberra 2004), 82.

⁵³ Wallace, *Malay Archipelago*; Gerrit Knaap and Heather Sutherland, *Monsoon Traders: ships, skippers and commodities in eighteenth century Makassar* (Leiden 2004). Several diarists noted the enthusiastic drinking habits of these island populations, including John Sweatman, who observed Ki [Kei] Island officials (west of Aru) becoming 'exceedingly elevated' after drinking a whole case bottle of raw gin. See Allen and Corris (eds), *The Journal*, 119. Wallace noted that for Aru Island men a tumbler-full of arrack was but a 'slight stimulus'; they scorned getting only half drunk.

⁵⁴ Shnukal, "'They don't know what went on'", 105.

⁵⁵ Wallace, *Malay Archipelago*, 408-9.

This commercially produced arrack was made of sugar-cane molasses, palm toddy, red rice and yeast, and was sometimes flavoured with aniseed.⁵⁶ From Makassar, it was traded on to other islands, particularly Aru, where Wallace observed uproarious drinking bouts and noted that arrack was the islanders' 'chief luxury'.⁵⁷

There is no doubt that the Makassans⁵⁸ were the agents for the diffusion of arrack to the northern coasts of *mainland* Australia in the 18th century. Fleets of Makassan praus sailed annually to the Arnhem Land coast each December from the early 1700s until 1907 in order to harvest and process bêche-de-mer (trepang). Among other desirable goods, they took supplies of arrack on board, which were exchanged and gifted to the Aboriginal owners of the coast and shorelines. Arrack was the first alcoholic beverage to be tasted by these northern Aboriginal groups, where it became known as *nganitji*, a loan word still used today in the region to refer to all alcoholic beverages.⁵⁹ The drink was highly valued by Aboriginal men, and is memorialised today in the ceremonial life of coastal Aboriginal peoples.⁶⁰ However, there is no available evidence to suggest that the Makassans attempted to produce toddy or arrack during these visits, presumably because of the dearth of useful syrup-producing palms.⁶¹ Once the praus returned to Makassar in April each year, Aboriginal people had neither the drink itself nor the means of producing it.

It is less likely that knowledge about toddy-making was transmitted to the Torres Strait from regions immediately to the north. Torres Strait Islanders were themselves both a maritime people and avid traders,⁶² and on the adjacent New Guinea mainland were Kiwai-speaking people of the Fly river estuary, who had long-standing trading partnerships with Islanders in the Strait.⁶³ But although these Papuan people were probably the original source of 'native' tobacco

⁵⁶ Knaap and Sutherland, *Monsoon Traders*; Burkill, *A Dictionary*, 1972.

⁵⁷ Wallace, *Malay Archipelago*, 453, 485.

⁵⁸ The 'Makassans' is another gloss term used for convenience to describe a number of disparate maritime peoples of the archipelago. Eighteenth-century observers commonly referred to them as 'Malays', but the visitors to Australia included people who were Makassan, Bugis, Badjau and others. For first-hand accounts of these visitors, see J.M.R. Cameron (ed.), *Letters from Port Essington, 1838-1845* (Darwin 1999).

⁵⁹ *Nganitji* is a derivation from the Macassan *anis*, a term adopted from the Dutch *anijis*, meaning 'aniseed'. See Alan Walker and R. David Zorc, 'Austronesian loanwords in Yolngu-matha of northeast Arnhem Land', *Aboriginal History*, 5:2 (1981), 109-34; Nicholas Evans, 'Macassan loanwords in Top End languages', *Australian Journal of Linguistics*, 12 (1992), 45-91. Aniseed (*Pimpinella anisum*) was and still is used as a flavouring agent in several spirits (including pastis, ouzo, and Batavia and Middle-Eastern arrack), giving them a distinctive taste.

⁶⁰ Campbell Macknight, 'Harvesting the memory: open beaches in Makassar and Arnhem Land', in P. Veth, P. Sutton and M. Neale (eds), *Strangers on the Shore: early coastal contacts in Australia* (Canberra 2008), 133-47; Maggie Brady, *First Taste*; Ingrid Slotte, 'A rally at Ramingining: the 'uniting' force of music and dance in a Yolngu Christian context', in F. Magowan and K. Neuenfeldt (eds), *Landscapes of Indigenous Performance: music, song and dance of the Torres Strait and Arnhem Land* (Canberra 2005), 76-95.

