
Macleay Museum News

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Shaping Australia

The Museum's latest display, *Shaping Australia: Tracks and Trade in Pre-Colonial Australia*, has been developed by our recent Macleay Miklouho-Maclay Fellow, Mike Letnic. Mike reflects on the subject of the display, traditional Aboriginal trade routes in pre-European Australia:

As an ecologist I spend much of my time trying to understand how landscapes and the ecosystems within them function. What, you may ask, has this to do with an exhibition on trade in Australia prior to European settlement? Landscapes do not just consist of the geology, flora and fauna. They also have a cultural component. People utilise and modify landscapes in ways which affect how they function. It is for these reasons that I became interested in how people modify landscapes and how these modifications affect the structure and function of ecosystems. This line of enquiry has led me a long way from ecology (but contributed much to my understanding of ecology) and stimulated my interest in trade and transport.

It seems that people have an inherent urge to trade and travel, but because of social and geographical complexities are often forced to conduct their activities in relatively limited areas. In inland Australia for example, Aboriginal people conducted widespread trade, of amongst other things, red ochre and a narcotic called pituri. The trade of these goods followed dreaming tracks that connected the waters of intermittent rivers. In some instances, these routes formed well-defined paths that may have been used for millennia. Most if not all of our early explorers and settlers were guided or directed by local Aboriginal people along these same lines of travel. In many places these routes appear to have evolved into the stock routes and roads evident in our contemporary landscapes. Similarly, many of the Aboriginal names for places, waterholes and mountains feature on our contemporary maps, which poses the question: how much of our contemporary landscape was inherited rather than discovered?



A group of Aborigines in Central Australia encountered during the Horn Scientific Expedition in 1894 and photographed by Baldwin Spencer (HPC 85/026/0002)

In *Shaping Australia* we present an outline of the extent of trade in Australia prior to European settlement. The trade routes linked coastal Australia with the inland and Australia's northern shores with the Indonesian archipelago and New Guinea. The items of trade were diverse and we feature many of these. They included pigments, narcotics, adornments, everyday utensils, even songs and stories. In some places, plentiful supplies of food allowed people to congregate at exchange centres to feast and trade. Some of the best known of these trading events were associated with the migrations of bogong moths in the Southern Alps of New South Wales, eels in Victoria, fish on the Darling River and the ripening of bunya nuts in Queensland.

Despite popular belief, Australia was not an isolated continent. At the time of European colonisation there were trade links with Indonesia and Papua New Guinea. Macassan seafarers from the island of Sulawesi, in what is now Indonesia, made annual journeys to Australia's northern shores to collect sea-slugs, also known as trepang or beche-de-mer. The trepang collected from Australia was in turn traded as far north as China, where they remain a culinary delicacy today. Aboriginal people exchanged trepang and turtle shell out-rigger canoes, sails and tobacco, and even accompanied the traders to Macassar and back. This trade ceased in the early twentieth century when Australia passed laws to protect the developing trepang industry in Australia. The influence of the Macassans on the spiritual and material life of northern Australian Aborigines is still evident today.

The marks of the indigenous trade networks while not always obvious are still imprinted in Australia's contemporary geography. Landscapes comprise many interweaving layers. I hope that *Shaping Australia* will uncover some of those layers and assist people to interpret the landscape around them.

Mike Letnic

Director's Notes and Jottings

Staff Notes

Susie Davies took one month's leave in August to visit her husband's relations in Canada, and I will be travelling to New York in November for a wedding, but otherwise this is a quiet year for staff travel.

Many of our regular readers will remember Lydia Bushell with affection. She was the Curator of Ethnography for many years, and is still a good friend to the Museum. Recently her husband Ralph died, and shortly afterwards, Lydia fell down her front steps, and broke both ankles. She is progressing well, and has been seen around the University in a wheel chair!

Conferences &c

Susie Davies and I attended the annual **Museums Australia conference** in Canberra in April, and I chaired one of the sessions. It is always worthwhile to meet up with colleagues to keep in touch with what is happening. Stuart Norrington attended a seminar on **education programs for young children**, held at the Australian National Maritime Museum. Geoff Barker gave a talk on 'Rock Slides: Geological Photographs in the Macleay Museum' at the [Australian Science History Club](#)'s seminar on **Geology and Federation** in May. Julian Holland and Geoff Barker shared attendance at the 13th **International Stereoscopic Union Congress** held in Sydney in September, and in October, Rose Stack will present a paper on the Indigenous Heritage Project at the **culture@com.unity** conference organised by the Museum and Galleries Foundation of NSW. This conference will be held at the University, and the Museum will be open for tours by conference attendees.

