SPECIAL ISSUE: INDIGENOUS KNOWLEDGE
GUEST EDITOR: PAUL TURNBULL

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This edition of *Humanities Research* on Indigenous knowledge is guest edited by Associate Professor Paul Turnbull, Senior Research Fellow in the Centre for Cross-Cultural Research. It features papers emerging from an important Conference in Cairns in 1996 convened by Paul Turnbull and Henrietta Fourmile and organized by the Humanities Research Centre on the subject of “Science and Other Indigenous Knowledge Traditions”. In this issue of *Humanities Research* there are also reviews of two groundbreaking Indigenous art exhibitions developed to coincide with the Olympic Games in Sydney in September 2000—*Papunya Tula: Genesis and Genius* and *Urban Dingo: the Art and Life of Lin Onus, 1948-1996*.

The concept of a special issue of *Humanities Research* devoted to Indigenous knowledge grew out of discussions regarding a greater focus for the journal on ideas of general interest across the Humanities and related to projects of both the Humanities Research Centre (HRC) and the Centre for Cross-Cultural Research (CCR). The year 2000 has been an important one for both Centres with a move to new premises in the historic Old Canberra House situated on Lake Burley Griffin, close to the new National Museum of Australia, and the forging of partnerships in research between the Museum, other National Cultural Institutions and the Centres.

There have been new appointments this year to the staff of both Centres. While Professor Iain McCalman remains Director of the HRC and continues to play a key role in the developing programs of the CCR, Professor Howard Morphy has been appointed as the second Director of the Centre for Cross-Cultural Research, succeeding Professor Nicholas Thomas. My own appointment as Deputy Director of the HRC (succeeding Professor Graeme Clarke) has also included Editorship of this journal. Because of these changes and the appointment of a new Publications Officer to the HRC, Lindy Shultz, there will be only one issue of *Humanities Research* in 2000. A double issue will be produced as the first issue in 2001 and the theme for that issue, which will coincide with the opening of the new National Museum of Australia in March 2001, is “The Future of Museums”.

The ideas presented in these pages open up questions of fundamental importance to Australian society today as we seek to reconcile ancient and contemporary cultural values, address past wrongs and
Photo: Courtesy Margo Neale
present concerns of Indigenous people in Australia and come to a greater understanding of what Australian culture is at the beginning of a new century. The HRC and the CCR have foregrounded Indigenous issues in projects being developed at the Centres. The publication of the landmark *The Oxford Companion to Aboriginal Art and Culture* this year, a most significant compendium of articles edited by Sylvia Kleinert and Margo Neale, is one of a number of projects related to Indigenous culture. The Centres have also commissioned (as part of the Australian National University's public art program) Fiona Foley, one of Australia's leading artists, to undertake a sculptural installation in the garden between the old and new buildings of the Centres on the Acton Peninsula. Foley, herself an Indigenous artist, has produced a memorialising work which conceptualises Indigenous knowledge of Canberra.

The two Indigenous exhibitions reviewed in this issue were conceived for international and local audiences as a way of introducing important developments in Aboriginal art and contributions to recent Australian art. Both were shown as part of the Olympic Arts Festivals in Sydney in September 2000. At the Olympic opening ceremony the theme generously proposed by Aboriginal representatives was "sharing the knowledge" and both exhibitions encapsulate that philosophy. *Papunya Tula: Genesis and Genius* was presented at the Art Gallery of NSW in a collaboration with Papunya Tula Artists, the Aboriginal company formed in 1972. It is the story of an artist-run company which has facilitated not only the flowering of an extraordinary creative outpouring by its artists but found a way to share that creativity, culture and knowledge with other Australians and international audiences. Without this vital movement, as Michael Nelson Tjakamarra, a senior Warlpiri Elder has noted, "they [meaning the outside world and particularly the rest of Australia] wouldn't know us". Creating works of authority, which at the same time tell powerful stories, and drawing on ancient knowledge, this movement has used new media—canvas and paints—to tell these stories. As Marcia Langton tells us in the catalogue to the exhibition (edited by Hetti Perkins and Hannah Fink), these are "spiritual landscapes". In that sense they are maps of inner and outer worlds and reflect a cosmology and way of looking at geography that encapsulates the sacred as much as cartographic knowledge in a Western sense. Yet, Aboriginal painting has also been used as evidence in Land Rights cases. These artists, in their longing for their land, produced works of incredible beauty such as the 1972 work by Mick Namarari Tjapaltjarri illustrated on the cover, which are meant to be shared with outsiders and are also inspiring testimony to cultural survival. Vivien Johnson, currently a Fellow in the CCR notes in the catalogue: "... we learn that disintegration is not the inevitable consequence of cultural contact" (p.197).
Urban Dingo: The Art and Life of Lin Onus 1948-1996 at the Museum of Contemporary Art in Sydney is an equally inspiring story of an artist and activist who addressed his own identity in two worlds (Yorta Yorta and Scottish heritage) and in an urban context to attempt to reconcile these different worlds within contemporary Australian society while also addressing the broader concerns of Aboriginal people in the changing social and political context of Australia in the last three decades.

The exhibition was the first national retrospective of an urban-based Aboriginal artist and was curated by Margo Neale, who earlier in 1998 curated the first retrospective of any Aboriginal artist in this country, the acclaimed Emily Kame Kngwarreye, Alhalkere: Paintings from Utopia.

Onus, described by Neale as "... a cultural terrorist of gentle irreverence", worked for social justice and in his art to find a new visual language to be a "bridge between cultures".

His work A Stronger Spring for David... Toas for a Modern Age, 1994, reminds us that Aboriginal and Indigenous culture and knowledge is not locked into Western perceptions. The items ceremonially presented in the installation are detritus of urban life presented by Onus and identified as Toas—the mysterious direction markers of Lake Eyre. The humour of this work, which encapsulates Onus' philosophy of engaging Black and White audiences through shared stories, belies its serious message. The work is also a tribute to Aboriginal writer and inventor David Unaipon (1872 - 1967) now honoured for his work as a scientific inventor in a
Western sense by having his image appear on the Australian $50 note.

Unaipon began as a servant at the Point McLeay mission and was a storeman, bootmaker and book-keeper. He was the first Indigenous writer to be published and an inventor of a handpiece for sheep shearing, a centrifugal motor and other devices related to perpetual motion but was unable to get financial backing. He dedicated his life to Indigenous culture and to attempting to achieve equal rights for Indigenous Australians through “sympathetic co-operation” between Blacks and Whites.

One of Unaipon’s inventions was a spring with a steel ball which Onus refers to in the art work’s title. The work was a central element in the 1994 exhibition “Perpetual Cultural Institute Inc.

Indigenous culture and knowledge, as these two exhibitions remind us, is not locked in the past. The challenge for non-Indigenous cultures and for Australian society is to recognize and respect both ancient knowledge and present contributions of Indigenous peoples in ways that are positive for all.

NOTES
This issue of *Humanities Research* offers four papers exploring relations between Western and Indigenous sciences. They derive from the 'Science and Other Indigenous Knowledge Traditions' conference, held at the Cairns campus of James Cook University in August 1996. The conference was an ambitious venture, sponsored by the Humanities Research Centre, in collaboration with Bukal Indigenous Consulting, the Centre for Aboriginal and Torres Strait Islander Participation in Research and Development of James Cook University. It brought together Indigenous Elders and knowledge custodians, Indigenous and non-Indigenous researchers from Australia and overseas for five days on the ancestral country of the Djabugay people, on which James Cook's recently established Cairns campus is located.

The decision to devote a major Humanities Research Centre conference to exploring the relations between European and Indigenous sciences grew out of conversations through 1994 between myself, Henrietta Fourmile, a Yidinji historian and policy analyst, well known for her research on protection of Indigenous knowledge and cultural heritage, and Iain McCalman, Director of the Humanities Research Centre. By early 1995, these discussions included David Turnbull, a cultural historian internationally known for his work on the relations between Indigenous and Western ways of mapping time and space.

Since assuming the Directorship, McCalman had sought to encourage Indigenous participation in the Centre. Given that in 1996 the Centre's activities would cohere around the theme of 'Science and Culture', it seemed to us logical and timely for a major conference exploring the relations between European and Indigenous sciences. Also, we felt it should be held at the Cairns campus of James Cook University. This would maximize opportunities for participation by Elders and knowledge custodians from across Northern Australia. However, we were also keen to recognize and draw upon the expertise in issues relating to Indigenous Australian knowledge developing within James Cook's Centre for Aboriginal and Torres Strait Islander Participation in Research and Development. Indeed, it was while Henrietta
Fourmile was employed at the Centre that she won international recognition for her research into the theft of Indigenous cultural property in Australia.

In Queensland, with the gradual dismantling from the mid-1960s of the protectionist regime under which they had lived since the turn of the twentieth century, Aboriginal and Torres Strait peoples gained legal rights to ownership and enjoyment of cultural property. Yet, as research by Henrietta Fourmile had shown, restoration and community protection of cultural property hinged on demonstrating the property in question was used in accordance with 'tribal custom or law'. State bureaucrats and non-Indigenous experts effectively reserved the right to determine just what constituted 'tribal custom and law'; and as was evidenced by cultural property being defined as 'relics' in the relevant legislation, the presumption on the part of non-Indigenous authorities was that little if anything remained by way of Indigenous culture and customary law.

Moreover, as Fourmile argues in her contribution to this volume, the continuing persuasiveness of these colonialist assumptions places Indigenous biological resources and other less tangible forms of cultural property in grave risk of appropriation and use without permission or compensation.

For several years, I had likewise been interested, as a non-Indigenous researcher, in documenting the fate of Indigenous cultural property and knowledge in nineteenth and early twentieth century Australia. In particular, I had been exploring the history of scientific procurement and uses of Indigenous bodily remains. As is well known, the 1980s witnessed at times fierce controversy over the continued preservation of Indigenous skeletal material within museums and medical schools. Demands by community Elders and Indigenous spokespersons provoked debate as to whether scientific criteria or obligations prescribed by Indigenous ancestral belief should ultimately determine their fate. I was particularly

*Iain McCalman, Director of the Humanities Research Centre, and Henrietta Fourmile, conference co-convenor.
Photo: Leena Messina*
struck by the perplexity of personnel working in institutions housing collections of remains. Why, as it seemed to them, did research focused on human remains now cause Indigenous Australians such anguish and outrage when it had never done so before? Several confessed to me that they could only make sense of the controversy in which they had become embroiled by assuming that it was orchestrated by younger Indigenous activists, whose motivation was purely political: quite likely they had been inspired by similar campaigns for the reburial of remains undertaken since the mid 1970s by radical North American Indian organizations.

There was no reason to doubt that these sentiments were genuine, but what they raised in my mind was whether the controversy over scientific use of Indigenous bodily remains had more complex historical origins that needed to be considered. This question seemed especially pertinent as during the course of the controversy both scientific researchers and their Indigenous critics justified their stance by recourse to claims about how and why Indigenous bones and soft tissue had come to rest in medical schools and natural history museums.

Working in the collections of the National Library over the summer of 1994-5, I came across numerous accounts written during the course of the nineteenth century documenting how different Indigenous communities sought to prevent the desecration of burial places by explorers, natural history collectors or ordinary settlers keen to aid contemporary scientific research into the origins and nature of Indigenous society. Many of these sources also proved remarkable for illuminating the ways in which the scientific practices and ideas that rendered the Indigenous dead objects of curiosity in European eyes also determined how the living and their knowledge systems were understood.

What emerged in the process were also glimpses of how explorers, surveyors and squatters routinely availed themselves of Indigenous knowledge. They used the expertise of Indigenous people to navigate unknown country and to assess its worth for pastoralism. Explorers often found that the Indigenous men they employed to help them travel, and often live off the land, were anxious to gain the permission of traditional owners to do so. The diplomacy of Indigenous guides was often critical to expeditions gaining safe passage. Interestingly, guides were at times as unfamiliar as the white men with the culture of the people whose country they passed through. When they met with what from their own experience seemed sacred places, Indigenous guides readily...
sought to persuade their European companions to leave quickly without disturbing anything. Typical in this regard were the expeditions undertaken by George Grey in northwest Australia during the late 1830s. In his account of his second expedition in early 1839, Grey wrote of the wariness of Kaiber, the party's principal guide, when travelling through unknown country, and his 'concern and unease' on the party's encountering a newly made grave on the upper reaches of the Harvey river. After the loss of their stores and boats, Grey's party was forced to make a gruelling journey of some six hundred kilometres back to Perth, which they survived only through Kaiber's diplomacy, his ability to discover water and persuading the people they encountered to share frogs and other seasonally plentiful foodstuffs.

Pastoral, and later mining, frontiers were typical of colonial situations in that the colonizers assumed they were inherently superior to the colonized. While as has been extensively documented by historians, sexual relations between Indigenous women and European men were widespread, other relationships, grounded in senses of affinity or equality, were much rarer, with the result that Indigenous knowledge was used by settlers only when it made pragmatic sense in terms of western understandings of nature.

For many early squatters the choice of homestead and out-stations was determined by Indigenous knowledge of weather patterns and the reliability of local water courses. Indigenous pharmacopoeia and ways of healing were assessed and used when they paralleled contemporary western medical practice. Settlers in outlying districts similarly used the ashes of woods favoured by Indigenous healers to cauterize wounds, and employed steam baths using herbs and species of fern which Indigenous people had discovered to be effective in treating rheumatic pains and bronchial congestion. Stiff black and white joints were treated with goanna fat. The resin of the red gum (Eucalyptus resinfera) was used to prevent wounds turning septic, and taken in pill form to check dysentery.

As one settler in Western Australia recorded in his journal in the early 1840s, 'it is a very strong astringent and has been taken medicinally very generally in the colony, and certainly I found immediate relief from it.' Throughout the nineteenth century, colonial naturalists drew heavily on Indigenous knowledge. They invariably relied on Indigenous people to locate specimens of flora and fauna, as is well exemplified by the activities of the early nineteenth century botanist, George Caley. Through the patronage of Joseph Banks, Caley collected extensively in the ancestral country of the Eora, Dharug and Tharawal peoples of what is now the greater Sydney region between 1800 and 1808. Caley was quick to appreciate the value of employing Indigenous help. As he wrote to Banks in
August 1801, 'I mean to keep a bush native constant soon, as they can trace anything so well in the woods, and can climb trees with such ease, whereby they will be very useful to me...' Yet, he soon realized that Indigenous people were able to provide him with crucial information about the animals and plants he encountered. In 1802, for example, he sent Banks specimens of various kangaroo and wallaby species, together with detailed descriptions of their usual habitat and behaviour which had been gathered from Dharug men. At the turn of the twentieth century, some fifty type specimens of Eucalyptus collected by Caley were discovered in the Imperial Herbarium at Vienna. They reveal how extensively Caley relied upon Indigenous people not only to find specimens, but to provide him with detailed information as to their reproductive cycle, growth and uses within Indigenous society. Of a specimen of the Turpentine Tree (*Syncarpia glomulifera*), Caley wrote, 'When the tree is wounded it discharges a turpentine like substance of a peculiar taste and smell which bees are remarkably fond of and if I do not mistake the natives at some particular times [they] make incisions into the bark to attract the bees in order to trace them to their hives or nest for robbing them of the honey.' Caley also regularly recorded the flora and geographical features he encountered by their Indigenous names.

