# The patterns of musical practice in Melanesia: how can it be tied to linguistic (? and archaeological) affiliation?

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Australian National University

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# Austronesian and non-Austronesians

- One of the great cultural dramas in human history is undoubtedly the encounter between the expanding Austronesians with the long-resident cultures of Melanesia.
- It is generally considered that prior to the Austronesian movement out of Taiwan some 4000 years ago, non-Austronesian (NAN) languages were spoken throughout Island SE Asia (ISEA). However, these have disappeared almost without trace.
- However, the nature of the interactions that occurred when the Austronesians reached western Melanesia must have been very different from ISEA, because very large numbers of NAN languages survive, principally on the island of New Guinea, but also in the Solomons, on Timor and some other offshore islands.
- Genetically there must have been substantial mixing, as Austronesian speakers in New Guinea look physically similar to their NAN counterparts, a situation which was responsible for confusion among early attempts to classify these languages.

# Innovation in musical practice I

- Is it all likely musical patterns can be tied to language families?
- Language is also culture and the Austronesian movement was clearly a real expansion as well as a partial assimilation of resident populations
- Although globalisation in music has clearly broken this link in the modern era, it may have validity in the past
- Human beings are not very inventive when it comes to musical instruments, for reasons we do not fully understand.
- For example, the principle of the duct-flute appears to have been only invented once, since it is nowhere found in Africa or Melanesia, despite the wide variety of flutes.
- Similarly, the worldwide occurrences of the Jews' harp are all geographically linked, and it is absent in Africa, Australia and the New World. Arguments for independent invention are thus not very convincing.

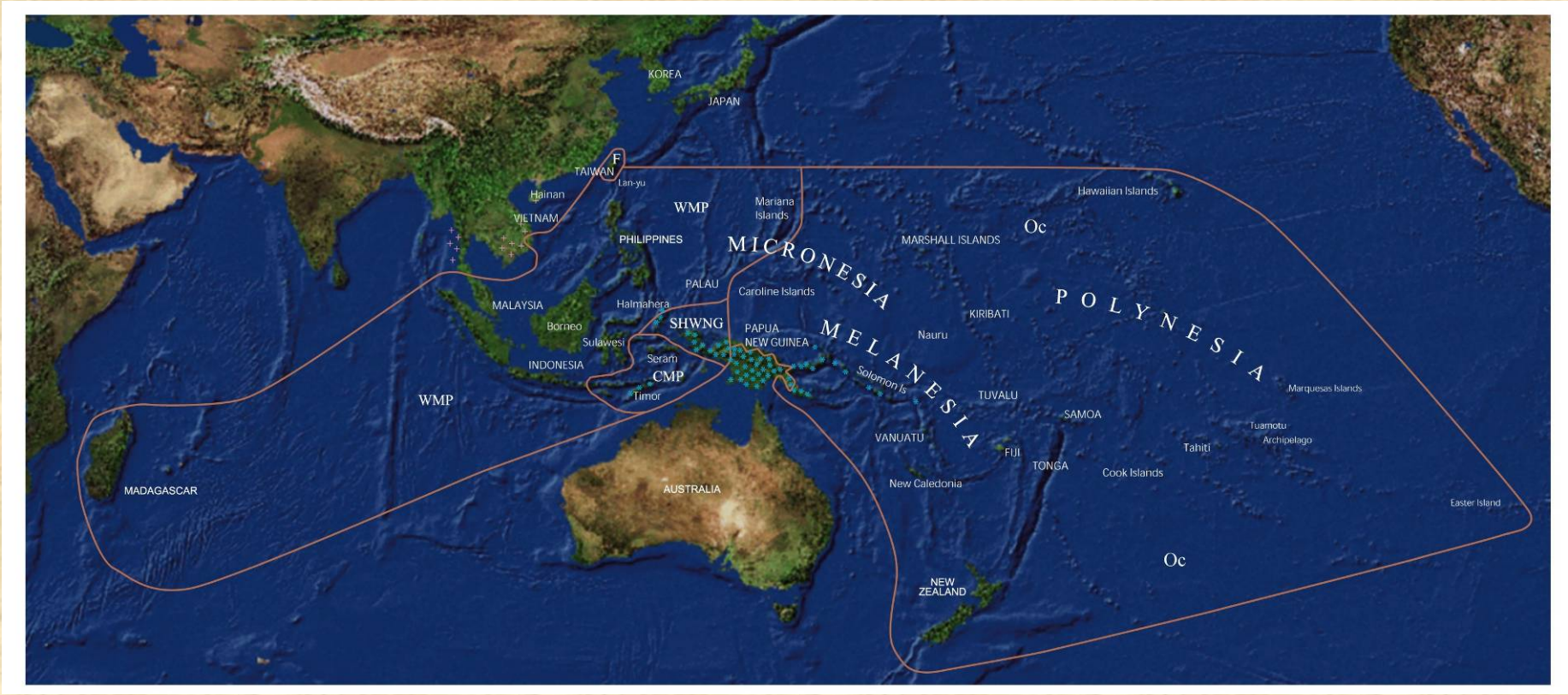
# Innovation in musical practice II

- We also know that migration and music are strongly linked. Think of the transport of Spanish musical practice ot the New World
- So it is reasonable to suppose the Austronesian migrations may have left a musical trail as well as a linguistic one.
- We are assisted by a feature of the organology of Melanesia, the small number of instrument types. There are more organological principles at work in a single African or Yunannese village than in the whole of Melanesia.
- Australia is even more restricted, with just three or four instruments found in the entire continent.
- This has advantages for the reconstruction of prehistory, since high levels of diversity creates difficulties in detecting which instruments are indigenous and which introduced.