The Museum has played host to several special meetings, notably one for **slide rule collectors**, which resulted in a very interesting article in the *Bulletin* in August. We also provided the venue for an evening reception for an international **conference on John Locke**, organised by the Philosophy Department. In September we hosted the annual meeting of the **Council of Heads of Australian Entomological Collections**, which included a visit to the Entomology Collection. We also organised a tour for members of the Arts Association, and a morning tea and tour for Members of the Powerhouse Museum. In May we were co-hosts with the School of Biological Sciences for a fundraising morning tea for the Cancer Council, and we opened specially for Courses and Careers Day.

2001 Fellow

Dr Jude Philp was appointed the Fellow for 2001. Her project was to work with the ethnographic material relating to the peoples of the border region of coastal Western Province, Papua New Guinea and Torres Strait. Jude was looking at the Australian interest in Papua New Guinea in the late 19th and early 20th centuries and the role of natural history and particularly ethnography in these debates. We were delighted to welcome Jude to the Museum, but after only one month with us, she was lucky enough to get a full-time job with the Australian Museum and was thus forced to resign her Fellowship. As jobs in Museums are very hard to get, and Jude is very well qualified, we are now delighted to congratulate her on her appointment and look forward to a fruitful cooperation with her in her new role. She will complete and probably publish the first section of her work, so her time with us was worthwhile. Because it is so late in the year, we cannot appoint another Fellow for 2001. The Fellowship will be advertised again early in 2002.

Work Experience

We have a policy of welcoming students under the School Work Experience program. So far this year four young women, from Caringbah Selective High School, Ascham High School, Asquith Girls High and MacKillop College, Bathurst, have each spent a week at the Museum. One young man broke his leg the day before he was due to arrive - but we hope to see him in December. The work of these students is coordinated by Stuart Norrington, but we also give them experience of other sections of the Museum. The students give every impression of enjoying their week with us.

Visitors

One of the many ways in which we serve the University is in providing resources for visiting scholars. Among those whom we have been pleased to welcome in the past year, to inspect parts of the collection and talk to staff, have been: Penny Iking, Museum Victoria, to look at Oceanic material; David Kaus and Mark Henderson from the National Museum of Australia to research collections now at the National Museum but originally transferred from the University; Christopher Wright, from the University of London, researching W.J. Macleay and the Western Solomons; John Stanton from the Berndt Museum, University of Western Australia, to look at Aboriginal artifacts for a book; Alison Hatfield, from the V & A, London, researching Roger Fenton stereographs; Jean Eduard Carlier (Voyages Curieux) to look at Solomon Islands material; Karen Sears, University of Chicago, working on embryonic marsupials; Leilani Bin-Juda, National Museum of Australia, to look at Torres Strait material; Yves Le Fur, from Musée des Arts Afrique et d'Océanie in Paris, and Claude Stéfani, Musée de Chartres, to look at Oceanic material. Dr Peter Miller, a computer scientist, is working on the Australian phasmid (stick insect) collection to produce the first field guide to this interesting insect.

Among other notable visitors, we have been pleased to welcome M. Arnaud Littardi, Cultural and Scientific Counsellor, Embassy of France; Dr Christian Kaufmann from Museum der Kulturen, Basle, with Margaret Tucson; Dr Stéfane Martin, Président-Directeur general of the new Musée du quai Branly, with Bill Evans; Tim Klingingder of Sotheby's with Todd Barlin, and David Attenborough, who seems to pop into the Museum regularly. Michael Wright from the London Science Museum visited the Museum (especially the Scientific Instrument Collection) while on a private visit to Sydney late last year. We were also delighted to welcome a group of 12 members of the Native Title Tribunal who attended a tour led by Rose Stack, and a group of Wanjii people from the Gulf country, the traditional owners of the Riversleigh archaeological site who were visiting the University to discuss the site with archaeologists.

Technology

Keeping up to date with technology is very difficult on a small budget, but we really have to do so. Recently we spent some of our savings on new computer equipment for all staff, so that we now all are using new, reliable machines, which do not crash all the time, which run the same software, and are linked to a central server which provides proper backup for our various databases. We also bought a Photoprinter scanner for the Historic Photograph Collection, a colour printer, and CD burners, thus making the production of prints from the collection much easier. If you are interested in purchasing any prints, check the HPC section on the web. We are also trying to improve the structure of the databases which hold the catalogue information, and to work on improving the data about the collection.