Caley came to form a close relationship with an Eora youth named Moowat'tin, whom he relied heavily upon when collecting well beyond the boundaries of European settlement. He was, Caley wrote, '...the best interpreter of the more inland native's language of any that I have met with. I can place that confidence in him which I cannot in any other – all except him are afraid to go beyond the limits of the space which they inhabit with me (or indeed any other)...'. Moowat'tin accompanied Caley to Norfolk Island and Tasmania in 1805. From what survives of Caley's letters and journals it would seem that this expedition proved a fascinating cross-cultural engagement in which two individuals schooled in radically different knowledge traditions worked closely together to make sense of the ecology of places to which both were equally strangers. Moowat'tin eagerly questioned Caley about the relations between climate, landform and the forms of vegetation they encountered. On the basis of their discussions, Moowat'tin sought to locate plant specimens typical of particular environments.

While he admired the intelligence of his Eora friend, Caley remained conscious that Moowat'tin lived between two worlds. That other world intrigued and disturbed Caley. Exploring the upper reaches of the Nepean river in 1807. Caley and his party were introduced by one Tharawal clan to a party of Gundungurra men who had supposedly come to share in a hunt for kangaroo. Among the party was Carnambaygal, a warrior who was to figure prominently in the campaign of
resistance that Tharawal, Dharug and Gundungurra clans fought through the autumn of 1816. Caley recalled being struck by how subdued and respectful the Tharawal were in the presence of Carnambaygal, until seeing his startled reaction to Caley’s using his gun to bring down a bird. The Tharawal were delighted, Caley wrote, to see Carnambaygal’s unease, as they believed him to be ‘invincible and more than mortal’.8

Caley’s interpretation of the encounter is a minor but telling illustration of how by the early nineteenth century Europeans’ belief in their scientific superiority—tangibly proven in their minds by technologies such as the gun and the time-piece—shaped their interaction with Indigenous societies.9 This theme is further explored by David Turnbull in his contribution to this volume, which explores the cultural entanglement of European and Polynesian knowledge traditions in the 1760s. Turnbull retells the well-known story of James Cook and Tupaia, the Raiatean priest and navigator, but does so in ways that tease out the cultural presumptions implicit in European navigational expertise.

Western scientific communities have interacted so as to form complex webs of interconnections in which shared assumptions and theories about the workings of the natural world have evolved. Even so, as Turnbull shows, scientific knowledge has invariably been forged from cultural resources peculiar to the historical context of its creation. For all its seeming discursive unity, European science has been in many respects as intellectually diverse as the knowledge systems of Indigenous societies.

Where European science has differed is in the persuasiveness of its claims to universalism. From the mid-seventeenth-century British scientific communities gave varying degrees of credence to sceptical modes of reasoning. No one way of knowing was believed certain to confirm the true and essential nature of things. Scepticism found much favour with intellectuals from the 1650s, as a way of ensuring social stability through neutralising the truth claims of both radical Puritans and Catholic apologists. Another strand of thinking that gained widespread assent, especially in British intellectual circles during the course of the eighteenth century, was the idea that the methodological aims and procedures adopted by Newton in determining the existence of regularities in the physical universe could be extended to all domains of human knowledge. Especially amongst theologians and moral philosophers these two strands, scepticism and what we might justifiably call positivism, lay in uneasy contradiction. But gradually they came to be seen as capable of resolution by accepting that while no way of knowing could lead to certainty, human nature was stubbornly disposed to accept various propositions as proven beyond doubt. What was thus required was close...
investigation of human nature and specifically how beliefs came to be formed.

In essence this was the rationale informing the Enlightenment project of analysing the origins and natural history of belief. As the philosophers of the Enlightenment maintained, the human mind was acutely susceptible to the power of the emotions as they were stimulated or subdued by the engagement of the senses with the body and the external world. In unfavourable existential circumstances, humanity easily fell to irrational thinking and behaviour. As David Hume, the highly influential Scots philosopher, argued, ‘the mind of man is subject to certain unaccountable terrors and apprehensions, proceeding from the unhappy situation of private or public affairs, from ill health, from a gloomy and melancholy disposition, or from the concurrence of these circumstances’. Worse, in such a state of mind the presence of ‘infinite unknown evils’ of unknown causation were actively and fearfully assumed to be at work in the affairs of men.

The Enlightenment conceptualized religious devotion and belief in magical or occult powers as arising directly out of the mind’s natural propensity to generate irrational hopes and fears. The weight of historical evidence was overwhelmingly seen to support the conclusion that the first forms of religion were the most irrational, because life in the earliest human societies was lived at the mercy of natural forces. As these societies survived through hunting and gathering, there was little or no opportunity for experiences which might allow the formation of the kinds of complex ideas necessary to grasp the actual relations between objects and entities in the world. Human understanding was a captive to the irrational play of the mind. Indeed, when eighteenth-century European intellectuals spoke of non-European societies as ‘savage’, they did so presuming savagery to be a distinct condition, characterized by the ‘life of the chase’ circumscribing what its practitioners could believe and know.

Could the savage escape savagery? This question was to be the focal point of metropolitan and colonial debates about the fate of Indigenous communities until well into the 1840s. The stress that Enlightenment philosophy placed on the progressive development of human understanding through experience was interpreted by Christian humanitarians as proving that Indigenous people could be civilized, at least to the same level as the labouring classes in settler society, provided they were removed from their country and life-ways at an early age. Humanitarians also aligned themselves with those philosophers who had argued that, though ideas were derived solely from sensation, there was nonetheless overwhelming scientific evidence that humanity possessed an innate sense of moral judgement. When freely exercised this moral sense ineluctably led the mind to embrace the essential truths of
Christianity. Indeed, it was the teachings of Christianity which had refined human sensibilities so as to seek social and moral improvement. Conversion to Christianity was integral to the task of raising the Indigene from savagery.

However, as is evident from the writings of early colonial naturalists such as George Caley, belief in the supremacy of experience in shaping human intellect could equally result in ambivalence and often fatalism about those perceived as living in the condition of savagery. This

**Indigenous science is underwritten by the presumption that all sentient beings are not just created by ancestral spirits but are the living embodiment of those creative entities**

may also help explain why colonial intellectuals proved so receptive to theories which posited that the minds of non-Europeans were physiologically less equipped to process sensory data.

Extending 'the experimental mode of reasoning into moral subjects', Enlightenment thinkers drew upon a culturally engrained repertoire of assumptions—notably the distinctiveness of mind and body, and culture as opposed to nature. They saw reality in terms of physical causality. They explained the objects and entities they perceived almost exclusively by the patterns of cause and effect they associated with them. As Joseph Banks famously remarked of the astronomical observations in which he participated on Tahiti during Cook's first Pacific voyage of 1768-71, they were inspired by the goal of measuring the frame of the world.10

By way of contrast, Indigenous Australian societies have been equally concerned to observe and account for relations between objects and entities, but have understood the order of things from the perspective that they themselves either share the same qualities, or are distinguished by not possessing them. Sylvia Kleinert takes up this point in her paper on Indigenous artistry and craft in southeastern Australia, showing how everyday life and artistic practice is informed by complex webs of meaning drawn between self, community, the ancestral realm of being and other phenomena in the world.

What seems, to the western eye, knowledge of phenomena that has been acquired through the same inductive processes that characterize post-seventeenth-century European science only makes sense—only becomes science—through its connections with other beings or things that Europeans implicitly see as external to the self. As the late David Mowaljarlai, a senior Elder of the Ngarinyin and Worora peoples of the Kimberley region, explained by availing himself of the conceptual vocabulary he
encountered amongst anthropologists with whom he worked over many years:

We Aborigines of Australia see our land as a grid system, within which every man has his symbol in nature. One man will have a mountain as his symbol, another the river, another a plain; still others represent the stringy bark tree, or the track of a spirit, a fish such as the rock cod, or a tree blossom.

At our camping place on the grid, we do not sow seed and plant food, as our spirit ancestors put out all our foods for us. There are increasing-places where a stone could symbolize a yam or a barramundi fish. When we hunt we touch these stones and obtain that food.

There are women—images and man—images in the earth itself. These images relate to our stories and the cave-painting, and without them we could not live. They give us energy and power, they give us much wisdom, they are controlling our lives.

When the really hot weather comes, and the water supply is reduced to one pool, we know that Wandjina the creator puts that pool there for us. Everybody drinks there together, including the kangaroo, the goanna, the lizard and the snake. The children who drink at that waterhole are the image of the Wandjina, who goes on creating our families, our young people.

Since the mid-decades of the nineteenth century, western science has come to regard the question of what ultimately causes the regularities discerned in nature as beyond its concern. Indigenous science is underwritten by the presumption that all sentient beings are not just created by ancestral spirits, but are the living embodiment of those creative entities. Each being, moreover, is conscious of its place and purpose within the schema of ancestral creation, and may communicate that knowledge to other beings. Hence the investigation and appraisal of phenomena is a process of learning what things say about themselves and other beings. As Deborah Bird Rose writes of the Yarralin people of the Victoria River district of the Northern territory, they see their country as 'alive with information for those who have learned to understand':

Crocodiles \((Croodylus johnstoni)\), for instance, only lay their eggs at one time of the year. Yarralin people know that it is time to hunt for crocodile eggs when the black march flies start biting. These annoying flies carry a message: 'the march flies are telling you the eggs are ready.' This sort of knowledge is accurate. If we know that crocodiles lay their eggs toward the end of the dry season, the calendar can tell us that they will probably start sometime in September or October. March flies tell us exactly.

However, as Bird stresses, Yarralin do not understand this relationship, as western observers would, in terms of cause and effect.

No one tells the march flies to bite because the crocodiles are laying eggs. Rather, the big river country where Yarralin is located, march flies know when it is time to hatch and forage. Their time is also crocodile time. Neither causes the other, nor is caused by an external other. In following
their own Laws they communicate themselves; those who know the interconnections find information in their actions.¹¹

To the outsider, the attributes of fellow beings discernible to Yarralin clearly reflect a specific cultural geography. So too does the knowledge they acquire from studying the relations between beings. This is not to suggest that western science evades precipitating the wider cultural forces in which it is located into its practices and intellectual products. As much recent historical research has demonstrated, western science equally has a social history: the play of wider cultural forces has similarly determined how facts about the world have become evident.¹³

As suggested above, where western science differs from Indigenous knowledge is in how it has come to talk about our primary relations to objects. What has been distinctive is its use of narrative techniques to strengthen cognitively its claims to interpret literally the world—to be a way of knowing that accurately and transparently mirrors the unconditioned external world, no matter where and how it may be encountered.

Western scientific discourse relies heavily on metaphors that not only underwrite its claims to interpret literally the grain and substance of physical existence, but occlude perceptions of its employment of metaphor. Notably in colonial contexts other knowledge systems have consequently been seen as so suffused with metaphor as to warrant their classification as primordial, pre-scientific modes of thought. Hence, as David Okpako explains in his paper comparing Western and African modes of medical diagnosis and treatment, there has been a long engrained tendency with the Western academy to relegate Indigenous knowledge to the analytical categories of myth. If we are usefully to re-evaluate the relations between indigenous and western sciences, we would do well to accept that no knowledge system can make sense of the world without recourse to deeply enculturated narrative traditions and techniques. All knowledge systems might be considered myth or lore in this respect, and analyzed as giving voice to those things which matter most in particular knowledge traditions.

In Australia today most researchers in the physical or biological sciences appreciate and respect Aboriginal and Torres Strait Islander cultures. However, those who choose to interact with Indigenous communities remain anchored within professional communities still greatly inspired by narratives which represent the researcher as discoverer of radically new and universally applicable insights into the workings of nature. Over the past decade, notably within Australian universities which have supported the development of Aboriginal and Torres Strait Islander Research Centres, there have been numerous programs undertaken on the basis of Indigenous participation and control, notably in the area of environmental science. But the outcomes
INTRODUCTION

The Yarrabah Dance Company perform as part of the welcome ceremonies for the conference. Photo: Leena Messina.

have not yet greatly influenced mainstream scientific practice. When findings have been reported in scientific journals, research data has generally been re-conceptualized in terms of conventional disciplinary aims and practices.

Since the mid-1990s, the refashioning of Indigenous knowledge in the light of western scientific aspirations has been critically appraised by Henrietta Fournile, Errol West, and other researchers at James Cook University's Centre for Aboriginal and Torres Strait Islander Participation in Research and Development. What they have found on consulting North Queensland community Elders and knowledge custodians is that information shared with non-Indigenous researchers is often still regarded as if the communities have no real moral or legal claims to dictate how it will be represented or used within the wider world. As Gladys Tybingoompa, a senior Elder of the Wik people, observed at the Cairns conference, Indigenous knowledge has only recently come to be seen as more than 'uni tucker'—i.e. raw information about natural phenomena that is free to be digested by western science with little or no consciousness of its being Indigenous intellectual property, and no guarantees that its owners will benefit from its use in the commercial development of processes and products. This presumption, incidentally, still seems implicit in Australian science policy. What is noticeable about the Federal Government's 1999 White Paper on Higher education, *New Knowledges, New Opportunities* is that it has much to say about invigorating Australian science through encouraging stronger linkages between university-based researchers and industry, but says nothing about Indigenous science, nor indeed anything about the contribution of Indigenous peoples to our understanding of the world.