# Austronesian and non-Austronesians

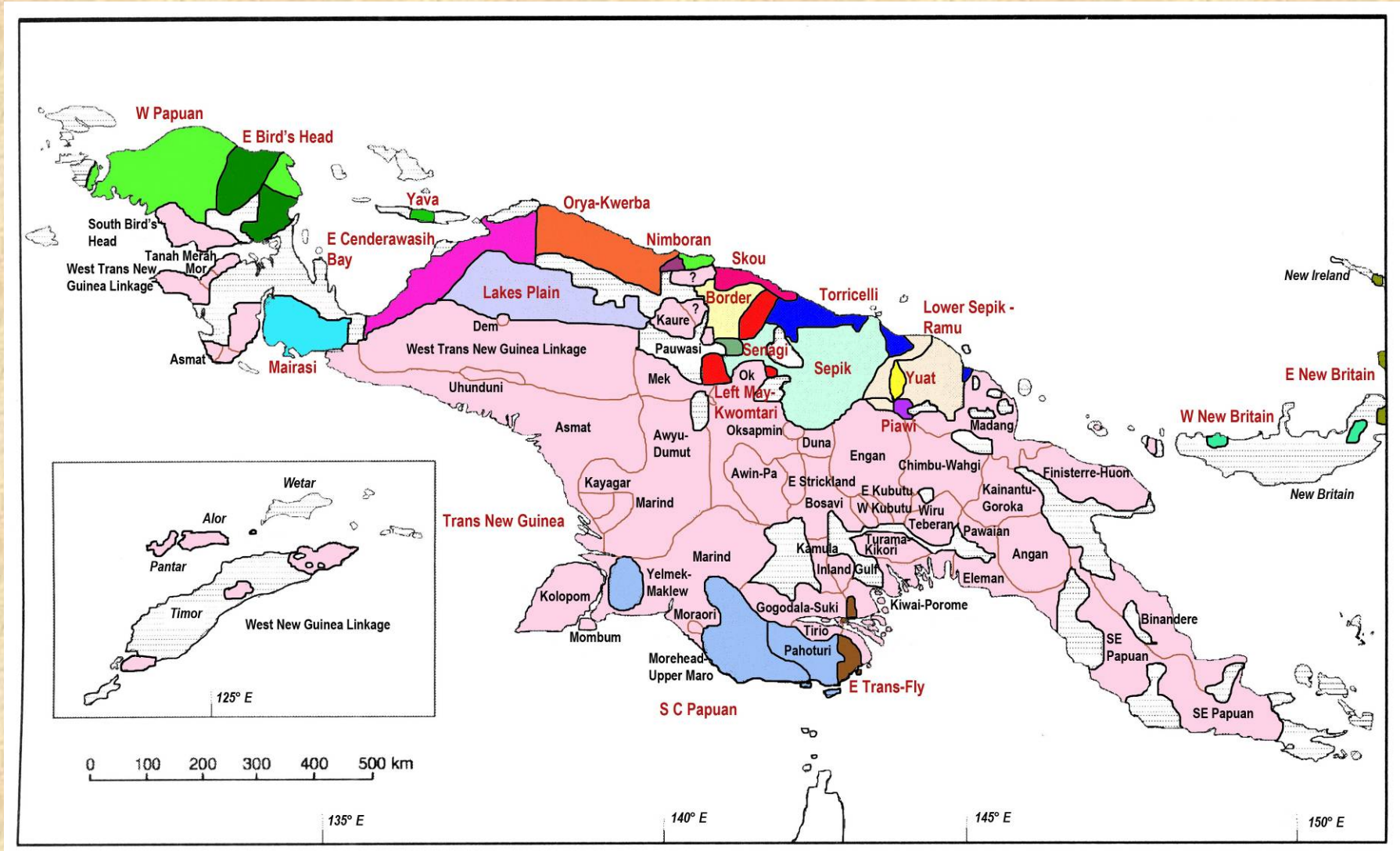
- This presentation looks at the distribution of major musical instruments and musical practice in the Melanesian region and the extent to which they can be mapped against language phyla.
- It begins with the instruments we know to be old in Papua and explores those which might be Austronesian introductions.
- Three instruments, the slit-gong, panpipes and jews' harp have broad regional distributions and their history is evidently complex, since they typify both language phyla.
- Some consideration of the linguistic data on musical instrument names is included, but the evidence remains rather weak in this area.