⁶¹ *Nypa fruticans*, the mangrove palm, produces syrup but has only a limited distribution on the Cobourg Peninsula and the Tiwi islands of the Northern Territory. See John Brock, *Top End Native Plants* (Darwin 1988), 268; G. Windsor Earl, *Handbook for Colonists in Tropical Australia* (London 1882), 153-5. The *Corypha* palm can be tapped to produce sugar, and is found in the Northern Territory and Queensland.

⁶² Steve Mullins, 'The Torres Strait beche de mer fishery', 22.

⁶³ David Lawrence, 'Customary exchange across Torres Strait', *Memoirs of the Queensland Museum*, 34:2 (1994), 241-446; Lindsay Wilson, *Thathilgaw Emeret Lu*.

smoked by Torres Strait Islanders in Papuan-style pipes,⁶⁴ and Kiwai people also used kava (*gamada*),⁶⁵ which found its way to Saibai Island in the Torres Strait in 1910,⁶⁶ there is no evidence of toddy being used or traded by them with Torres Strait Islanders.⁶⁷

Musing recently about its origins, one Torres Strait man thought that perhaps *tuba* was introduced by Pacific islanders: 'them people from the first civilization, the South Sea people came [with it], especially talking about Murray [Island]... at certain times they drank *tuba*.' Certainly coconut and other toddies were being made in the Pacific from the 1840s, and Pacific Islanders came to the Strait as crews and leading hands on ships participating in the western Pacific maritime trade in the 1860s.⁶⁸ These traders were followed by missionaries of the London Missionary Society who arrived in 1871, together with their Pacific Island teacher-evangelists.

The Most Likely Pathway

Nevertheless, ranged against these potential sources of the drink is the fact that the beverage fermented and distilled in the Strait was, and is still, known by its Filipino Tagalog name *tuba* and *steamed tuba*⁶⁹ rather than 'toddy', 'tuak' or 'arrack' as used in India, Ceylon, the Pacific and Indonesia. The Tagalog term for the distilled *tuba*, *lambanog*, did not make it to the Torres Strait. Together with present-day oral accounts from Torres Strait Islanders that associate *tuba* production with individually known Filipinos, the persisting use of the Tagalog term strongly suggests Filipino origins for the diffusion of this drink to those islands in the Torres Strait that bore coconut trees.⁷⁰ Filipinos had been the agents of transmission of *tuba* production even farther afield than the Strait, and many centuries earlier, when they arrived in western Mexico in the 16th century as crew members on the Manila galleons of the Spanish East Indies. In the Colima region of western Mexico, where there was a localised profusion of coconut palms, these 'Manila men' soon started to produce coconut wine, introduced simple stills and created a viable cash income

⁶⁴ Tobacco was known in several parts of the Torres Strait by its Kiwai name, *sukuba*. See J. Beete Jukes, *Narrative of the Surveying voyage of HMS Fly commanded by Captain F.P. Blackwood, R.N. in the Torres Strait, New Guinea, and other islands of the Eastern Archipelago, during the years 1842-1846*, vol. 1 (London 1847), 188; Haddon, *Reports of the Cambridge Anthropological Expedition*, 142.

⁶⁵ Francis Edgar Williams, *Papuans of the Trans-Fly* (Oxford 1936), 427; Vincent Lebot, Mark Merlin and Lamont Lindstrom, *Kava: the Pacific drug* (New Haven and London 1992).

⁶⁶ *Annual Report of the Chief Protector of Aborigines for the year 1910*, Brisbane Qld, C.A. 59-1911, 22.

⁶⁷ According to Pamela Swadling, toddy made from the Segero palm was known to Seram Laut traders (who also dealt extensively with the arrack-loving Aru Islanders), and whose trade extended as far east as the trans-Fly region of Papua New Guinea, but whether toddy or arrack were part of this trade is not known. See Pamela Swadling, *Plumes from Paradise: trade cycles in outer Southeast Asia and their impact on New Guinea and nearby islands until 1920* (Boroko and Queensland 1996), 162.

⁶⁸ Steve Mullins, 'The Torres Strait beche de mer fishery', 27.

⁶⁹ The Chinese term for distillation is *cheng liu*, which means 'steaming'. See Daniel Zisumbo-Villarreal *et al.*, 'Distillation in Western Mesoamerica', 415.