The Cairns conference aimed to open a dialogue amongst scientists working within western and Indigenous traditions, so that they, philosophers, anthropologists
and historians could come together to discuss how western and Indigenous sciences might interact in more intellectually and morally profitable ways. Critical to our thinking about how this might best be done was the Indigenous Research Ethics Conference organized by Errol West that took place in Townsville in September 1995. Discussions with various community leaders during the conference resulted in the decision to hold the conference in Cairns, with a view to maximizing opportunities for participation by Indigenous Elders and knowledge custodians across Northern Australia, where there had been most interaction with western scientific researchers. In view of concern that the conference not replicate the inequalities widely felt to characterize those interactions, and thus treat Indigenous participation as another source of 'uni-tucker', it was agreed that the conference would take the form of a mix of prepared papers, workshops and presentations which the presenter considered best suited to what they wished to achieve.

In view of rising concern that Indigenous intellectual property gain stronger and more culturally appropriate forms of legal protection, it was also decided that the conference would include workshops aiming to provide advice to peak Indigenous organisations. Indeed, as it turned out, the conference coincided with the Aboriginal and Torres Strait Islander Commission's seeking community advice in the framing of its submission to the Federal Government in respect of Australia's response to the United Nation's Convention on Bio-Diversity. The workshops resulted in the Commission being strongly advised to demand of government that it endorse provisions within the draft convention safeguarding Indigenous ownership and rights over the uses of traditional knowledge.

Clearly, such a conference could not take the routine academic form of papers read and subsequently offered for publication. We discussed filming the proceedings, but found key participants had doubts that we should. Rightly, they were concerned at what would subsequently be made of the footage. While happy to share their thoughts and expertise with those participating at the conference, several Elders were troubled by the prospect of having no control over its future interpretation, especially being in the process of framing claims under native title legislation. As one Elder pointedly asked, what guarantee was there that what he and others might say would not forewarn hostile parties of what would be argued before Queensland's Native Title Tribunal.

We could hardly ignore these concerns, especially given the aims of the conference. By the same token, even if it had been possible to ensure that participants enjoyed control over how footage was edited and subsequently presented, we would have then been obliged to negotiate appropriate copyright
agreements and royalty payments. And while we had no hesitation about doing so, the total funding we had secured left just enough after meeting the travel and accommodation costs of invited participants to recognize their contribution through payment as distinguished guest lecturers. We had no option but to drop the idea of creating a film record of the proceedings.

This of course meant that we were left with a small selection of formal papers, which stood as fragments surviving the ebb and flow of conversation in which Indigenous voices were heard strong and clear. Since 1996, several of these papers have been revised in the light of things we talked about in Cairns, and published in other journals or within monographs. The four which appear in this issue of *Humanities Research* address major themes that were explored and often vigorously debated well into each night of the conference. Each secured a place in this volume by virtue of being nominated by participants on our last day together as having provoked us to think in fresh and more rewarding ways about the relations between Indigenous and western sciences.

Finally, special thanks are due to Iain McCalman, who, besides offering the resources of the Humanities Research Centre, helped secure the conference additional funding from various sources to support Indigenous participation. Also, the success of the conference owed much to Leena Messina, the Centre’s conference administrator, and her ability to manage the logistics of an event which up to the last moment seemed ever to change its form.

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**NOTES**

1 George Grey, *Journals of Two Expeditions of Discovery in North-West and Western Australia, during the Years 1837, 38, and 39...with Observations on the Moral and Physical Conditions of the Aboriginal Inhabitants...* (2 vols., London: John Murray, 1842), vol. 1, p. 323.

2 *Perth Gazette* 5 November 1833.


4 Edward (Mrs.) Millett, *An Australian Parsonage, or the Settler and the Savage in*


11 David Mowaljarlai, 'Life, Death and Burial', Address given at the Ceremony before the Repatriation to Indigenous Control of Ancestral Remains from the Anatomy Department, Edinburgh University, 29 September 1991. Copy in Possession of the Author.


13 On this point, see Steven Shapin, A Social History of Truth (Chicago: Chicago University Press, 1994), especially chapter one.
INTRODUCTION

One view of traditional African medicine held by health authorities in Africa seems to be that it is a rudimentary form of biomedicine. This attitude is reflected in the way medical authorities respond to traditional African medicine as a system of health care. For example, biomedical scientists' interest in traditional African medicine is directed at the plant remedies used in the system; it is assumed that these must serve the same purpose as drugs in biomedicine, and are therefore potential sources of new lucrative therapeutic agents; and identification of appropriate pharmacological activity in these remedies is seen as a legitimate validation of traditional African medicine itself.

The assumption that traditional African medicine is essentially biomedicine in its early stages of development underlies biomedical authorities' scepticism, if not downright rejection, of the rituals that form part of the management of life-threatening illness in traditional African medicine; these are seen as irrational superstitious practices by persons who are ignorant of the basic processes of disease. For these reasons African medicine is not considered worthy of inclusion in the curricula of programmes preparing students for the medical profession; this is despite the fact that the majority of their future clients regularly patronize traditional healers, either before consulting the hospital or again if they are not satisfied with the scientific method. The view seems to be that traditional African medicine is destined to be subsumed by biomedicine and therefore, for extinction; governments do not budget for its development. This is regrettable because African ideas on illness represent, arguably, the most profound expression of indigenous African thought.

In this paper, I explore two issues related to this predicament. Firstly, belief in the spirits of dead ancestors and their role in ensuring morality on the one hand, and in the production of serious illness on the other, is a major part of the religious thinking of African societies in general. The first question therefore is whether the idea of ancestor spirits as causes of serious illness can be considered rational: does it make sense? Are the methods employed
by healers under this system internally consistent with this assumption?

The second issue concerns the methods used by the practitioners of traditional African medicine; these are in many ways different from those of biomedicine. Thus, diagnosis in biomedicine and divination in traditional African medicine search for causes of serious illness among different categories of agents. In the former the category consists of material agents: bacteria, viruses, cancers, biochemical lesions. In traditional African medicine, the cluster is predominantly spiritual: ancestor spirits’ anger, deities, witchcraft, sorcery, malevolent intent of persons. I argue that these differences are fundamental, reflecting differences in perception of what constitutes the primary factor in the cause of serious illness.²

CATEGORIES OF ILLNESS

It is important to note from the outset that in both traditional African medicine and scientific biomedicine, illnesses are broadly understood as falling into one of two categories: firstly, minor ailments which are largely self-diagnosed and treated ‘without the doctor’s prescription’; and secondly, serious life-threatening illnesses for which reference to a specialist (in traditional African medicine, these specialties are divination and ritual sacrifice) is mandatory.³ This broad classification is attested to widely not only by traditional healers but also by biomedical scholars who have analysed the system. For example, Chief Labulo Akpata, a well known Yoruba healer, says that:

medical herbalism is divided into two branches: real treatment and psychological treatment. Real treatment is for those who require no incantations and other ceremonies. Psychological treatment requires incantations and other ceremonies such as sacrifices before the medicine can act ... we require the services of the two together to cure the two aspects of sickness.⁴

What Chief Akpata refers to as ‘real treatment’ can be described as those ailments for which the diagnosis is self-evident and treatment can be effected without supernatural invocations; for example, physical injuries arising from accidents (e.g. fractures, cuts), fevers, aches and minor pains and normal child birth. The treatment of such minor problems is handled without recourse to divination and ritual sacrifices. In such cases, the physical properties of a plant remedy have a direct bearing on its effectiveness. Thus, the effects of juices expressed from fresh leaves frequently used to arrest bleeding caused accidentally or following scarifications or circumcision are almost certainly due to tannic acid or other haemostatic principles present in them. Tannic acid has protein-coagulating (astringent) properties and is widespread in the plant kingdom.⁵ Another example is fever. Fever may accompany many different disease conditions, and is easily diagnosed; a mother can tell that the baby on her back (skin to skin) is feverish from
slight differences in their body temperatures. Fever remedies are consequently abundant as 'folk remedies'. The Nigerian neurologist, Ben Osuntokun, remarks that the average Yoruba peasant can recite recipes of herbs and concoctions that are supposed to relieve common symptoms. Most households have their own favourite prescriptions for headache, fever, jaundice.  

A point that should be of interest to those searching for drugs in traditional remedies is that plants used for the treatment of fevers have historically been major sources of important anti-inflammatory or anti-malarial substances (e.g. salicin from Willow tree, quinine from cinchonna, artemisinin from quinhao (Artemisia annua) and gedunin from dongo yaro (Azadirachta indica).  

Where a diagnosis cannot be ascertained without technology (for example, cancer, congestive heart failure, stroke, AIDS, tuberculosis, diabetes) and the illness is protracted and life threatening, traditional healers evoke supernatural agencies, and employ ritual treatments. In such situations, plant preparations are used for more esoteric purposes than the pharmacology of their chemical constituents. Traditional pharmaceutical methods and the physical properties of the remedies can often not be reconciled with conventional western pharmacological theory.

THE IDEA OF ERINVWIN OR ANCESTORS AMONG THE UGHIEVWEN PEOPLE

Central to traditional African medicine is the association of ancestors with illness, and the belief that ancestor spirit anger is triggered by antisocial behaviour. The importance of these three elements—ancestors, morality and health—in securing and maintaining social cohesion is crucial, as I now consider in some detail, making particular reference to the Ughievwen Clan of the Urhobo speaking people of Nigeria.

The idea of Erinvwin as a concrete expression of the spirits of departed ancestors is a dominant element in the world view of the Ughievwen people. Various related expressions are used: Orinwun means the dead body of a person; ihwo re erinvwin means the people who belong to erinvwin (spirits, or ghosts); erinvwin here, means the realm or world of the spirits of dead persons; erinvwin can be used also to refer to the spirits of all dead persons. But it is Erinvwin (with a capital “E”) who lay down the immutable moral laws that govern the ordering of society. Erinvwin ensure that through the proper application of sanctions, individuals live according to the moral laws which they have laid down.

Thus, certain acts of moral transgression are referred to as emu re erinvwin, meaning 'a matter in which only the ancestors' (can adjudicate). On such matters, Erinvwin are believed to
unfailingly punish the transgressor unless the antisocial act is exposed and ritually treated. Such views of the role of the ancestors are held by many different African communities, but when the Ughievwen speak of Erinwvin who should be revered, they refer to the spirits of particular ancestors. These are dead ancestors (men or women) who had attained distinction as people of integrity, honour and biological and material success in life; for example, they owned property (house, farmland), left offsprings and lived long enough to have achieved the grade of ekpako (senior). There is therefore more than one category of spirits of the dead in the mind of the Ughievwen.

At the beginning of Ore celebrations, special ceremonies of invitation to all spirits of the dead are made; this is to allow into the community those spirits who would not normally be accepted as desirable participants in the affairs of the living (for example, spirits of dead criminals, witches/wizards, sorcerers, those who died of dangerous diseases, or who were insane). During Ore festivals, these spirits are made to partake of libations thrown to them by the left hand; they must not be allowed to eat or drink from the family ancestral shrine. They are not ascribed the status of ancestors and they should not remain in the community. Therefore, after Ore, a reverse ceremony is made to drive them out. The Owahwa Udje poetry exponent, Okpeha Okpako satirises this in these lines:

\[
\text{Ario 're phrun re 'na dje 'rinwvin kpo}
\]
\[
\text{Keta vo avwan 'dja ye n ra a}
\]

[After the festival, you say, drive out the spirits where do you drive them to?]

The poet is referring to an apparent contradiction; even though the spirits have been driven out of the community, Erinwvin continue to be called upon daily. In all major events (weddings, deaths, births) Erinwvin are called upon in thanksgiving for protection and for good health. The Erinwvin venerated in this way are thus different from the Erinwvin of less distinguished or evil spirits.

The Erinwvin of high morality are the spirits of those who were known generally to have lived a life of high integrity, and would have exercised moral authority while alive, such as in having had wives or raised children or been community leaders. Assigning divine moral roles to distinguished dead ancestors seems to be a practice that is widespread in human groups world wide.9

The apparent separation of 'undesirable elements' from the good among the spirits of the dead may be construed as the Ughievwen's projection onto Erinwvin of what the good society should be. The world of the Ughievwen consists of physical and emotional uncertainties that can threaten its survival: betrayals, sin, early death, envy, untruth. In Erinwvin reside the spirits of those distinguished ancestors, who overcame these
limitations. For the Ughievwen it is the abode of 'human nature purified' where the rules of morality can be formulated and incorruptibly enforced. The judgements of Erinvwin on moral issues would be just because Erinvwin consists of the spirits of persons who were upright and just. On occasions Ughievwen elders would say that 'Erinvwin is people' or 'Erinvwin does what the people want'. One can say from this, that Erinvwin is the repository of the essential laws of Ughievwen society.

The idea of Erinvwin must be seen in relation to other aspects of Ughievwen world view. The Ughievwen see human existence as being in a temporal cyclic relationship with the dead (erinvwin) and the unborn. The world of the Ughievwen is inhabited by different spirits who may interact directly with humans, sometimes even physically; for example, the supreme test of physical strength (egba), highly appreciated in the male by the Ughievwen, is to have fought successfully with a mythical spirit. Spirits may also be present as invisible beings in crowded places.

Ughievwen do not regard animals or plants as sacred objects of veneration (though there are taboos forbidding the eating of certain animals or plants), but seem to believe that all other living things and they share 'life' as a common attribute; so that anything that has life can take the form of another thing that has life. Thus, Ughievwen mythologies contain narratives of men or women taking animal forms for specific purposes, or animals or trees taking human forms, in a process of transmutation. In Ughievwen, as in most African cosmologies, spirits and humans are in close contact. An abiku (Yoruba) or ogbanje (Ibo) is a spirit child destined to a cycle of birth and rebirth to the same mother. Asaro, in Ben Okri's The Famished Road, is an abiku who has decided to stay in the world of the living, but is nevertheless in regular communication with his friends in the world of the 'unborn'. Abiku are the subject of notable poems by Nigerian writers, Wole Soyinka and John Pepper Clark. In Amos Tutuola's The Palm-Wine Drunkard, the narrator goes to the dead's town to look for his dead palm-wine tapper, and encounters numerous spirits on the way. Every person has his/her own erhi or chi, a personal spiritual guardian. To the Ughievwen, reality exists in two domains, the objective world (Akpo) and the invisible subjective world (Erinvwin). As the eminent Nigerian psychiatrist, Adeoye Lambo observes, 'to the African, reality consists in the relation, not of man with things, but of man with man, and of all with the gods.'

Ughievwen and other traditional African people live in an environment in which a
consciousness of the spiritual or subjective world is a constant reality; actions and relationships between people (including matters of health, illness and death) are to a large extent interpreted against the background of such realities. Ughievwen believe that a life threatening illness or other misfortune has a supernatural underpinning, and a frequently implicated agency is ancestor spirit anger. A contravention of the laws that govern morality is believed to be unfailingly punished by Erinvwin. The relationship between the sexes is especially highly regulated, and incest, understood broadly to include sexual intercourse between relatives, even distant relatives, or an extra-marital affair by a married woman, are grave moral offences (emu erinvwin). In general, the way in which men and women relate to one another (even married couples) is highly regulated.