# Austronesian languages



# Papuan languages

# Trans New Guinea languages



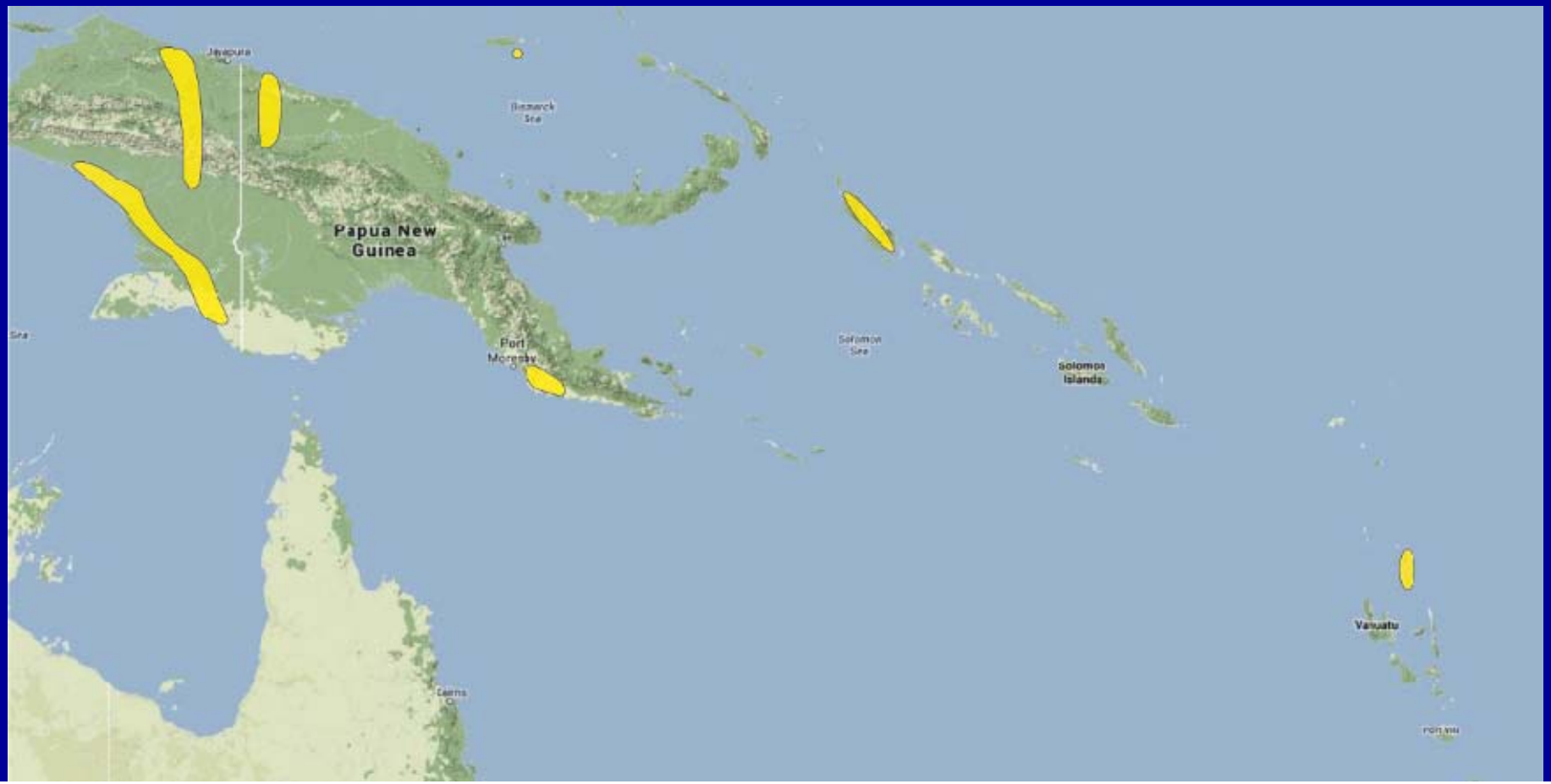
# Papuan musical instruments

# Wide-bore end-blown trumpet

- A highly characteristic instrument of Melanesia is the wide-bore end-blown trumpet, usually made from a giant grass. These are frequently used in sacred ceremonies as the ‘voice’ of spirits. Some instruments have a series of tubes of different diameters inserted in one another, thus creating a type of conical bore.

# Wide-bore end-blown trumpet

- This distribution, as well as their absence in the Austronesian speaking regions of ISEA points strongly to a Papuan instrument.



# Overblowing transverse flute

- Transverse flutes, where the resonating tube is held transversely to the player,  are predominant in Melanesia, and are typically without fingerholes, producing melodies using the overblown harmonic series.
- They are often known as ‘sacred flutes’ as they are often used in pairs or ensembles to create melodies which accompany initiations or other rites.
- The map shows the distribution of transverse overblowing flutes in Melanesia as a whole. The distribution of these flutes in remote Oceania is still unclear and they may be more widespread than this map suggests.
- Transverse flutes are not typical of ISEA, and where they exist, they usually have six fingerholes and are probably local copies of sixteenth century Portuguese fifes introduced by sailors.