⁷⁰ Shnukal, *Dictionary*, lists *tuba* as being introduced by Filipino divers.

for themselves.⁷¹ Bruman observed in 1945 that the Filipino roots of the enterprise were still apparent in the techniques and nomenclature of *tuba*-making. To this day, the coconut-based drink in western Mexico is known by its Tagalog name: *tuba*.⁷²

Twenty men who were probably from Guam or the Marianas were brought to the Torres Strait in 1877 and, by 1884, there were 400 Filipinos living on various islands, with about forty on Thursday Island.⁷³ Interviews with Torres Strait Islanders conducted in 2004 provide further evidence of a strong Filipino link, naming several *tuba* producers. Dan McGrath, for example, explained that *tuba*

originated in Ceylon. But here it came from Manila men. They had a bad reputation because they all had knives! It was introduced here by the Filipinos. It was made out on Murray Island after the war. My experience was Horn Island. In those days you'd see coconut trees all along [the beach] in amongst the houses. Mangroves started at Cable Beach. And this guy Vecinti, an old Filipino... when I used to go to Horn Island, I'd see short trees with this ladder [leaning on them], and a billy can, white enamel, to catch the juice. It was the flower before it opens, you bend it down, hang it down, and collect. To make it alcoholic, you steam it — must've boiled it up [distilled]. He [Vecinti] had about three trees he'd treat at a time, the short ones always, from Cable Creek to Vecinti Creek.

The Filipino known as 'Uncle Vecinti' and his *tuba* making were also noted by Mary Bowie and John Singe, who collected reminiscences about the Galora family of Horn Island,⁷⁴ and according to Monica Walton Gould, her Filipino father William Walton made *tuba*.⁷⁵ An elderly man observed that 'Manila man started [it], Santiago Dorrante... Tudu [island had] plenty sandfish [*beche de mer*]. Educated there [i.e. learned about *tuba*]. Malay man, they know [the process] from beginning to the end.'

Toddy could only be produced on the islands of the central and eastern groups that could support coconut palms (not all islands in the Strait are ecologically suited to coconuts), and some residents planted large groves. Juan Francisco Garcia (a Filipino), planted hundreds of coconut trees on several islands, before settling on Aurid, where he harvested his trees for *tuba*.⁷⁶ A Samoan, Jimmy Mills, had a large coconut plantation on Nagir to produce copra, but his daughter reported that he had learned to make steamed *tuba*, and harvested the sap for this purpose too.⁷⁷ Islanders interviewed in 2004 reported that *tuba* was made and consumed on Aurid, Nagir, Tudu and Yam Islands in the central group; and on Darnley and Murray Islands in the eastern group, as well as on

⁷¹ The distribution and prehistory of the coconut have been much debated. See Henry J. Bruman, 'Early coconut culture in Western Mexico', *The Hispanic American Historical Review*, 25:2 (1945), 212–23; R. Gerard Ward and Muriel Brookfield, 'The dispersal of the coconut: did it float or was it carried to Panama?' *Journal of Biogeography*, 19 (1992), 467–80; Zisumbo-Villarreal *et al.*, 'Distillation in Mesoamerica'.

⁷² Bruman, 'Early coconut culture'; Zisumbo-Villarreal *et al.*, 'Distillation in Mesoamerica', 414.

⁷³ Shnukal, "'They don't know what went on'", 86.

⁷⁴ Bowie and Singe, 'The Galora Family', 12.

⁷⁵ Monica Walton Gould, in Shnukal, Ramsay and Nagata, *Navigating Boundaries*, 282.

⁷⁶ Shnukal, 'Confluence', 249.

⁷⁷ Interview with Ina Titasay, 2004; see also Bleakley, *The Aborigines of Australia*.

Horn Island close to Thursday Island. Today's older generation of Torres Strait Islanders recall steamed *tuba* being made well before World War II, 'proper, in a big way' in the 1920s. Those now in their 40s recalled the generation before them and their grandparents generation making *tuba*. Production continued until the 1980s, but is no longer made or consumed today.