CASES OF ANCESTOR SPIRIT ANGER

In my exploration of the idea that serious illness is a manifestation of ancestor spirit anger triggered by immoral behaviour, I encountered several cases where the cause of illness/misfortune was attributed to supernatural intervention. A pregnant woman aged twenty-five years whom I will call MI, had a difficult, life-threatening labour during which she was moved to and from different maternity clinics in the town of Abeokuta, where she and her husband were then migrant labourers. A diviner eventually determined that MI had a secret that she needed to reveal. After her memory was prodded by her mother, she admitted that the conception had occurred following intercourse with a lover before the marriage with her husband had been consummated. After her confession, the narrative went, she gave birth dramatically and every one agreed that her difficulty had been due to ancestor spirit anger. In Ughievwen culture, every one is brought up to know that MI’s immorality is emu erinvwin that would not go unpunished.

In another case, a seventy-year-old man, whom I will call OO took ill with what was diagnosed at the general hospital, forty miles away, as congestive heart failure. He was treated and later discharged with instructions to continue on digoxin and calcium supplement. He died at home later. While he was under hospital care, his two grown up daughters from a previous marriage had been consulting a diviner. Ughievwen believe the swollen extremities symptomatic of congestive heart failure are inflicted by ancestor spirits or deities for moral transgression. The diviner had made the enigmatic pronouncement that OO would die of the illness, not because of his own transgression, but nevertheless death would have been self-inflicted. It transpired that two years earlier, OO’s current wife and an adversary had sworn before łybun, a cult centred on the powerful goddess Ogbaurhie, calling
on her to punish whichever was the guilty party in the issue under contention, OO, not wanting any harm to come to his young wife and children, had used some other ritual to attempt to deflect Ogbaurhie's possible anger away from her.

The diviner's pronouncement was now interpreted to mean that OO's illness and subsequent death were indeed a manifestation of Ogbaurhie's anger which OO had brought upon himself. This did not mean that his wife was necessarily guilty in the substantive issue under contention; only that OO had committed an abomination by attempting to interfere with supernatural justice. This understanding had come after OO's death; the daughters had blamed their step mother who apparently knew of her husband's attempt to deflect Ogbaurhie's judgement, but did not reveal what she knew until it was too late. The whole conflict had to be brought out in the open and dealt with before OO's final funeral rites, to prevent further harm to his family. Ogbaurhie's curse would have to be publicly revoked by Igbon high priests; meanwhile steps were taken to reconcile the daughters and and their step mother. All the reconciliatory processes, including a full statement of the facts, libations and prayers took place in the presence of the entire family and the public, including this writer, during OO's funeral ceremonies.

The theory that ancestor spirit anger causes illness is commonly seen by scientists as neither being capable of being tested nor refuted, with the result that traditional African medicine is regarded as a non-scientific body of knowledge. But this is reductionist interpretation of ancestor spirits. It construes how they are perceived within African medicine as necessarily requiring rejection of western explanations of pathology. Yet, while ancestral spirit anger is believed to be the cause of serious illness, the traditionally enculturated African can accept a biomedical explanation involving a virus or cancer as the immediate cause of the illness. He or she would ask, however, why that particular individual at that time is the one who is afflicted. It is the power of the ancestors to punish moral transgression that is believed to undermine the health of the transgressor rather than ancestor spirits acting as infective agents.

We may say that reference to ancestor spirit anger in traditional African medicine is a metaphor, a simplified way of stating the intuitive knowledge and experience, that awareness of guilt and the
accompanying sustained fear of ancestor spirit punishment is harmful to health. Harry Sawyerr remarks that the effect of spiritual evocations on man in African culture is not due to magic, but 'to a conflict which is psychological in nature, created by the fear of sin committed against the sensus communis of a given community, which gnaws into the psychic life of the offender, thereby causing him to be ill.' These emotions, it can now be said, undermine the immune system, so that the sufferer is vulnerable to opportunistic infections. An extreme analogy is the infection by the human immunodeficiency virus (HIV) which destroys the immune system.

The concept of stress is useful in relating emotional upheaval to somatic diseases, although the mechanisms by which this happens are only beginning to be understood. We can say that consciousness of guilt and fear of ancestor spirit anger constitutes stress, which is the 'nonspecific response of the body to any demand.' This demand may be nervous tension, physical injury, infections, in short anything that upsets the steady state equilibrium or homeostasis of the body. These stressors depress the immune system, the body's own defence against infections and cancers.

DIVINATION, CONFESSIONS AND SACRIFICE

Divination processes enlarge the circle of those involved in illness management, whereas technological diagnosis in biomedicine is impersonal and atomistic (reduced to a relationship between the patient or a specimen and the technologist). Divination brings in the relatives of the afflicted person; it is they who consult the diviner. The implementation of the findings of the diviner must necessarily involve the participation of relatives and other members of the kinship group sharing the same cultural beliefs. Often, the pronouncements of the diviner require interpretation by members of the kinship group in terms of their cultural beliefs. In other words, the management of serious illness in traditional African medicine is the concern of the community; a threat to the life of one member, found to have violated the laws that determine the cohesion of the society, is also a threat to the survival of the society. Divination and its consequent processes thus serve a wider purpose in traditional African medicine than diagnosis in biomedicine.

In traditional African medicine, divination is employed for the detection of hidden conflicts. The use of this technique is widespread in Africa, and is shared by ethnic groups that are otherwise culturally diverse. Most divination processes involve throwing a set of symbolic objects (cowries, bones, kola nut or calabash pieces, sticks), and "reading" the pattern in which the objects lie in relation to one another. Among the Ughievwen, diviners (ebo epha) are a different class of practitioners from herbalist ebo. In
Ughievwen, diviners may be male or female; diviners do not recommend to the herbalist what plant remedy the latter may use.

The diviner's role is to identify hidden sins or people with evil intents (witches/wizards) and those transgressions that are *emu erinuwin*. Writing on divination among the Ndembu of Zambia, Victor Turner says that the diviner seeks to discover unconscious impulses behind antisocial behaviour:

He feels after stresses and sore points in relationships, using the configuration of symbolic objects to help him concentrate on detecting the difficulties in configuration of real persons.14

Turner makes the crucially important point that the diviner occupies a key position in consolidating social order and reinforcing the moral values on which the integrity of society depends; and since the diviner operates in emotionally charged situations, 'moral norms are often stated in striking and memorable ways'.

Divination often leads to recommendations of sacrifice, where participation by as many people as possible is mandatory. Food, money and drinks offered in propitiation of the ancestors are shared; gifts may be given. Although these are ostensibly to restore the sick person to a harmonious relationship with the ancestors, there is also a social component involving the repair of relationships between persons in the community whose lives had been affected by the sick person's misdemeanour. We can say that these rituals are as much to alleviate the individual's suffering as to consolidate the moral and social integrity of the community. Consequently, success in illness management in traditional African medicine should not be seen merely in terms of the restoration of health to the sick person; the whole process is also a mechanism of moral reaffirmation for the community. The patient may die, but the procedure may have been successful in pointing up the sort of antisocial behaviour that can undermine health. Indeed, death, after a grievous *emu erinuwin* has been established, followed by the appropriate rituals, may be seen as much as a validation of traditional African medicine, as it is a case of therapeutic failure. In other words, 'It is a pity that the patient died, but he should not have done what he did. You cannot expect to offend that sort of morality and survive! What seems to be important is that everything within the recognised regimen of illness management is done. As Arthur Kleinman puts it, '...healing is evaluated as successful because the sickness and its treatment have received meaningful explanations ... related social tensions and threatened cultural principles have been dealt with appropriately.'15

**PHARMACOLOGY IN TRADITIONAL AFRICAN MEDICINE**

An important part of the management of illness in traditional African medicine is
the use of preparations made from plants. Biomedical scientists assume these to be the equivalents of drugs used in biomedicine. A fact that has a bearing on this idea is that many drugs in use today in biomedicine were extracted from plants or from molecules refined from plants. The assumption of equivalence has some important practical consequences: for example, biomedical scientists searching for drugs in plants often base their protocol of investigation on the claims of traditional healers; and attempt to validate traditional African medicine on pharmacological principles. This is true of sceptics as well as of sympathetic traditional African medicine propagandists, trying to prove the validity of traditional African medicine as a health care system equivalent to biomedicine. The continued scepticism of the biomedical establishment about the worth of traditional African medicine comes from many instances of failure of validation on this basis. All these come from the primary assumption that traditional African medicine is an elementary form of biomedicine. I argue that this presumption is not justified.

Pharmacology can be described as a theory of selective poisoning for therapeutic purposes, consistent with the general theory of biomedicine, namely, that diseases are specifically caused by infections, cancers or biochemical lesions. The drug is meant to control the disease by selectively killing the infective organism, abnormally growing cells or poisoning an enzyme, but not be harmful to normal structures. In other words, the drug is a "magic bullet". The emphasis is on selectivity. Therefore the quantity of drug administered is all important; too large an amount may poison normal cells and harm the patient, and too little may fail to poison the target. Selectivity is a major concern of drug manufacturers, but it is difficult to achieve, mostly because of the complexity of the biological system, and our limited knowledge of the relationships between its components. Therefore unwanted side effects and drug-induced harm are characteristic features of drug therapy. The 'successful' use of poisons as drugs is greatly aided by technology; weights, volumes and time can be measured with precision in absolute units, and drugs can be delivered to target sites by technologies designed to minimise unwanted effects. Pharmacology then, is a theory whose success depends on strict adherence to the rules of dosage, to ensure that predictable therapeutic plasma concentrations of drug are maintained throughout the period of treatment, and yet cause as little harm as possible to the patient.

Three Ughievwen traditional healers with whom I have worked do not use plant remedies primarily for their pharmacological properties. Ganade, who was about eighty-years old when we met, alluded to the ability of a gifted healer to communicate with plants. He expressed this idea as follows:

the gifted healer goes into the bush, with the patient and the illness he wants to treat
imprinted in his mind, but not always the plant he must use. As he goes deeper into the forest, the right plant will reveal itself by colour, shape, smell or by the way it moves in the wind.

This notion that the plant reveals itself to the gifted healer, is similar to the sympathetic modes of selecting remedies in many healing systems.

Another healer, Nirite (about sixty years old) relied very much on the absolute confidence which a childless couple had in his expertise; so that he made for them a preparation that he had not used before. He was exploiting the effect of belief on the outcome of therapeutic intervention. Nirite also knew that his remedy would be part only of the treatment regimen that the couple would seek for their childlessness. There was success following Nirite’s medicine; but this need not be attributed solely to the plant remedy. Clearly, divination and other rituals would have taken place elsewhere before or after the use of Nirite’s medicine.

In the case of a third healer, Saradje, we can say that the efficacy of the plant he employed was predicated on his belief that the remedy was shown to him in what seemed like a divine revelation. The plant in question, *Newbouldia laevis*, is used widely throughout Nigeria as medicine, but not specifically in the treatment of hypertension. Possibly it contains anti-hypertensive compounds, but that is not what led Saradje to its use. However, to insist that their presence accounted for its clinical benefit, is to deny that plant remedies can be of benefit in illness by mechanisms other than those predicted by conventional pharmacological theory, and therefore to deny traditional African medicine’s intrinsic validity.

I found that having decided on a number of remedies by whatever criteria, a healer would use them, singly or in different combinations, in the treatment of different complaints. The most frequently cited ground for excluding a plant from use as a healing remedy, is the knowledge that the plant is poisonous. Thus, fish poisons which are widely known and are used in the Owahwa area are not employed as remedies in the management of illness. One can say from these observations that the choice of plant remedy is not made on the basis of its pharmacological properties, and in some cases, not even on the basis of its history of efficacy.

There are other observations that lend support to this conclusion. First, plant selection and preparation are often accompanied by incantation. Turner recorded the following interesting invocation by Ndembu healers when taking parts of the *mukula* tree (*Pterocarpus angolensis*) for the treatment of infertility in women:

The principal practitioner addresses the tree and says ‘Come, o you mukula, ishi kenu of women, who give birth in order to rear children’. The practitioner then takes beer, pours libation and makes invocation
with it. 'Truely, give us our procreative powers'. Then he digs up its roots...

Here the practitioner is evoking the healing powers of the tree—which are clearly more esoteric than the pharmacology of chemical constituents.

Second, decoctions are prepared and used without regard to exact quantities and dose. Third, topical, oral, rectal and inhalation routes are used for drug administration in both traditional African medicine and biomedicine. However, medicines for the treatment of internal ailments in traditional African medicine are also believed to be effective when worn around the waist, ankle, neck or placed under the pillow, sleeping mat or above the lintel of a door. Pharmacodynamic or pharmacokinetic mechanisms cannot be offered for the effectiveness of the remedies administered by these methods. Fourth and finally, a range of effects and powers (which cannot conceivably be due to pharmacological constituents) are attributed to plants by healers. For example, Una Maclean reported on the use of koropo (Crotolaria retusa) by healers in the city of Ibadan. The use of this plant ranged from treatment of a variety of common ailments to its use to:

- persuade an abiku child to stay... a divorced wife to return to her husband,
- guard a house and its occupants against dangerous medicine... [and] assist in the arrest of evil doers and lunatics.

These observations show that in traditional African thought, plants are presumed to have healing powers; but these powers are not seen as concrete pharmacological entities as are drugs in biomedicine. It seems to me understandable that non-western societies should see plants as possessing subjective spiritual dimensions and esoteric powers.

In my view, the use of plant remedies in traditional African medicine is best understood as part of the ritual component of illness management. As I have suggested, confessions of hidden guilt and sacrifices arising therefrom, could invigorate an immune system depressed by these emotions. A plant remedy, whatever its form of preparation and administration, could add to the effect of the above rituals, through a placebo effect, and, if taken internally, possibly also through the action of immunostimulants.
PLACEBOS, POISONS AND HEALING

(substances that enhance the body's immune defence mechanisms).