# Overblowing transverse flute

# Overblowing transverse flute

# Ocarinas

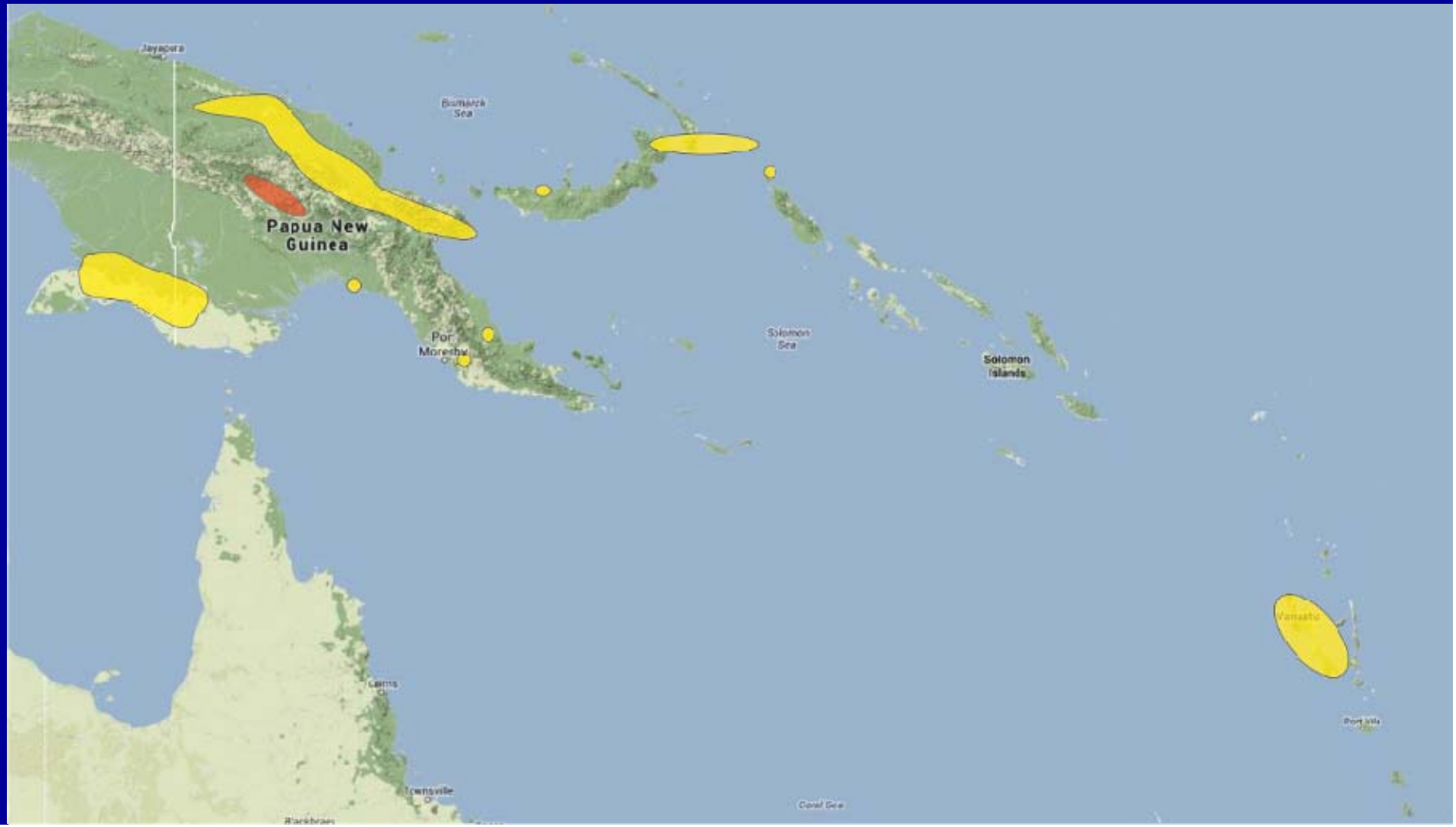
- The ocarina is a globular vessel-whistle, which usually has a single blowhole and one or more fingerholes. European and Asian ocarinas have a duct like a recorder and are thus structurally quite different from those in Melanesia.
- Interestingly, ocarinas in Africa are identical to those in Melanesia, which may suggest high antiquity. Most of the ocarinas in Melanesia are either made from a spherical fruit-shell or a dried, hollowed coconut.
- However, in parts of the Highlands, notably among the Simbu, ocarinas are made from clay and usually have elaborate polychrome decorations.