Publicity

The current exhibition *Collected* received a favourable and interesting review in the *Sydney Morning Herald* in April, and in May we were one of the museums featured on a front-page story, 'Hidden Charms', of the Saturday *SMH* Metropolitan section. The Museum has been featured three times on the children's program *Totally Wild* on Channel 10, twice with Margaret Humphrey involving the insect collection, and once with Susie Davies on *Collected*. A fourth program featuring Dr Steve Wroe discussing skeletons was filmed in the gallery in early September. The insect collection also featured on Channel 7's *Saturday Disney*, and a four year old critic who saw the show thought it was terrific! Stuart Norrington discussed the history of taxidermy on ABC Radio's *Arts Program* at the end of August.

Vanessa Mack

Exhibitionism

With *Collected* up and running since early this year, work has progressed on a number of smaller displays. The Museum's oldest display - *Pharmacy* - has with some regret been dismantled. This display was popular with visitors but was installed more than 25 years ago. It has not disappeared completely, however. In coming months, some of the exhibits will be incorporated in a new display in the Pharmacy Building across Science Road from the Museum. In place of *Pharmacy*, we will shortly install *Shaping Australia: Tracks and Trade in Pre-Colonial Australia* discussed on page 1. This will be installed by early November.

Another display in preparation concerns body temperature and will also be installed in November. *In Sickness and in Health: Body Temperature and its Measurement* is being developed by two honours students in the Unit for History and Philosophy of Science, Krista Sigurdson and Fiona Mackenzie, as part of their Sociology of Science course. The display will incorporate a number of historic and modern thermometers as well as other items. Krista and Fiona are working with great enthusiasm, and Julian Holland is coordinating the display for the Museum.



The Paduan physician Santorio Santorre (1561-1636) applied quantitative measurement to human physiology, including temperature measurement with the newly invented thermometer, in the early years of the seventeenth century

In the wake of the discovery of live specimens of Lord Howe Island Stick Insects on Ball's Pyramid earlier this year - as reported in the last newsletter - Margaret Humphrey has prepared a display, *On the Brink*, which incorporates the Museum's historic specimens as well as photographs taken on Ball's Pyramid, and other stick insects from the collection.

Several small items from the previous major exhibition, *Adorned*, have been incorporated into a display in flat-top cases at the back of the gallery and a new selection of bark paintings has been installed in *Yirrkala*.

Geoff Barker and Julian Holland are in the preliminary stages of developing a major exhibition on stereo photography to replace *Collected* in 2003. While the exhibition will have a strong historical focus, their attendance at the recent International Stereoscopic Union Congress, fortuitously held in Sydney, provided a concentrated exposure to a diverse range of modern stereographic work.

Indigenous Heritage Project

In June 2001, the Macleay Museum celebrated the return of Ancestral Remains and Culturally Significant Items to the Bunuba and Walmajarri people of Fitzroy Crossing, the Kimberley, Western Australia. In a moving ceremony in the Senate Room, Professor Ken Eltis, then Acting Vice Chancellor made the handover to Elders Phillip Green, Bob Beharrel, and Joe Brown. Executive and staff members of the Kimberley Aboriginal Law and Culture Centre, Adrian Isaac and James Brown, accompanied the elders. Aboriginal and non-Aboriginal members of the University staff were guests on this important occasion. The welcome to country was given by Mr Allan Madden, a local Elder and Heritage Officer for the Metropolitan Local Aboriginal Land Council. Mr Robert Welsh, chairman of the Metropolitan Council, also welcomed the Kimberley visitors. This was the second occasion on which material was returned to the Kimberley.



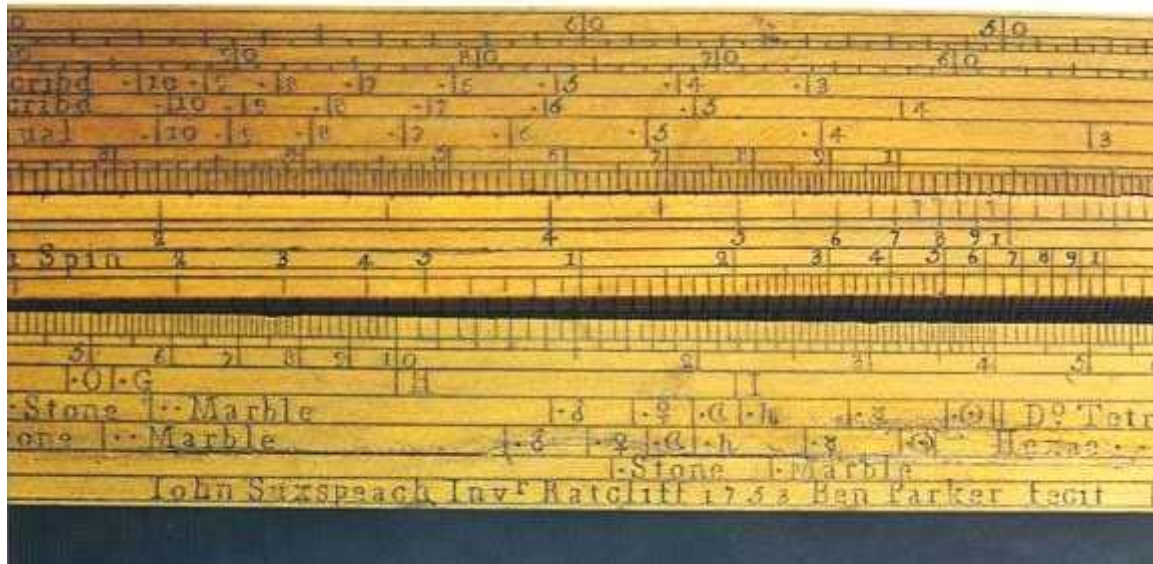
Professor Ken Eltis (centre) with, from left, Walmajarri elder Joe Brown, Kimberley Aboriginal Law and Culture Centre Chair Adrian Isaac, and Bunuba elders Phillip Green and Bob Beharrel