Immunomodulators and immunostimulants are substances that may affect different components of the immune system. They occur widely in the plant kingdom, are effective in concentrations and are extractable in the aqueous media that traditional people frequently use. The most widely studied are immunostimulants; examples are saponins and polysaccharides. The immune enhancing activity of saponins (for example, *Quillaia saponaria*) has been known for several decades, and is exploited in antibody production. Immunostimulants not only enhance antibody production, but can also cause killer cell activation, stimulation of cytokines (the chemical weapons used by lymphocytes to destroy infective agents) and activation of phagocytosis. Immunostimulant activity has been identified in many traditional Chinese medicines. Examples are, *Astragalus mongolicus*, *Acanthopanax senticosus*, and *Coriolus versicolor* which produces the important cancer immunostimulant, krestin. By promoting the functions of the immune system, these types of substances have antifungal, anticaner, antibiotic, antiparasitic, antiviral and other beneficial clinical effects. These substances lack selectivity; until recently, drug design or even the search for drugs from plant sources, did not include a consideration of such therapeutically 'holistic', but nonspecific substances. The AIDS epidemic has powerfully drawn attention to this class of compounds.

The placebo is the therapeutic benefit of a pharmacologically inert substance; it is a clinical effect due to therapeutic intervention, rather than the action of the administered substance. It has been shown that between thirty-five and sixty percent of the benefit of contemporary biomedical procedures can be accounted for as a placebo effect. It is generally accepted to be a component of all drug action; hence it is used as a control when taking a new drug through clinical trials. The placebo effect comes from the belief that the remedy will be effective in the condition being treated; the effect is greatest when both doctor and patient believe in the efficacy of the proposed treatment. It is a reflection of methodological difficulties and power of the pharmaceutical industry driven by the theory of selective toxicity, that the placebo effect is not more positively exploited. The current increasing interest in this phenomenon is a recognition that an assumption of mind-body dichotomy in biomedicine is not tenable. Even in the case of surgery where improvement in health is attributed to mechanical repair, Daniel Moerman has reviewed the increasing evidence which suggests that 'although cardiac bypass surgery works, it does not necessarily work for the reasons that it is done'. Several coronary bypass surgery patients have been found to experience impressive symptomatic improvement after the surgery, even when the new pass did not
function. In concluding, such improvement can be due to placebo.

The placebo effect would be expected to be particularly significant in the emotionally charged atmosphere in which serious illness is managed in traditional African medicine. We may say that the feeling of relief that something significant is being done about a potentially fatal illness, is similar and complementary to the feeling of relief experienced by the sufferer after his or her long-hidden antisocial secrets have been confessed and exposed for ritual treatment. In both instances we might expect a surge in immune activity. Thus, the combined effects of the spiritual and material approaches to illness management in traditional African medicine can be said to be synergistic in the mobilisation of the body's immune defence mechanisms.

THE DOSE OF MEDICINE

The single most important expression of the pharmacological theory of selective toxicity is the idea of dose of a drug. The elementary theory that the effect of a drug is directly proportional to its quantity, is fundamental to the determination of specificity of drug action. The idea underlies research in the identification of receptor systems, enzyme inhibition and toxicology; it enables highly poisonous substances to be used as drugs and it differentiates biomedicine from other health care systems in a most fundamental way. In the drug industry, a determining factor in the choice of one chemical over another for further research and development, is the dose of the chemical producing the required pharmacological effect; the lower the dose at which it blocks an enzyme or kills a parasite, that is, the more specifically poisonous it is to the cause of disease, the more attractive it is for development as a drug. Biomedical scientists and their clients are so educated to the centrality of dose of medicine, that they are suspicious of any system in which medicines are administered without regard to the rules of dosage as embodied in pharmacological theory.

As the goal in traditional African medicine is to strengthen the body's natural defence mechanisms, then the plants used towards the achievement of this purpose need not contain the highly toxic activity expected from drugs used in biomedicine. There is indeed evidence that plants containing acutely poisonous substances may have been excluded from the general pool of traditional plant remedies. It seems to be the case that, over the millennia during which man came to rely on plants both as food and as medicines, overtly poisonous plants were identified (for example, poisonous mushrooms and poisonous yams) and avoided for these purposes; where the food item was extremely valuable, traditional people the world over found ways to remove the poison (e.g. cassava in West Africa, Alocasia macrorrhizos (cunjevoi) and Macrozamia spp. (burrawangs) used by Queensland and Western Australia Aborigines as food).
Moerman has done a quantitative analysis of the plants used by Native Americans as medicines; his results on the family Caprifoliaceae (honeysuckle family) are instructive with respect to the point I am making. Elder (sambucus), the most heavily used of the genera, provides edible berries. Most elderberries must be cooked, dried or fermented before they are eaten (to ameliorate the effects of several emetic alkaloids that they contain). These berries are used widely by Native Americans as emetic and laxative, effects which were most probably observed when the berries were first eaten. They are also used for other medicinal purposes, but only externally for sprains, bruises, swellings, cuts boils, sores.

It will be noted that common items in traditional plant remedies in traditional African medicine are household aromatic and spicy foods valued for their nutritional and aromatic properties. In this practice, precise dose of plant material is not critical for clinical outcome any more than it is when used as food. In fact the more the better seems to be the attitude.

Perhaps the most obvious point that supports the view that in traditional African medicine poisonous plants may have been deliberately avoided as internal medicines is this. Some of the most important drugs in biomedicine today (tubocurarine, muscarine, picrotoxin, physostigmine) were extracted from poisonous plants that were used by traditional people for purposes other than healing. We may say therefore that in the evolution of the pharmacopoeia of medicinal remedies, plants whose use (either as food or medicine) gave rise to dramatic toxicities, when taken internally without regard to dosage, were excluded or used in ways that avoided the harmful effect. In the absence, in African cultures, of the precision technologies that enable poisons to be used as drugs in biomedicine, a cumulative and systematic exclusion of poisonous plants from medicinal remedies would be the logical line of development in traditional African medicine.

Absence of rules of dosage in traditional African medicine should therefore be seen as an inherent attribute of the system, rather than a ground for denigrating it as dangerous, or its practitioners as ignorant. This argument is not an excuse or a plea for mitigation for the absence of dosage rules in traditional African medicine. Rather, we need to see its potential as a system to mobilise the body's defence mechanisms, that has intrinsic merit.

**GENERAL REMARKS AND CONCLUSION**

Robin Horton has argued that, when one comes down to it, the differences between Western scientific thinking and traditional African modes of thought are not as great as scientists make them out to be. In his view, just as theory can be said to replace common sense in science, so does mystical invocation replace common sense in African thought. Horton has considered
mystical (ancestor spirit anger) explanations of illness as theory: by analysing the structure and function of theory in science, he has concluded that traditional African thought, as exemplified by ancestor spirit anger as cause of illness, can be said to be rational. However, on various grounds that Horton has discussed in detail, including the point that mystical thinking cannot be subjected to refutation (an important canon of science), African traditional thought is categorised as a ‘closed predicament’; African traditional thought, in Horton’s view, does not see the possibility of an alternative, as opposed to western scientific thinking that is ‘open’. This conclusion is consistent with classical Popperian definitions: the assumed existence of ancestor spirits is not open to refutation. While the invocation of ancestor spirits’ anger can thus be said to be unscientific on this basis, the point should be made that it is no more so than western religious beliefs, for example, in the doctrine of the ‘trinity’. Were we to inquire into why the dugout canoe floats, we should find that the Kalabari fisherman does not invoke ancestor spirits for explanation. He is also likely to be completely ignorant of Archimedes’ principle; but so too would be the English worker at the shipyard, not to mention the ordinary Englishman in the street. I fear that some of Horton’s more baffling conclusions have arisen from a comparison of two unlike entities, namely religious African beliefs and western science.

I came to a different understanding of the reference to ancestor spirit anger as explanation for the occurrence of serious illness from this study. To a biomedical scientist, the mention of ancestor spirits in connection with illness, may suggest the possibility of ancestor spirits being assigned the role of pathogens by diviners in ignorance. In African thought on the cause of illness, ancestor spirits are not pathogens. A close examination of the reference to Erinwin (ancestor spirits) as a factor in the cause of illness, reveals that this is not a mindless mystical invocation by people who did not understand the genesis of illness. Ancestor spirit anger is triggered by behaviour that the sufferer knows to be antisocial or sinful in the culture of his upbringing. Emu Erinwin in particular will trigger ancestor spirit anger. Other types of antisocial behaviour such as telling untruth, disrespect for elders, theft or even murder are not necessarily emu Erinwin, probably because society has other ways of dealing with these kinds of crime; they do not constitute a threat to the cohesion of the community in the way that emu Erinwin does.

We may say that in these cultures, the critical role of the spirits of the ancestors is to enforce morality and hence social integrity. The kind of sin that triggers ancestor spirit anger is the sort that can have a devastating effect on social cohesion. As the sinner is in close daily contact with those who are affected by his misdemeanour (for example, he or she
may be interacting with the husband or wife of the person involved in an incestuous relationship, as well as with other members of the kinship group who do not know that such a sin has been committed, but who would be horrified if they knew), the sense of guilt or attack of conscience, is repeatedly experienced by the sinner. The people must know from experience and intuitively, that the emotional stress thus created produces physical/physiological effects that can cause damage to health when sustained over a period of time.

It is possible to know this. Anyone who has been tempted to commit an antisocial act can testify to an attack of conscience. I am suggesting that in African thought, sin has a wider significance than the illness to which it gives rise; sin threatens the cohesion of the community and hence its continued existence, because of the social disruption to which sin simultaneously gives rise. The invocation of ancestor spirit anger is therefore not a simple explanation of illness (comparable to virus or bacteria in biomedicine), but a broadening of the significance of illness to include the fact that sin, the underlying cause of the illness, is a threat to the collective good of the community. In this sense, we may say that illness is a mechanism for enforcing morality and social cohesion. As a construct which combines the factors of illness, morality and social cohesion simultaneously in a single concept, ancestor spirit anger as cause, is a powerfully sophisticated tool in the context of the culture in which traditional African medicine is practised.

My point is that ancestor spirit anger in traditional African thought can be understood as a metaphorical allusion to the intuitive knowledge that acts which the society recognises as immoral (the behaviours that cause tension in, and threaten the cohesion of, the group) can give rise to conflicts in the mind of the enculturated individual and hence emotional stress and illness.

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Traditional African medicine is a unique system of health care, steeped in African intuition and accumulated experience.

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Traditional African medicine is a unique system of health care, steeped in African intuition and accumulated experience, and is fundamentally different from the theoretical assumptions that underlie the practice of biomedicine. The methods by which the traditional African healer achieves his therapeutic objectives (including its pharmacology) are wholly consistent with the basic assumption that serious illness has its roots in conflicts arising in the mind of the sufferer. Therefore, it is irrational to attempt to validate traditional African medicine or to control it according to conventional pharmacological theory. Such control is
intended when biomedical authorities attempt to employ traditional healers, register their organisations or standardise their remedies. The contribution of traditional African medicine to health care should be evaluated holistically in the context of the cultures in which it is practised, and not simplistically on conventional principles of biomedicine. In traditional African medicine, health is a composite of social, moral and physical well being.~

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NOTES

1 Ancestor spirits are generally thought to inflict illness as punishment for moral transgression.

2 Traditional Africans have no difficulty accepting that entities such as virus, bacteria, parasite, cancer or biochemical lesion may be the demonstrable cause of an illness. What they would insist upon is that for the particular individual to have been affected at that time, he/she must have done something that contravenes the moral laws laid down by the ancestors.

3 The Ughievwen reference to these categories of illness is instructive. Oma gan re e (the body is not strong) refers to a minor ailment that prevents the person from performing normal functions or duties. The Ughievwen greeting Oma gan re e? (is the body strong? equivalent to 'how are you?') is really an inquiry as to whether the person, although up and about, is able to do all the things that he/she should be doing. On the other hand, oma 'rho (the body is paining or hurting) refers to a more serious illness, and oma 'rha gangan (the body is hurting seriously) indicates that the illness is now a matter of life and death.


6 Ben Osuntokun, The Traditional Basis of Neuropsychiatric Practice among the Yoruba of Nigeria, Tropical Geography and Medicine, Vol. 27 (1975), pp. 422-430.

7 This plant grows widely in Nigeria. The decoction of its bark and leaves in water or dilute alcohol, is used in the treatment of fever, aches and pains. It is believed to cure malaria even though there is no evidence that these decoctions kill malaria parasites. Pharmacological evaluation has shown aqueous extracts to be anti-inflammatory and antipyretic. S. N. Okpanyi and G.C. Ezeukwa, Anti-Inflammatory and Antipyretic Activities of Asadirachta indica, Planta Medica, (1981), Vol. 41, pp. 34-9. Heroic extraction with strong organic solvents has also shown the presence of an antimalarial principle gedunin that has a potency equivalent to quinine. Sami A. Khalid, Helmut Duddeck, and Manuel Gonzales-Sierra, Isolation and Characterization of an Antimalarial Agent...
PLACEBOS, POISONS AND HEALING


Thomas Okpeha Okpako (c.1900-1951), an exponent of *Udje*, a traditional poetry that is put to music and dance, for which the Ughievwen are famous throughout Urhobo land. Thomas Okpako’s *Udje* is still performed at funerals and other important ritual ceremonies at Owahwa.


17 Turner, *Drums of Affliction*, p.59

18 Maclean, *Magical Medicine*, p. 84.


22 Daniel E. Moerman, ‘Physiology and Symbols: the Anthropological Implications...


RESPECTING OUR KNOWLEDGE
NATIONAL RESEARCH INSTITUTIONS AND THEIR OBLIGATIONS TO
INDIGENOUS AND LOCAL COMMUNITIES UNDER ARTICLE 8 (j) AND RELATED
PROVISIONS OF THE CONVENTION ON BIOLOGICAL DIVERSITY

For Indigenous peoples and local communities, the Convention on Biological Diversity is rapidly assuming the status of the most important legally-binding international instrument to protect our traditional biological resources, our cultural heritage and lifestyles. It is also becoming increasingly recognized worldwide that the maintenance of biological diversity is dependent upon maintaining cultural diversity: that in fact the two share a mutually dependent relationship. Not only does the Convention and the Conference of the Parties recognize that the knowledge that we as Indigenous peoples hold is important to the maintenance, conservation and sustainable use of biological diversity, they also acknowledge that we also have an active role to play in the management of that biodiversity.

The Convention on Biological Diversity contains a number of requirements which involve the interests of Indigenous peoples and local communities. These are specifically spelled out in Articles 8(j), 10(c), 17.2 and 18.4. Article 8(j) requires that, as far as possible and as appropriate, and subject to national legislation, the contracting parties respect, preserve and maintain the knowledge, innovations and practices of Indigenous and local communities embodying traditional lifestyles; promote their wider application with the approval and involvement of the holders of such knowledge, utilize innovations and practices, encourage the equitable sharing of benefits which arise from such utilization.