# Ocarinas

## Clay ocarinas


## Fruit-shell ocarina

# Ocarinas in Melanesia

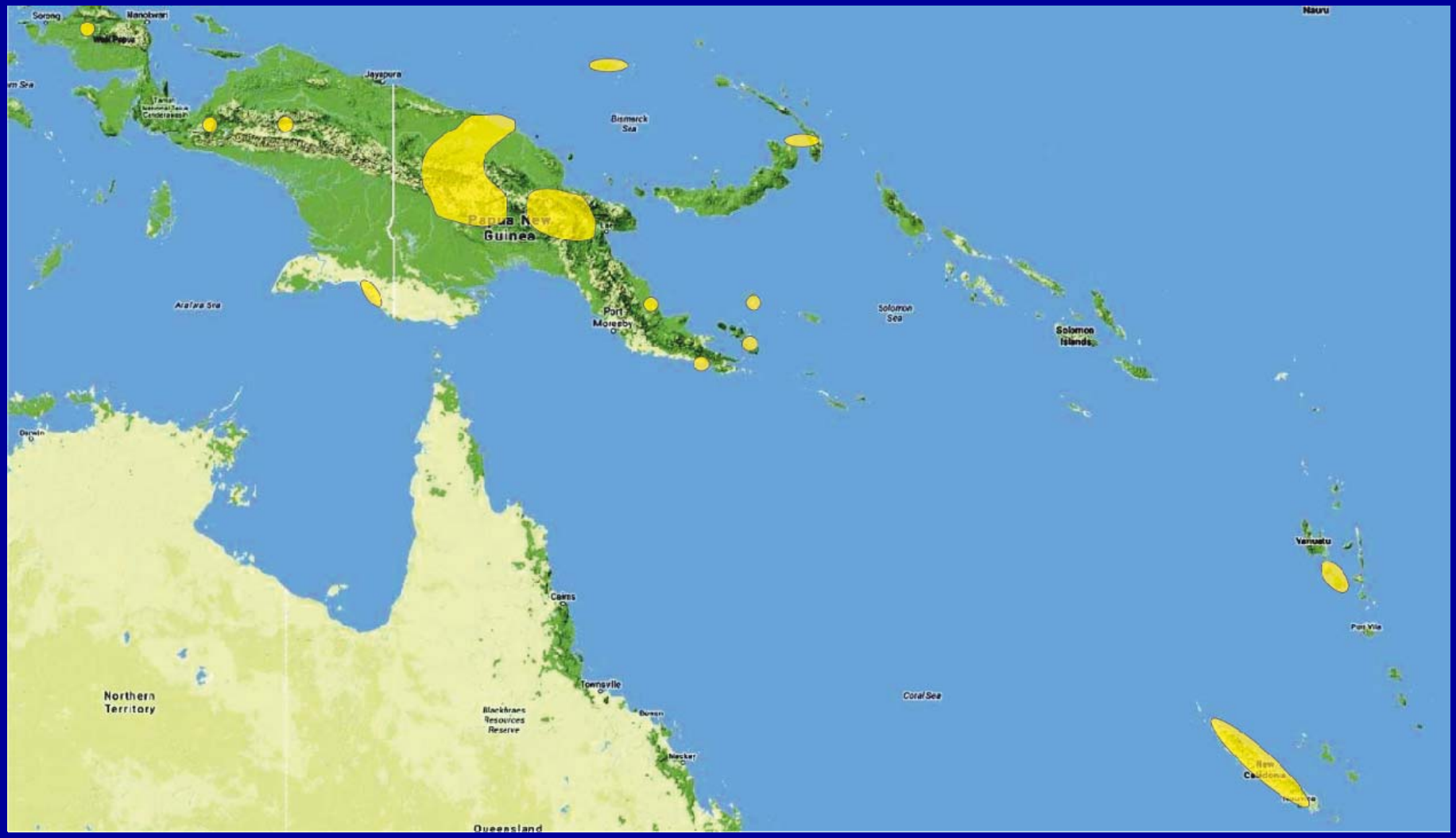


# Mouth-bows

- The musical bow is typical of many cultures around the world and was probably reinvented from the hunting bow numerous times. The musical bow consists of plucking a hunting bow while using the mouth as a resonant cavity to selectively emphasise different harmonics.
- The map shows the distribution of mouth-bows in Melanesia. The interior occurrences in New Guinea argue that this must be an old Papuan instrument. However, it also occurs in the Austronesian-speaking areas, notably in Vanuatu and New Caledonia.
- It must therefore have been picked up the migrating Austronesians, unless is a survival of the musical bows found in the Philippines.

# Musical Bow

# Mouth-bows in Melanesia



# Glued hourglass drum I

- The main type of drum in Melanesia is the hourglass drum, where the resonator is a cylindrical sounding tube with a narrowed waist. It is open at the base, and the head, often made from a lizard-skin, is beaten with the hand. This system is highly characteristic of Melanesia and almost unknown in ISEA, so it seems likely this is an old Papuan practice.
- These drums are extremely widespread across the whole island, something which led Ross et al. (1998) to conclude a word for these drums could be reconstructed to proto-Oceanic, for which they propose **kude*.

# Glued hourglass drum II

- This is almost certainly false, and where Austronesian groups play this drum they have almost certainly borrowed it. Map shows the regions where the hourglass drum is *absent* in Melanesia, which includes both the Admiralties and all of New Britain and New Ireland.
- It is also apparently absent from all of remote Oceania. Notably also it is found through much of the interior, and absent in many coastal regions. Hence it is likely that the related Austronesian terms are borrowed from Papuan and the hourglass drum cannot be reconstructed to proto-Oceanic.
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# Glued and tied hourglass drums

# Absence of the glued hourglass drum in Melanesia

# Austronesian musical instruments

# Transverse conch

- The conch is a world instrument, found in most regions, including the New World and coastal Africa. The shell is cleaned of biological matter, and a hole drilled in one end. The conch is the shell of the sea snail, *Charonia tritonis*.
- Conches can be transverse or end-blown, but all the instruments in SE Asia and the Pacific are of the second type.
- The conch is technically a vessel-horn, but it can be tuned for ensembles by selecting shells of different sizes. Although this is practised in Tonga (Moyle 1975) it is unknown in Melanesia proper. However, a second shell, *Cassis* spp. is also used in Melanesia, which, because of its morphology, is always end-blown.

# Transverse conch

- The map  shows the distribution of transverse conches in Melanesia. Transverse conches were probably introduced by the Austronesians as their main distribution appears to be coastal (McClean 1994: Figures 26a,b).
- There are some examples of highland conches, but they were probably traded up from the coast. It could argued that since conches are by definition found on seashores, a coastal distribution is ecological.
- However, in mainland SE Asia, and India, conches are traded long distance inland because of their perceived spiritual properties, so this does not exclude an introduction by the Austronesians.

# Transverse conch

Transverse conch from Goodenough Island in Milne Bay Province.