IT IS REMARKABLE that the production techniques for the drink remained unchanged over many centuries: the descriptions of sap collection and *tuba* production provided by Torres Strait Islanders in 2004 were little different from those noted by Antonio Pigafetta in the 16th century, or from those reported by Joseph Banks in the 18th century. The linguistic evidence and oral accounts of the remembered past given by Torres Strait Islanders, demonstrate that the knowledge of how to make fermented and distilled versions of this drink was derived from the Filipinos who formed a significant portion of the migrant labour force entering the Strait in the late 19th and early 20th centuries.⁷⁸ The diffusion of *tuba*-drinking was successful in the Torres Strait because the Filipino labourers who became residents there found on some of the islands the raw materials they needed, just as their compatriots had discovered coconuts growing in western Mexico, enabling them to introduce *tuba* to Mesoamerica in the 16th century.

In the Torres Strait, the final product had numerous perceived advantages that facilitated its adoption as an innovation. *Tuba* was a versatile drink which catered to the needs and tastes of its users: it could be taken as a refreshing non-alcoholic juice, a mild alcoholic toddy, a vinegar, a powerful spirit or used as a natural raising agent in bread. For these small island communities with a limited existing range of mood-altering drugs (tobacco; occasional kava use in some instances; infrequent access to rum, methylated spirits and other European intoxicants at least until World War II), *tuba* filled a gap. It was relatively easy to produce, requiring simply the raw material (coconut palms), a basic still, and the investment of time and labour in the harvesting and production processes. It was also highly compatible with local social values, in that it could be shared in order to promote sociability, to show hospitality to kin and friends, and was a way of raising cash. Prior to the 1960s, *tuba* also enabled the polyethnic Islanders of the Torres Strait to sabotage the state of Queensland that regulated their legal access to alcohol, and made it possible to undermine attempts by local supervisors and administrators to govern their daily lives.

The introduction of alcohol to 'native' peoples is often associated with 'drunken, poxed European sailors debauching Island maidens and introducing innocent Islanders to guns, rum and tobacco'.⁷⁹ In the case of *tuba* in the Torres Strait Islands, however, and indeed with the introduction of arrack to mainland Aborigines, this variety of beverage was introduced by non-Europeans in what was a relatively benign form of drug diffusion. There is little evidence to suggest

⁷⁸ Reynaldo C. Iletto, 'Heriberto Zarcas: the first Filipino-Australian', in A. Shnukal, G. Ramsay and Y. Nagata (eds), *Navigating Boundaries: the Asian diaspora in Torres Strait* (Canberra 2004), 125.

⁷⁹ Donald Denoon (ed.), *The Cambridge History of the Pacific Islanders* (Cambridge 1997), 148.

that *tuba* production and consumption was a *significant* cause of health or social problems, despite the predictable concerns of religious and government authorities. Unlike the widespread introduction of rum, used frequently in European expansion as an enticement to labour and a means of drawing 'native' populations into relations of dependency,⁸⁰ the immediate source of these drinks lay not in Europe, but in the East, where they were an integral part of the social and economic lives of the peoples who produced them. The diffusion of *tuba* occurred in concert with population migration and relocation, and unlike other alcoholic beverages, production and consumption in its new setting were not designed to elicit subordination from neophyte users. The 'law of alien poisons', in which drugs from abroad are seen to be more disruptive and dangerous than those native to one's own country, does not apply here.⁸¹ In the case of *tuba*, the drink itself was less damaging than its alternatives.

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ABSTRACT

There is relatively scant evidence of the Indigenous production and consumption of intoxicating drinks on the Australian mainland prior to the arrival of outsiders. Although Australian Aboriginal peoples had mastered fermentation in some regions, the Indigenous manufacture of much stronger drinks by distillation was unknown on the Australian mainland. However, following contact with Pacific Island and Southeast Asian peoples in the 19th century, Islanders in the Torres Strait adopted techniques for fermenting and distilling what became a quasi-indigenous alcoholic drink known as *tuba*. This paper discusses the historical process of the diffusion of this substance as a result of labour migration and internationalisation in the Strait, and provides present-day accounts of *tuba* production from Torres Strait Islanders.

⁸⁰ Daniel Bradburd and William Jankowiak, 'Drugs, desire, and European economic expansion', in D. Bradburd and W. Jankowiak (eds), *Drugs, Labor, and Colonial Expansion* (Tucson 2003), 3–29.

⁸¹ Lebot, Merlin and Lindstrom, *Kava*, 200.