The wording of this Article has been widely criticized by Indigenous and local community organizations—particularly the qualification that its provisions should be subject to national legislation, thereby raising the issue that Article 8(j) stands or falls on the degree to which legislation reflects the intent of the Article. It is to be hoped, however, that within the next two or three years the Conference of the Parties to the Convention on Biological Diversity will adopt guidelines for national legislation relevant to the implementation of Article 8(j). This will make it easier for the Conference of the Parties, Indigenous communities, international agencies like the World Conservation Union (IUCN), UNESCO, the Food and Agriculture Organisation of the United Nations and the
Commission on Human Rights, and non-government organizations to monitor Parties' compliance with the guidelines. Nevertheless, there is still sufficient substance and moral authority to the Article for it to provide significant protection to the interests of Indigenous and local communities with regard to the maintenance of cultural traditions, the protection of intellectual property rights regarding traditional knowledge, and adequate rewards to the holders of traditional knowledge when it has been applied elsewhere, with respect to the conservation and sustainable use of biodiversity.

Article 10(c) lays down a powerful obligation on Parties regarding cultural maintenance through the continued use of biological resources. It provides that contracting parties shall, as far as possible and as appropriate, protect and encourage customary use of biological resources in accordance with traditional cultural practices that are compatible with conservation and sustainable use requirements. However, Article 10(c) can only be implemented within the context of the whole of Article 8 regarding in situ conservation of biological resources. Article 8, amongst other things, deals with protected areas, restoration of degraded ecosystems, aspects of biosafety with regard to the release of living modified organisms resulting from biotechnology into the environment, and recovery of threatened species-areas in which Indigenous and local community involvement is critical if Article 10(c) is to have any relevance or to be successfully implemented. Thus, pursuant to Article 8(j) and 10(c), contracting parties are therefore obliged to not only respect, preserve and maintain traditional knowledge, innovations and practices, but also protect and encourage customary use of traditional biological resources in a manner consistent with the objectives of the Convention on Biological Diversity.

Article 17.2 concerns the exchange of information, which shall include exchange of results of technical, scientific and socio-economic research, as well as information of on training and surveying programmes, specialized knowledge, Indigenous and traditional knowledge as such and in combination with technologies relevant to the conservation and sustainable use of biological diversity, or which make use of genetic resources, and which do not cause significant damage to the environment. Article 18.4 concerns technical and scientific cooperation, such that contracting parties “shall, in accordance with national legislation and policies, encourage and develop methods of cooperation for the development and use of technologies, including indigenous and traditional technologies, in pursuance of the objectives of the Convention on Biological Diversity. For this purpose, the contracting parties shall also promote cooperation in the training of personnel and exchange of experts.”

Many of the other Articles also contain
provisions which directly involve the interests of Indigenous peoples and local communities. For example, Articles 7 (identification and monitoring), 11 (incentive measures), 15 (access to genetic resources) and 16 (access to and transfer of technology) cannot be read without reference to the various obligations contained, particularly in Article 8(j). Thus the Convention on Biological Diversity contains a web of interlocking provisions which involve Indigenous people and local communities in the work of the Convention on Biological Diversity. The implications of these provisions are being unravelled, explored and elaborated by the Subsidiary Body on Scientific, Technical and Technological Advice and various decisions of the Conference of the Parties. For example, at the third Conference of the Parties meeting, a number of decisions were taken which reflect current thinking and interpretation of various Articles of Convention on Biological Diversity in order to give effect to their implementation. Under Decision III/14, regarding the implementation of Article 8(j), the Conference of the Parties recognized that traditional knowledge should be given the same respect as any other form of knowledge in the implementation of the Convention. In decisions III/10, the Conference of the Parties endorsed Recommendation II/2 of the Subsidiary Body on Scientific, Technical and Technological Advice concerning capacity-building for taxonomy. Paragraph 8 of that recommendation states, in part, that it "should also be recognized that traditional taxonomic systems offer a valuable perspective on biological diversity and should be considered part of the total taxonomic knowledge base at national, regional and subregional levels." In Recommendation II/1, the Subsidiary Body on Scientific, Technical and Technological Advice noted that improvement of taxonomic knowledge was fundamental to the development of indicators for biodiversity monitoring, and that traditional knowledge "could play a valuable role in the development of indicators, as well as in monitoring and assessment."

The Convention of the Parties is also greatly concerned about the protection and exercise of intellectual property rights under the Convention and their potential relationships with other aspects of the Convention's implementation, including, for example, implementation of Articles 8(j), 15 and 16. It wants Parties to consider the role and the potential of existing intellectual property rights systems in achieving the objectives of the Convention, including, inter alia, in facilitating technology transfer and in arrangements by which interested parties, including Indigenous and local communities and countries, may determine access to and share equitably the benefits of genetic resources or [traditional] knowledge, innovations and practices."
On June 18, 1993, Australia ratified the Convention on Biological Diversity, thereby binding the Commonwealth and the states and territories to the obligations specified in the Articles of the Convention. The Commonwealth's key measures for implementing the nation's obligations under the Convention on Biological Diversity are contained in the National Strategy for the Conservation of Australia's Biological Diversity, signed by all states and territories. The National Strategy is, financial support coming primarily through the Natural Heritage Trust. Commonwealth and state and territory departments with environmental responsibilities, particular agencies, like the Great Barrier Reef Marine Park Authority; and institutions, such as the Commonwealth Scientific and Industrial Research Organisation, Australian Institute of Marine Science universities and cooperative research centres, are also bound to reflect the policies for the implementation of the nation's responsibilities under the Convention on Biological Diversity as laid out in the National Strategy for the Conservation of Australia's Biological Diversity, the various sectoral policies and strategies, and the Council of Australian Governments' Agreement on the Environment. Failure to do so is tantamount to dishonouring, or limiting the capacity of the Commonwealth to deliver on these responsibilities.

The purpose of my analysis is to indicate the scope for the kind of comprehensive research agenda required to address Australia's obligations to its Indigenous communities itself, a cornerstone of the National Strategy for Ecologically Sustainable Development, and together with other national policies and strategies for our coasts, forests, fisheries, rangelands, wetlands, and so on, forms a comprehensive plan for the conservation and sustainable use of biological resources as required by Article 6 of the Convention on Biological Diversity. The respective Commonwealth and state responsibilities for, amongst other things, implementing the strategy are outlined in the Agreement on the Environment concluded by the Council of Australian Governments in November 1997, with Commonwealth With respect to the National Strategy for the Conservation of Australia's Biological Diversity, there are a number of references to Aboriginal and Torres Strait Islander peoples. Of the principles which have been adopted as a basis for the Strategy's objectives and actions, and which should be used as a guide for implementation, the final principle states:

The close, traditional association of Australia's indigenous peoples with components of biological diversity should be recognised, as should the desirability of sharing equitably benefits arising from the
innovative use of traditional knowledge of biological diversity. The goal of Objective 1.8 is to: "Recognise and ensure the continuity of the contribution of the ethnobiological knowledge of Australia's indigenous peoples to the conservation of Australia's biological diversity." One of the actions designed to implement this objective concerns access to information through

[The provision of] resources for the conservation of traditional biological knowledge through cooperative ethnobiological programs; and

The provision of access to accurate information about biological diversity for Aboriginal and Torres Strait Islander peoples, and involve them in research programs relevant to the biological diversity and management of lands and waters in which they have an interest.

A second reference concerns the need to improve our knowledge and understanding of Australia's biological diversity essential for its effective conservation and management. With regard to the ethnobiological knowledge of Aboriginal and Torres Strait Islander peoples, it is necessary to:

Recognise the value of the knowledge and practices of Aboriginal and Torres Strait Islander peoples and incorporate this knowledge and those practices in biological diversity research and conservation programs by:

a) encouraging the recording (with the approval and involvement of the indigenous peoples concerned) of indigenous peoples' knowledge and practices;
b) assessing the potential of this knowledge and these practices for nutritional and medical uses, wildlife and protected areas management and other purposes;
c) applying the knowledge and practices in ways that ensure equitable sharing of the benefits arising from their use.

The final reference, concerning implementation of the Strategy, sets an objective that, by the year 2000, Australia will have, *inter alia*,

implemented cooperative ethnobiological programs, where Aboriginal and Torres Strait Islander peoples see them to be appropriate, to record and ensure the continuity of ethnobiological knowledge and to ensure that the use of such knowledge within Australia's jurisdiction results in social and economic benefits to Aboriginal and Torres Strait Islander peoples.

These references, in their various wordings, reflect the requirements of the Convention on Biological Diversity with respect to Articles 8(j), 10(c), 17.2 and 18.4, but also reflect the need to involve the nation's Indigenous peoples in the work of other provisions, such as Article 7 (identification and monitoring) and the whole of Article 8 (*in situ* conservation).

The purpose of my somewhat detailed analysis is to indicate the scope for the kind of comprehensive research agenda
required to address Australia's obligations to its Indigenous communities under various Articles of the Convention and as reflected in the National Strategy. It might be expected that national research institutions would reflect these obligations in their own research agenda and make sure that at least some projects carried out under their auspices address them. However, this appears not to be the case.

I now want to indicate the extent to which Indigenous research interests and involvement in research processes—including the selection of research projects—are marginalized by examining the structure and research output of the Cooperative Research Centre for Ecologically Sustainable Development of the Great Barrier Reef. This analysis is based on its 1996-97 Annual Report.

The Cooperative Research Centre for Ecologically Sustainable Development of the Great Barrier Reef is an unincorporated joint venture established in 1993 by an agreement between the Centre Parties, namely, the Association of Marine Park Tourism Operators, the Australian Institute of Marine Science, Great Barrier Reef Marine Park Authority; James Cook University of North Queensland and the State of Queensland through its Department of Primary Industries. Membership therefore reflects a heavy weighting in favour of those with commercial interests in the Great Barrier Reef. Indigenous communities, as major stakeholders who have traditional marine estates and cultural, spiritual and economic interests in the Great Barrier Reef—and as expressed in many native title claims—were therefore excluded at the outset from consideration as a possible Centre Party. This is despite the fact that the activities of some of the Parties, such as the Association of Marine Park Tourism Operators and the Queensland Department of Primary Industries (as the principal agency responsible for monitoring and setting quotas for commercial and recreational fishing in the Great Barrier Reef) impact greatly on the interests of Indigenous reef communities and that the best place to start to address such conflicts of interest over sustainable development of the Great Barrier Reef would have been through Indigenous membership as a Centre Party, thus entitling Indigenous communities to representation on the Centre Board.

The management structure of the Cooperative Research Centre Reef primarily consists of the Board (and the Director), which is advised by three Advisory Groups: the Users Advisory Group, the Technical Advisory Group, and the Public Relations/Media Group. As might be expected, given the composition of the Centre Parties, there is no provision for Indigenous membership of the eleven-member Board. According to the 1996-97 Annual Report, the Association of Marine Park Tourism Operators had four members, while the Australian Institute of Marine Science, James Cook University,
Respecting Our Knowledge

Great Barrier Reef Marine Park Authority, Queensland Department of Primary Industries, the Queensland Commercial Fishermen's Organisation and SUNFISH had one each, with the Director making up the eleventh member. Similarly, Indigenous membership on each of the three Advisory Groups is absent. The seven-member Technical Advisory Group, comprising the Cooperative Research Centre Reef Chair, five Programme Leaders and James Cook University student representative, has no Indigenous representative. This is despite the fact that the Centre for Aboriginal and Torres Strait Islander Participation in Research and Development exists at James Cook University and could provide leadership to a Program in its own right, or could ensure that Indigenous research needs are met within the existing framework of the Cooperative Research Centre (through integration of our research needs within the other programs and through the conduct of research specific to Indigenous reef communities).

The Users Advisory Group, consisting of some eight members, considers issues and knowledge required by major user groups, review research outputs and assists in implementation towards "effective use". The role and structure of the Group is being reviewed to broaden involvement in the process of selection of tasks and the assessment of opportunity for research products. During the year 1996-97, the Users Advisory Group drew membership from the Association of Marine Park Tourism Operators, the Department of the Environment, the Great Barrier Reef Marine Park Authority, and Queensland Department of Primary Industries. At face value, such representation seems hardly representative of the diverse user groups of the Great Barrier Reef. One would think that Indigenous reef communities would constitute an important user group (and not just in economic terms) and should have representation on this advisory committee.

The Public Relations/Media Group provides a focal point for communications with the wider community, drawing on the public relations and media skills within the four institutional Parties (ie. James Cook University, the Great Barrier Reef Marine Park Authority, and the Australian Institute of Marine Science and Queensland Department of Primary Industries). The Group addresses broad extension activities for stakeholders and the wider community. This ten-member committee comprises representatives of the Cooperative Research Centre Reef, the Australian Institute of Marine Science, Queensland Department of Primary Industries, Great Barrier Reef Marine Park Authority and James Cook University. One of the principal publications of the media section is the Cooperative Research Centre Reef's bi-monthly newsletter, CRC Reef Research News. Given the lack of representation on the Public Relations/Media Group, despite the fact that the Townsville campus of James Cook University has an excellent Aboriginal and
Lin Onus,
Acrylic on linen,
83cm x 244cm

Photo courtesy of
the Australian
Heritage Commission
Torres Strait Islander media training facility as part of the Centre for Aboriginal and Torres Strait Islander Participation in Research and Development, with a number of students from Indigenous reef communities, it comes as no surprise that matters concerning Indigenous reef communities receive scant attention. For example, the four issues of *CRC Reef Research News* (Vol. 4, Issues 3-6), which had been sent to me in Montreal, do not refer to Indigenous reef communities at all.

It should also be noted that, in 1996-97, the Cooperative Research Centre Reef was associated nationally with more than 115 organizations which included fourteen universities and TAFE colleges; sixteen Cooperative Research Centres, the Commonwealth Scientific and Industrial Research Organisation and marine research agencies; fifteen state government departments and corporations; sixteen Commonwealth departments and corporations; sixteen local government and consultative organizations; and forty-two private companies and industry groups. Despite the existence of Federal and State Indigenous agencies, like the Aboriginal and Torres Strait Islander Commission regional councils, the Aboriginal Coordinating Council and the Islander Coordinating Council; Aboriginal land councils; and a number of Aboriginal local government authorities, such as the Palm Island, Yarrabah, Wujai Wujai, Hope Vale, Lockhardt River and Injino community councils, all representing Indigenous communities with interests in the Great Barrier Reef, not one of these is listed among those 115 organizations.