# Transverse conch in Melanesia

# Notch-flute

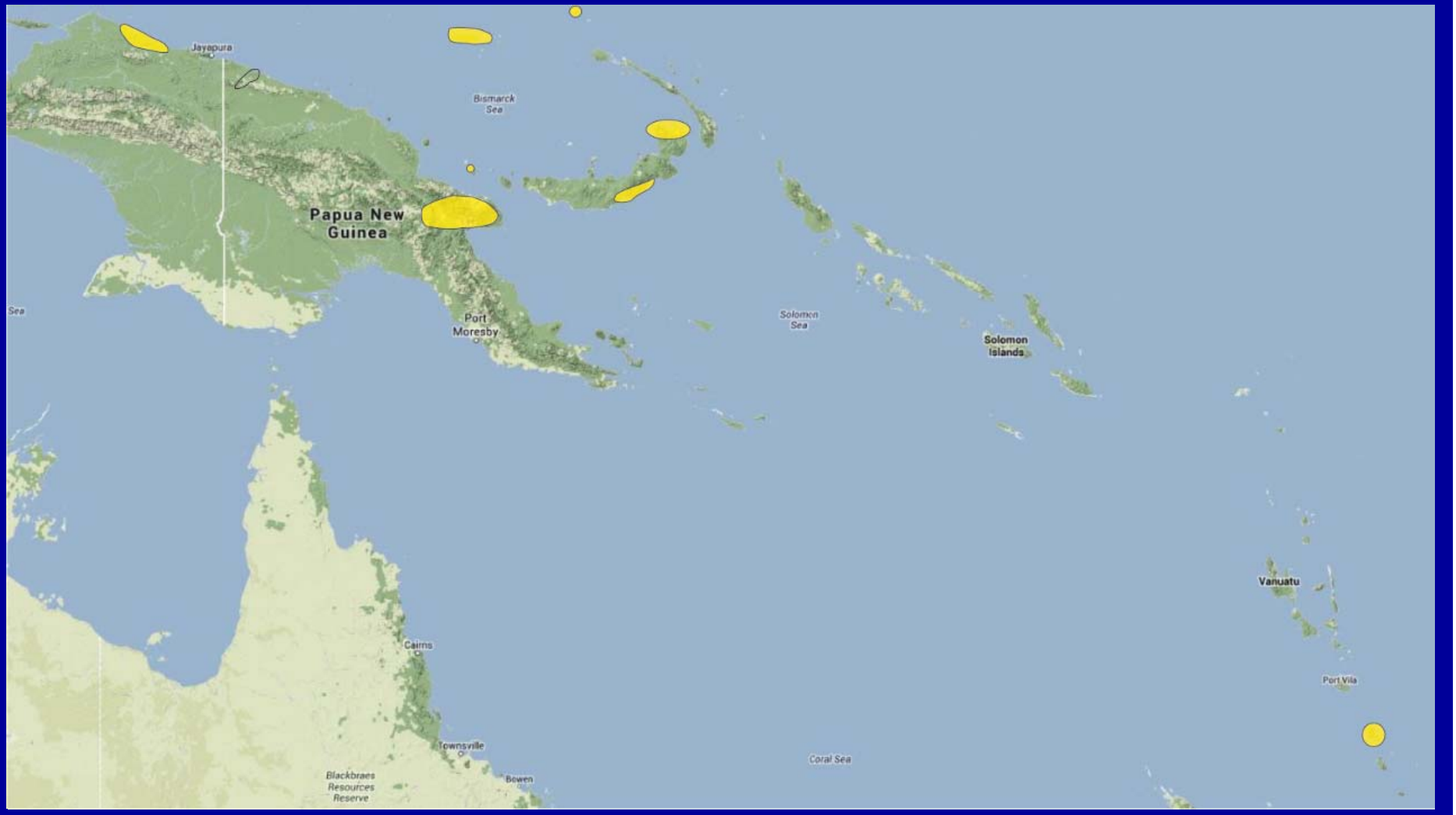
- The notch-flute is a hollow, cylindrical flute made from a reed with a V-shaped notch cut in the end which acts as an embouchure. Notch-flutes are most characteristic of the New World, but are also found in parts of Africa and Asia. They are rare in mainland SE Asia, but are known from much of the Philippines and in parts of Indonesia.
- The notch-flute is one of the few instruments where a linguistic reconstruction in Austronesian is possible; from Isneg in Luzon to Mamanwa in Mindanao, the name is **p-l-n-d-g*, suggesting that the instrument was carried throughout the region.
- The distribution of the notch-flute in Melanesia is almost entirely confined to islands and coasts, making it a strong candidate for Austronesian introduction. Notch-flutes are also recorded in Vanuatu but not apparently in the Solomons.

# Notch-flute

- Notch-flutes from Tanna

- Notch-flutes from Cenderewasih Bay

# Notch-flute in Melanesia



# Tube-zither

- The coiled-leaf shawm is a small double-reed instrument, made from a palm leaf wound into a cone. The double-reed, also made from palm-leaves, is inserted into the small end to act as the sounding device.
- They are found in coastal parts of  Eastern Melanesia, Bougainville and some other islands. Their distribution edges into the interior in several places, but as they are also found in parts of ISEA, they would appear to be Austronesian in origin.