The Indigenous Heritage Project continues to make contacts with Aboriginal and Torres Strait Islander communities across the nation. In the near future Ancestral Remains excavated from the far north coast of NSW will be transferred to the Australian Museum. There they will be reunited with other remains excavated from the same site, and ultimately repatriated.

Rosemary Stack

Catholic Organon

The name of this strange device suggests something to accompany liturgy in a church. Its function, however, was very different. Its full name was the 'Catholic Organon or Universal Sliding Foot Rule'. It was in fact a slide rule, the first such to be patented.



Detail of Suxspeach's complicated slide rule made in 1753

The slide rule was an invention of genius. From its first development in the seventeenth century until it was superseded by the electronic calculator in the 1970s, the slide rule has been produced in many forms to expedite many types of calculation. Following the discovery of the principal of logarithms by the Scottish mathematician John Napier in the early seventeenth century, Edmund Gunther laid out a logarithmic scale on a wooden strip. Calculations were then made by setting a pair of compasses on one part of the scale and transferring that interval to another part of the scale. The idea was improved upon by laying a logarithmic scale on each of two wooden strips and moving one against the other. The slide rule as an integral object in which all the elements are held together is thought to have been developed by William Oughtred about 1625.

Though an invaluable aid in practical mathematical activities such as land surveying, more than a century passed before any design of slide rule was patented. The patent was sought by John Suxspeach, a schoolmaster in the parish of St Dunstan's in the London suburb of Stepney. The instrument he had invented 'with much labour and expence' was indeed more than just a slide rule, it was 'an instrument which was then brought to its utmost perfection, to be called the Catholic Organon or Universal Sliding Foot Rule, which consisted of a stock that contained an octagonal slide or telescope and two thin slides, each slide containing a brass tongue, that form a quadrant, which would be of great use in the practice of arithmetick, geometry, mensuration, gauging, trigonometry, navigation, dialling, astronomy, and all the branches of the mathematicks, being an instrument never discovered or made use of by any other person or persons whatsoever, and would be of great service to many of His Majestie's subjects who were desirous of being improved, constructed, or assisted in the above studies'.

There is no part of the 'universal sliding foot rule' that does not bear scales, an almanac, or some other information, except the inside of the 'telescope' tube. The photograph shows a detail of the instrument with the signature and date, 1753. The patent, retrospectively numbered 676, was granted on 29 March that year. That Suxspeach's 'labour and expence' were justified may be doubted. In the eighteenth century, London grew to be the leading centre of scientific instrument making in the world, but there was always a premium on simplicity and practicality. Suxspeach's inventive genius went against this principle. It seems that in some examples the octagonal tube was fitted up with lenses to operate as a telescope, but this was hardly convenient compared with a purpose-built telescope, and the Macleay Museum example shows no sign of optical fittings.

From the small number of known examples, some bearing specific dates, it seems that the 'Catholic Organon' - only a schoolmaster could have produced such a ponderous name - was first produced towards the end of 1752, before the patent was granted, and was still being produced in 1755, but production tailed off after the first year and possibly no more than twenty were produced altogether. Very little is known about John Suxspeach, but if he hoped his invention would free him from school teaching he must have been disappointed. Next to nothing is known of Benjamin Parker, the craftsman who made the instruments, but he was plainly a skilled and competent worker.

The 'Catholic Organon' was donated to the Museum in 1986, and although the octagonal tube is bowed (and probably has been for most of its life) it is otherwise as usable today as it was when it was made nearly 250 years ago.

Suxspeach's remarkable slide rule is currently on display in Slipsticks in the Museum gallery. Peter Hopp kindly provided a copy of Suxspeach's patent specification.

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