Given the lack of Indigenous representation on the Board and its three principal advisory committees, and the lack of association with Indigenous representative bodies, it also comes as no surprise that Indigenous reef concerns do not feature in the Cooperative Research Centre Reef's research output as evidenced by the titles of research publications, technical reports, student thesis topics, and conference and seminar presentations. For example, of the seventy-eight PhD, Masters and Honours theses, only one thesis would appear to have a direct connection to Indigenous interests, namely, "Management of the archaeological record in the Great Barrier Reef Province". With regard to research publications, technical reports and so on, there are over 320 titles listed in the Annual Report. Not one of these titles refers specifically to Indigenous reef concerns or interests. In other words, of the some 400 research topics, only one would appear to deal with an Indigenous reef concern or issue. Of course, many of the issues addressed in some of the research papers are of concern to us, but our interests have been excluded from the parameters of such research.

On the evidence presented, one can justifiably conclude that Indigenous reef interests and concerns have been entirely
written out of the research agenda of the Cooperative Research Centre Reef and that the Centre has comprehensively failed to meet its obligations under the Convention on Biological Diversity and the National Strategy for the Conservation of Australia's Biological Diversity.

Unfortunately, while the Cooperative Research Centre Reef presents an extreme case of the marginalization of Indigenous research needs and interests, the situation is nearly as bad in other cooperative research centres. For example, the Cooperative Research Centre - Conservation and Management of Marsupials, a relatively new cooperative research centre, has no Indigenous representation on its nine-member Advisory Group, its six-member Board, or its ten-member Research and Management Executive, a situation of which the Director, Professor J. Rodger, is aware. However, the role of Aboriginal people in managing marsupial populations has at least been identified as "a particularly important issue."

My 1995 analysis of the management structure and research output of the Cooperative Research Centre - Tropical Rainforest Ecology and Management also revealed an extremely negative picture with regard to Aboriginal involvement and research interests. However, the situation has improved with Aboriginal participation now occurring within its administrative structure, leading me to the conclusion that, once such a situation is exposed with regard to cooperative research centres, it will generally lead to better outcomes for Aboriginal people.

At least four messages come out of this analysis of the Cooperative Research Centre Reef.

First, the cooperative research centres need to be aware of their national obligations imposed under the Convention on Biological Diversity and the National Strategy—and this includes any such obligations which might be relevant to their institutions under Articles 8(j), 10(c), 17.2 and 18.4, and provide for these in their strategic planning and research agenda.

Second, in order to do this, however, there must be Indigenous representation on the governing boards and advisory committees so that the institutions as a whole can address these obligations in a strategic manner which is both meaningful and acceptable to the Indigenous communities concerned.

Third, they need to remain informed about the decisions and the debate regarding the implementation of the Convention on Biological Diversity, including decisions of the Conference of the Parties and any notes prepared by the Secretariat to assist the Parties and the Subsidiary Body on Scientific, Technical and Technological Advice. This information is readily available through the national focal point for the Convention on Biological Diversity, which is the
Biodiversity Group in Environment Australia, Canberra, or direct from the Secretariat office in Montreal via the Internet. These obligations are not just confined to the Convention on Biological Diversity. Other Conventions such as CITES,\(^4\) the Ramsar Convention on Wetlands,\(^25\) and the Convention to Combat Desertification\(^6\) also have implications for the involvement of Indigenous peoples in their work. Also wide-ranging moral obligations are entailed in such non-binding instruments as the statement of principles contained in the Rio Declaration on Environment and Development,\(^27\) Agenda 21,\(^58\) and the Statement of Forest Principles.\(^29\)

Finally, universities associated with cooperative research centres concerned with natural resource use and management would do well to incorporate units within their courses which inform and sensitize students to Australia’s international obligations to Indigenous peoples under such treaties. They should also include within their courses, units on the role that traditional knowledge can and should play in the management and sustainable use of Australia’s biodiversity.

Indigenous communities for their part, can scrutinize the activities of research institutions—reading and analyzing their annual reports is a good starting point—and prepare case studies in response to the various invitations extended by the Conference of the Parties, for example, as contained in para. 4 of Decision III/14 (concerning the implementation of Article 8(jj)) and para. 1 of Decision III/17 (concerning intellectual property rights).

Such case studies can expose the shortcomings of national research institutions to address the needs of Indigenous peoples and local communities in the international fora of the convention—the Conference of the Parties, Subsidiary Body on Scientific, Technical and Technological Advice, regional meetings and so on. Such case studies are usually circulated in information documents prior to any meetings, incorporated in syntheses, stored in Secretariat databases and are made available through the Clearing House Mechanism. The Convention on Biological Diversity is also one of the world’s most popular international treaties, with over 170 Country Parties as signatories. Indigenous community groups can also extensively lobby international Indigenous networks and non-government organizations, thereby putting pressure on national institutions “to do the right thing”.

I think that, if these measures can be carried out, Australia’s Indigenous peoples will get a better deal from those of the sixty-eight cooperative research centres nationally whose research domains have relevance to us. Co-operative research centres in their turn will come to have greater respect for our knowledge and its application, particularly in partnership projects, to conservation issues which
affect all of us. In doing so they will not only fulfill their obligations under the National Strategy for the Conservation of Australia's Biological Diversity, and effect reconciliation between our traditional knowledge systems and Western science, but also assist the nation as a whole to fulfill its obligations to its Indigenous peoples under the Convention on Biological Diversity.

HENRIETTA FOURMILE

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NOTES

1 The views expressed in this paper are mine alone and do not imply the expression of any opinion on content or policy whatsoever on the part of the Convention on Biological Diversity Secretariat or of the Australian Federal Government. I speak as a representative of the Yidindji people, traditional owners of land and sea country in the Cairns region, and who therefore have an interest in the management of the Great Barrier Reef and in any research conducted to do with the use and management of its waters and resources.

2 The issue of national legislation to which Article 8(j) is subject is complex as environmental matters are generally addressed by a raft of legislation existing, in federal systems like those in Australia, and have long been frustrated by the different standards for their involvement in natural resource management, notably in protected areas, existing between the Commonwealth and the states. How our Indigenous communities will fare with respect to the implementation of Article 8(j) and related provisions now, of course, depends on the outcomes of the new environmental legislation regime which the Federal Government is proposing. Our concern should particularly focus on its proposal for a new Biodiversity Conservation Act intended to result in an integrated framework for the conservation and sustainable use of Australia's biodiversity. Amongst the legislation which this Act is intended to replace is the National Parks and Wildlife Conservation Act 1975 (C'th), which of course, contains the key provisions which enable the traditional owners of the Uluru–Kata Tjuta and Kakadu national parks to be in the majority on their respective boards of management. It was the joint-management regimes set up under this Act that were considered to be the "blue print" for Indigenous involvement in the management of protected areas elsewhere in Australia and in some countries overseas. It is important that, whatever standards acceptable to Indigenous peoples were set in the previous legislation, these standards are to be
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maintained, and if possible, advanced in its replacement.


4 *The Biodiversity Agenda*, pp. 27 and 103.

5 *The Biodiversity Agenda*, pp. 27 and 95.

6 *The Biodiversity Agenda*, Decision III/17, para. 1(b) and (d). p. 56.


9 *The Biodiversity Agenda*, p. 35.

10 *The Biodiversity Agenda*, p. 41.


12 This raises the issues concerning the need for Indigenous reef communities to have some form of body to represent their interests in the Great Barrier Reef.


14 *The Biodiversity Agenda*, pp. 6-7.

15 *The Biodiversity Agenda*, p. 7.

16 *The Biodiversity Agenda*, pp. 9-10.

17 *The Biodiversity Agenda*, pp. 29-33.

18 K. Mortimer, Honours thesis; *The Biodiversity Agenda*. p. 32.

19 *The Biodiversity Agenda*, pp. 44-62.


21 Personal communication.


25 Convention of Wetlands of International Importance Especially as Waterfowl Habitat.

26 Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa.

27 UN Declaration on Environment and Development. See, in particular, Principle 22.

28 The program of implementation for the Rio Declaration. See, in particular, Ch. 26.

29 The UNCED Authoritative Declaration with Non-legally Binding Force of Principles for a Global Consensus on Management, Conservation and Sustainable Development of All Types of Forests. See, in particular, preambular paragraph (c), and Principles 2, 5 and 8.
Knowledge and society do not merely interact or determine one another. They are constitutive of one another. Society consists in the relations between people and the natural world that produce what we take to be knowledge and vice versa. Seen in this light modern science is not, in essence, distinct from other so-called traditional knowledge systems. All knowledge traditions are in effect socially organized and sustained spaces in which trusted and authoritative knowledge is produced and transmitted. This not only permits an equitable basis for their analysis and comparison, but also provides the possibility of bringing into focus hidden cultural features and assumptions by examining encounters between knowledge traditions. This approach can help to avoid the trap of privileging one tradition's mode of classification and ordering over another. It also helps avoid the trap set by the prevailing overemphasis within western intellectual circles on knowledge as representation.

As Stephen Greenblatt observes, 'European contact with the New World natives is continually mediated by representations: indeed contact itself, at least where it does not consist entirely of acts of wounding and killing is very often contact between representatives bearing representations.' Edward Said makes the related point that,

...the act of representing (and hence of reducing) others almost always involves some violence of some sort to the subject, as well as a contrast between the violence of the act of representing something and the calm exterior of the representation itself. The action or process of representing implies control, it implies accumulation, it implies confinement, it implies a certain kind of estrangement or disorientation on the part of the one representing. Because, above all, they involve consumption, representations are put to use in the domestic economy of an imperial society.

In order to give some flesh to the idea that claims about what is to count as knowledge or truth are both representations and performances, with largely invisible or concealed moral and spatial components that make contact between cultures problematic, I have been exploring encounters between knowledge traditions. Here, I want to look at a particular instance when two knowledge
traditions encountered one another, when Captain James Cook met Tupaia, a Polynesian priest and navigator. Exploration of such an encounter is, of course, rendered problematic by the familiar reflexive difficulties created by the fact that socio-historical analysts work within distinct knowledge traditions. The difficulties are compounded by my being located within what is currently the dominant tradition. My strategy, for reducing reflexive tension, is to adopt the role of the fool or the trickster and to tell a tale which portrays the encounter as a cartographic méconnaissance.

*Méconnaissance* is a term used by Bourdieu and Lacan. It is often translated as mis-recognition, but the English word does not carry the same connotation as the French which also implies a certain duplicity. Bourdieu calls it 'a self-seeking silence,' by which he means 'a silence about the ways in which the arbitrary and social are made to appear natural.' Such silences are especially acute in this period when the Europeans were not just engaged in the Enlightenment project of archiving knowledge but were also searching for examples of 'man in a state of nature' in order to judge whether civilization, i.e. the social, was natural. However, I think such silences are inevitable in encounters between knowledge traditions and are especially marked in the roles of the analyst and the go-between. It has often been noted that most of the great passages of discovery and exploration by westerners have been accomplished with the help of an indigenous translator or go-between. Their role is in many ways that of the trickster because encounters with the other are intensely difficult, involving epistemological and moral denials and the go-between's role is frequently erased. Hence the analyst has also to be a trickster in order to reveal the silences, denials and erasures. The trickster is the spirit of disorder, the enemy of boundaries; and the function of the trickster myth, according to Kerényi, 'is to add disorder to order and so make a whole, to render possible within the fixed bounds of what is permitted, an experience of what is not permitted.'

The oppositions of order/disorder, permitted/forbidden reflect the Janus-faced character of the translator, the go-between, the analyst, the critic—indeed anyone who moves between traditions and cultures, between self and other, or between accounts of events. There is a sense in which all historians, critics or any kind of analyst must deceive in order to tell the truth. This contradiction is the source of the tension which the reflexivists want to dissolve by a constant revelation of the constructed character of one's own framework. However, it is the tension upon which all knowledge claims are built: for there to be truth, there has to be 'untruth;' that is, a concealment of the prior assumptions and social constructions that provide the conditions for the possibility of truth; *méconnaissance* is inevitable.
My performance, or story telling, will also hopefully gain some narrative strength by being counter-poised with the orthodox story of a great divide and the creation of the other. It is a tale of (en)countering and countering. The orthodox story is that of 'discovery' and exploration, which makes the 'other' a foil against which to see the 'objectivity', 'rationality' and 'universality' of western scientific representations. This tale has underpinned the history of science and served it well in a historical struggle for authority which has occluded its own performative nature through denying the social labor in its own construction, and the active role of the 'others' it enrols. The méconnaissance involved is not just a misrecognition and (self) deception as a matter of the personal biographies of Cook and Tupaia, but also as a matter of the kind of historiographical and epistemological assumptions that underpin the received story.

In 1769 James Cook, an English naval captain from Yorkshire, arrived at Tahiti where he met Tupaia, a Polynesian high priest and navigator from the island of Raiatea. Tupaia joined Cook aboard the Endeavour and sailed with him and Joseph Banks on their voyage of exploration of the Pacific, New Zealand and Eastern Australia. For a brief time these two cartographers from different knowledge traditions worked together. What I want to do is to bring into juxtaposition two representations/performances that emerged from that encounter to reveal the méconnaissance. They are Cook's drawing of the Transit of Venus and Tupaia's chart of the Pacific. Both illuminate the problems of bodies meeting: celestial bodies and the other bodies of knowledge.

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However, before examining these representations, I want to perform the orthodox account. Cook was both a genius and a scientific navigator/cartographer, perhaps the greatest in history according to anglophone historians. During three great voyages, he systematically explored the Pacific, accurately charting for the first time the position of many new islands, Aotearoa/New Zealand, the East coast of Australia, and the outliers of the North West passage. In doing so, he completed in broad outline the great imperial vision of science mapping the entire world. As a by-product of these achievements over three
voyages of circumnavigation he threw up an intriguing question to which he never developed a firm answer. Gathering linguistic and cultural evidence in conjunction with Joseph Banks, and the father and son naturalists, Johann Reinhold and George Forster, Cook came to perceive the people on the islands of what would become Polynesia of the Pacific, as one nation. His big question was, ‘How shall we account for this nation spreading itself so far over this Vast ocean?’