# Tube-zither

- Tube-zither from Cenderewasih Bay

# Tube-zithers

- Tube-zither from
  - Madagascar

- Blown tube-zither from the Seychelles

# Tube-zither

Also in Madagascar

# Coiled-leaf shawm

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# Coiled-leaf shawm

# Musical instruments characteristic of both Austronesian and Papuan

# Large slit-gong

- The slit-gong is a hollowed log or giant grass such as bamboo, with one or more lengthways slits and usually sealed at each end, beaten with sticks. It is found across the world, especially in tropical regions, wherever dense vegetation and large trees stimulate the development of instruments that can communicate over large distances.
- Only in New Guinea are there very large slit gongs, *garamut*s, similar to those in Nagaland. Photo shows a typically
- Very large slit-gongs are not found in the Solomons, but do occur in Vanuatu, standing upright rather than laid horizontally on the ground. Sets of small slit-gongs occur on Malaita, and this may be source of the Vanuatu instruments.

# Large slit-gong

Garamut from the Sepik area, now in the Port Moresby Museum.

# Large slit-gong in Melanesia

# Jews' harp

- The jews' harp is ubiquitous in Oceania, found throughout the island of New Guinea, with a few exceptions, such as the lower Sepik, everywhere in Polynesia, and in all parts of remote Oceania, including New Caledonia.
- Mapping it is therefore largely superfluous, but it must certainly have been present in Melanesia prior to the Austronesian incursions. However, given that it also occurs almost everywhere in ISEA, the Austronesians would certainly have had the instrument when they first encountered Papuan speakers.
- Unfortunately, the jews' harp typically attracts ideophonic names based on its distinctive sound, and typically has limited time-depth suitable for linguistic reconstruction, despite its ubiquity and presumed antiquity in the region. Osmond & Ross propose a PWOc reconstruction for jews' harp, **bogobogo*, based on just two attestations, both from the North Coast.

# Jews’ harp

# Panpipes

- Panpipes in Melanesia are extremely morphologically diverse and it is possible that there are two layers, an old Papuan layer and a more recent Austronesian layer. We know that panpipes were formerly played in Tonga and Samoa, but were then lost in the Polynesian instrumentarium.
- Similarly, although widely played in the Solomons and Vanuatu, they were unknown in New Caledonia. Panpipes have probably developed to their greatest extent in parts of Malaita.
- The map shows the distribution of panpipes in Melanesia and clearly indicates a coastal and island distribution for some types. However, panpipes are also widely played inland in the Eastern Highlands, and this probably points to an older pre-Austronesian layer.

# Panpipes I

Panpipes from Malaita

# Panpipes II

Panpipes from the Sepik

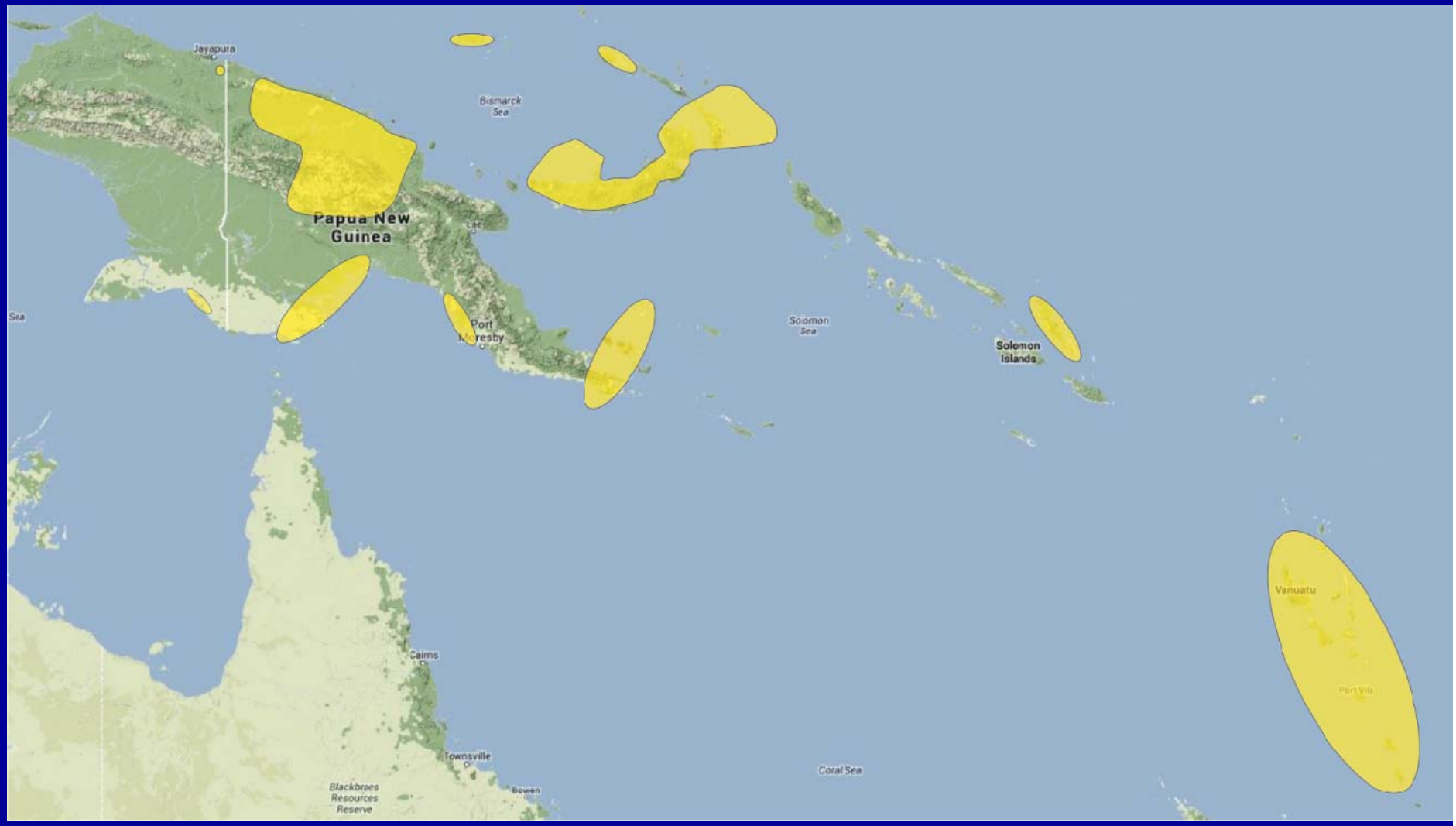
Tongan panpipes

# Panpipes III

Karen panpipes

Isneg (Luzon) panpipes

# Panpipes in Melanesia

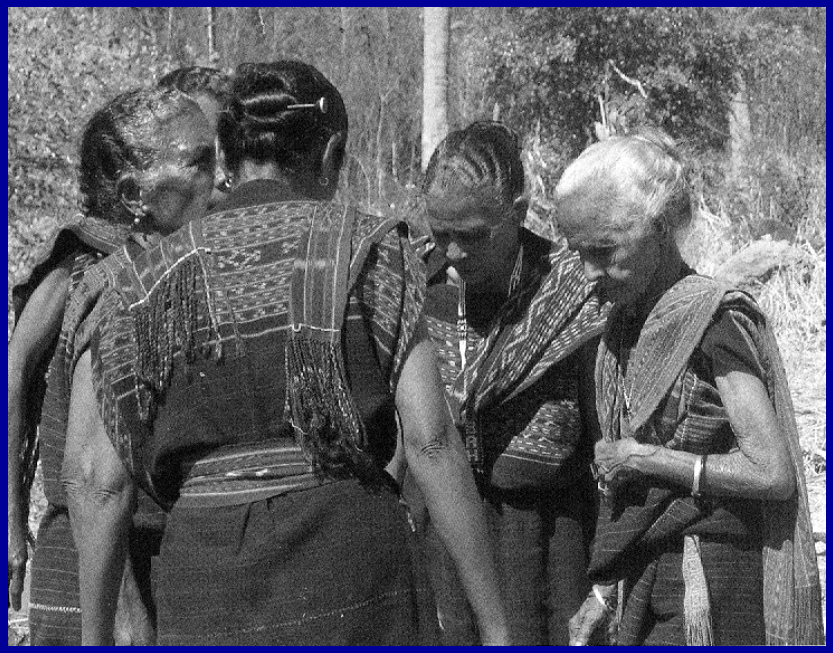


# Vocal polyphony in Melanesia

- Multi-part singing has a very curious distribution in the Austronesian/Papuan world.
- Dominant in Taiwan, it is almost unknown throughout most of Island SE Asia, where music is monodic or heterophonic
- However, it strikingly occurs in the east of Flores and Solor, together with multiple-pipe duct flutes
- On Timor and then in scattered locations on the New Guinea mainland and various islands (notably the Admiralties) as well as parts of remote Oceania
- I am guessing that the Taiwanese traditions (which may relate to those of Yunnan) are unrelated (musically) to the Melanesian traditions, and that the two or three-voice polyphony in Flores and Timor is a substrate tradition from non-Austronesians

# Vocal polyphony in Melanesia

Solor women



Flores duet

- However, the Admiralties as a core area does point to the break-up of the Oceanic languages, and we have to assume the pre-Austronesian tradition was passed to the Lapita peoples who then carried it on to New Britain and Remote Oceania

# Vocal polyphony in Melanesia

- There is probably a lot more to this story and we need to characterise the structural features of vocal polyphony more precisely.
- Also, does it relate to the multi-part flute performances, for example in the Sepik?

# Synthesis

- The impact of the Austronesian dispersal on the indigenous populations of Melanesia was both linguistic and cultural. Mapping the distribution of musical instruments and musical practice makes it possible to begin to understand aspects of that cultural impact.
- Apart from instruments brought by the Austronesians, they also seem to have picked up Papuan instruments and further dispersed them into remote Oceania. This is much less obvious in Polynesia, where a largely different set of instruments was adopted.
- Melanesia also has a small but interesting set of instruments which are quite distinctive, such as the New Ireland rubbing block, not found anywhere else in the world.
- At present there are several instruments whose cultural history is not easy to decide because their ambiguous distribution, but this may be because we have not described their morphology in sufficient detail.

# Summary

Summarises hypotheses concerning the origins of musical instruments of the Melanesian area

**Table 1. Origins of musical instruments of the Melanesian area**

| Category | Examples |
|---|---|
| Instruments indigenous to the Melanesian area | End-blown trumpets, Overblowing transverse flutes, Ocarinas, Mouth-bows, Glued hourglass drum |
| Introduced by the Austronesians | Transverse conch, Notch-flute, Coiled-leaf shawm, tube-zither |
| Not easily decided | Large slit-gong, Jews' harp, Panpipes, vocal polyphony |

In many cases the story is quite complex, as it looks like there has been earlier transmission of instruments across ISEA prior to the Austronesian dispersal.

# THANKS

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