In August 1769 Cook on his first voyage seemed to have little doubt that the question was one that could be answered in terms of native navigational practices:

In these Proes or Pahees as they call them from all the accounts we can learn, these people sail in those seas from Island to Island for several hundred Leagues, the Sun serving them for a compass by day and the Moon and Stars by night. When this comes to be prov’d we Shall be no longer at a loss to know how the Islands lying in those Seas came to be people’d, for if the inhabitants of Uleitea have been at Islands laying 2 or 300 Leagues to the westward of them it cannot be doubted but that the inhabitants of those western Islands may have been at others as far to westward of them and so we may trace them from Island to Island quite to the East Indias.

In April 1777, on his third voyage, Cook called at the island of Aitu in the Cook Islands, where he met a group of five survivors who had been in party of twenty sailing from Tahiti to Ulietea. Caught in a storm, they had been eventually washed ashore on Aitu clinging to their upturned canoe. Cook was moved to comment that ‘this circumstance very well accounts for the manner the inhabited islands in this Sea have been at first peopled: especially those which lay remote from any continent and from each other.’

However, in later reflections on the way the Society Islanders acquired their knowledge, Cook concluded that: The knowledge they have of other distant islands is, no doubt, traditional; and has been communicated to them by the natives of those islands, driven accidentally upon their coasts, who, besides giving them the names, could easily inform them of the direction in which the places lie from whence they came, and of the number of days they had been upon the sea... We may thus account for that extensive knowledge attributed...to Tupaia in such matters. And, with all due deference to his veracity, I presume that it was, by the same means of information, that he was able to direct the ship to Oheteroa [Rurutu], without ever having been there himself, as he pretended, which on many accounts is very improbable.

Cook’s views that the Pacific islands were discovered deliberately on the one hand, and by accident on the other, still inform debates on Polynesian migration and navigational knowledge. They can be reconciled, but generally one or the other has been favoured by authorities on the strength of what they have made of the
evidence of two-way voyaging by the early Pacific inhabitants and how they have construed Pacific and European navigational practice. I have argued elsewhere for the deliberate discovery and two-way voyaging thesis and here would note that the archaeological and linguistic evidence is now very strongly supportive of the view that there was an extended network of inter-island contacts that had begun to decline sometime before the European explorers arrived. Moreover, participatory navigation and replica voyages from Hawaii to Tahiti and New Zealand and back have demonstrated the power of Pacific navigational techniques.20

The question of how we should construe the two traditions will emerge through the course of this paper. The salient point for my approach to the encounter between Cook and Tupaia, however, is that despite his profound interest in the question of how the Pacific islands came to be inhabited, Cook appears never to have asked any of his informants how they navigated. What is especially interesting is that he did not ask Tupaia, or at least made no reference to asking him in any of his writings. This was partly because he found that 'most of them hated to be asked what they probably thought idle questions.' 21 But the main reason, I think, is not that he thought all their voyaging accidental. Rather, he thought it was a mixture of accidental and deliberate.22 Nor did Cook simply dismiss what Tupaia said, though clearly he had ambivalent feelings about his worth as an informant. When he was speculating during his first voyage on the other big question is there a 'Southern Continent', Cook was well aware of a vast expanse of unexplored Pacific in which such a continent might be found and commented,

...should it be thought proper to send a ship out upon this service while Tupaia lieves [sic] and he to come out in her, in that case she would have a prodigious advantage over every ship that have been upon discoveries in those seas before...23

The question of why Cook did not ask Tupaia how he navigated becomes even more acute on noting that he did ask Tupaia to draw a chart of the islands in the Pacific. That famous map is one of the most interesting documents representing an encounter between knowledge traditions; and in order to 'read' it, we need to consider Cook and Tupaia's separate trajectories before their encounter in Tahiti in 1769.

Cook was instructed by the Admiralty to take the Endeavour to the Pacific for two specific purposes: to observe a Transit of Venus and to discover, if possible, the Southern continent. Just as Cook was making preparations to leave in May 1768 Captain Samuel Wallis returned on the Dolphin having discovered Tahiti the year before. This was doubly fortuitous because Tahiti lay exactly in the centre of the area that the Astronomer Royal, Dr Nevil Maskelyne, had prescribed as most favourable south of the equator for the
observation of the transit of Venus, because its position had been accurately determined with respect to both latitude and longitude. John Harrison, the *Dolphin*'s purser, had calculated Tahiti's position in Wallis' words by 'Taking the Distance of the Sun from the Moon and Working it according to Dr Masculine[sic] Method which we did not understand.'

This was a history-making observation using the method of lunars, or lunar distances, for calculating longitude by observing the distance of the moon from the sun. It was for this purpose that Charles II had in 1675 ordered the building of Greenwich observatory, and appointed John Flamsteed 'astronomical observator' explicitly 'to apply himself to the rectifying of the tables of the motions of the heavens, and the places of the fixed stars, so as to find the so-much-desired longitude of places for the perfecting the art of navigation'. In other words, he was to provide the observational data so that lunar distances could be predicted.25

Maskelyne had been sent to the Atlantic island of St Helena in 1761 to observe the transit of Venus, but was prevented by clouds. Yet his trip was far from valueless since it was on this voyage that he developed the method of lunar distances for finding longitude at sea using Hadley's quadrant to observe the angular distance between the Moon and the Sun or a number of fixed stars. Maskelyne published the *British Mariners Guide* in 1763, which gave instruction in the system. In 1765, he became Astronomer Royal and published the first edition of the *Nautical Almanac*, which contained tables and calculations of the moon's position for every day of the year at three-hour intervals for the next ten years. This enabled even the longest expedition to calculate their longitude. Even so, it did require 4 hours for a skilled navigator to perform the calculations with corrections for refraction and parallax.26

Thus, it was with a copy of the *Nautical Almanac* and a light and precise sextant (a development of Hadley's quadrant and in effect a portable observatory), that Cook was the first navigator in the western tradition to sail to a Pacific Island as an act of deliberate calculation.27 His predecessors had only found them accidentally or 'rediscovered' them by sailing along the latitude.28 This alone should cast serious doubt on the contrast between the supposedly accidental discoveries of Tupaia and his predecessors and the deliberate discoveries of the Europeans. As Alan Villiers observes, 'All sea-borne discovery belongs to the sailing ship era, and by far the greater part was done before seamen knew how to keep accurate record of where they were or how far they had sailed.'29

Cook himself was not initially trained in the modern calculative tradition of navigation. He started by serving an apprenticeship on North Sea colliers which were sailed by the three 'Es': Lead, Lookout and Local Knowledge.30 Coastal sailing like this was essentially pilotage
done by eye and personal knowledge. Alan Villiers, not only a biographer of Cook but himself an experienced sailor, contrasts pilotage with navigation, which 'was in part, by careful astronomical observations with precise instruments...and the most careful reckoning.' Even so, he points out that in Cook's day a captain's ability to navigate depended on

- good housekeeping, judgements of leeway, accurate estimation of speed under sail - for there were no adequate instruments to measure or record it and, the wind being fickle, the sailing ship's forward speed varied infinitely - and the assured ability to appraise performance of his ship in any conditions all came into this.\textsuperscript{32}

Cook went on to acquire a unique set of skills when he left the commercial shipping world and joined the navy. Through a series of fortunate appointments and fortuitous meetings he became an accomplished cartographer, marine surveyor, and master navigator using the latest in observational and computational techniques in, for example, charting the St Lawrence for the attack on Quebec.\textsuperscript{32} Though Alexander Dalrymple thought he should have got the job, there is little doubt that Cook was the man best suited to lead the first scientific expedition to the Pacific (in the sense of being able in principle to bring back inscriptions or immutable mobiles—that is, precisely determined and standardized calculations and observations that would allow their assemblage at a centre of calculation).\textsuperscript{33}

But, as we shall see, while this may have been partly true for his geographical discoveries it was not quite true for his astronomical observations.

**THE TRANSIT OF VENUS**

In the mid 18th century navigation and astronomy were linked through two interconnected and basic questions: how to measure solar parallax and how to measure longitude. Cook was intimately involved with attempted solutions to both questions. One of the principal reasons the Admiralty sent Cook and the *Endeavour* to the Pacific was to observe the transit, or passage, of the planet Venus across the face of the sun. This was considered to be the scientific event of the century by learned societies throughout Europe.\textsuperscript{34} So much so that on the occasion of the transit in 1761, at least 120 observers around the world attempted unsuccessfully to record the event.\textsuperscript{35} The reason that this astronomical event brought about 'the first international co-operative scientific expedition in modern history' was that Edmund Halley had shown in 1716 that measuring the timing of the transit could provide the means of calculating solar parallax.\textsuperscript{36} Measuring solar parallax could then give the distance of the earth from the sun (the distance of the sun remains the astronomical unit providing the scale for all distances within the solar system and the base line from which the distances of the stars are measured).\textsuperscript{37} Until this measurement was established, the Newtonian astronomical
Drawings of the Transit of Venus by Cook and Charles Green.
Reproduced by permission of the National Library of Australia.
system remained incomplete. It was the precondition for fixing ‘the frame of the world’ and giving it dimensions.\(^{38}\) 

Cook was sent to observe the transit of Venus in the ideally located Tahiti. He arrived on 13 April 1769 and immediately set about, one might say in true Latourian fashion, to extend the laboratory by building a fort to ‘protect the observers and the instruments from the natives.’\(^{39}\) Within the fort he put up a tent which held a clock with a grid iron pendulum carefully set in a wood frame fixed in the ground. The pendulum was adjusted to the same length as that at Greenwich. Facing that was the observatory with another journeyman clock, an astronomical quadrant of one foot radius mounted on a barrel full of wet sand buried in the ground, and three reflecting telescopes. Despite mounting armed guard the quadrant was stolen the night it was brought ashore.

Eventually the quadrant was retrieved and repaired and the transit observed on 3 June 1769 by Cook, Daniel Solander the Swedish scientist and Charles Green the astronomer. As Cook recalled,

> This day proved as favourable to our purpose as we could wish. Not a cloud was to be seen the whole day, and the Air was perfectly clear, so that we had every advantage we could desire in observing the whole passage of the planet Venus over the sun’s disk. We very distinctly saw an atmosphere or Dusky shade around the body of the planet which very much disturbed the times of the contact particularly the two internal ones. Dr Solander observed as Mr Green and myself and we differed from one another in observing the times of the contact much more than could be expected.\(^{40}\)

Despite the apparently ideal observational conditions the timing proved problematic because Venus seemed to form a ‘black blob’ as it neared the edge of the sun’s disc. Nonetheless Cook dutifully reported the results to the Royal Society, as did 151 other observers at 77 stations in around 600 papers to societies around the world.\(^{41}\) Cook’s nose was put considerably out of joint when Maskelyne was critical of his results, attributing them to want of care and address in the observer. In mitigation, Cook argued that Maskelyne knew the quadrant had been stolen and damaged and that,

> Mr M should have considered, before he took upon himself to censure these observations, that he had put into his hands the very original book in which they were written in pencil, only, the very moment they were taken and I appeal to Mr M himself, if it is not highly probable that some of them might from various causes, be so doubtful to the observer, as either to be wholly [sic] rejected or to be marked as dubious and which might have been done had Mr Green taken the trouble to enter them in the proper book. Mr M should also have considered, that this was, perhaps the only true original paper of the kind ever put into his hands; does Mr M publish to the world all the observations he makes good and bad or did never make a bad observation in his life?\(^{42}\)
Apart from trying to offload the blame onto the unfortunate Green—a Maskelyne protégé who succumbed to the bottle and the flux after leaving Batavia. Cook’s defence is interesting because it displays the essential ambiguity and instability of raw data typified, for example, by the conflicting views of Millikan’s oil drop experiments to measure the charge on the electron. In Cook’s view, the raw data were somehow both natural and capable of ‘speaking for themselves’ and yet at the same time some basic massaging should have either have been performed by Green or been self-evident to Maskelyne. Nonetheless, actually performing the observations was fraught with difficulties concerning personal variation of the observer, flaws in telescopes and conditions of vision, much of which Cook and his contemporaries were unaware of. But most serious were the problems of the ‘black blob effect’ and the difficulty of determining longitude.

In 1762, Joseph-Jérôme de Lalande, astronomer at the Royal Observatory in Paris wrote to Maskelyne about the difficulty for astronomers caused by lack of a precise means of determining longitude. ‘You may deduce the difference of the meridians of these two cities, which we may be ashamed to say we are uncertain of to 20 seconds.’ In other words, no-one could tell with precision how far apart their observatories were. Calculations based on assembling astronomical observations from different observatories could not be performed. What was needed was a network in which their two observatories were physically linked by the invisible bonds of triangulated national surveys.

Ironically then, Cook could sail to Tahiti and back with relative ease; but he could not transform his observational data into the kind of immutable mobiles that Latour has led us to expect. Nor could he calculate his own position with precision. Somewhat to his chagrin he was 4 degrees out by the time he sighted New Zealand.

**Tupaia: Priest, Navigator, and Go-Between**

While Joseph Banks was in Tahiti he formed a strong relationship with Tupaia, a priest and skilled navigator. Tupaia became Banks’ constant companion during their three months in Tahiti guiding and advising him on native customs and rituals.

In July 1769, Banks managed to persuade Cook against his better judgement to let Tupaia accompany them on the Endeavour. Banks was to give a frank and revealing account of this in his journal:

>This morn Tupia came on board, he had renewd his resolves of going with us to England, a circumstance which gives me much satisfaction. He is certainly a most proper man, well born, cheif [sic] Tahowa or preist [sic] of this Island, consequently skilld in the mysteries of their religion; but what makes him more than anything else desirable is his experience in the navigation of these people and knowledge
of the Islands in these seas; he has told us
the names of above 70, the most of which
he has himself been at. The Capt'n refuses
to take him on his own account, in my
opinion sensibly enough, the government
will never in all human probability take
any notice of him; I therefore have
resolved to take him. Thank heaven I have
a sufficiency and I do not know why I may
not keep him as a curiosity, as well as some
of my neighbours do lions and tygers at a
larger expence than he will probably ever
put me to; the amusement I shall have in
his future conversation and the benefit he
will be of to this ship, as well as what he
may be if another should be sent into these
seas, will I think fully repay me.  

Cook gives a slightly different version of
events:

This man had been with us the most part
of the time we had been on the Island
which gave us an opportunity [sic] to
know some thing of him: we found him to
be a very intelligent person and to know
more of the Geography of the Islands
situated in these seas, their produce and
the religion laws and customs of the
inhabitants then [sic] anyone we had met
with and was the likeliest person to answer
our purpose; for these reasons and at the
request of Mr Banks I received him on
board together with a young boy his
servant.  

Of Tupaia himself we know relatively little,
but enough perhaps to get some idea of his
side of the encounter with Cook. He was
not from Tahiti but from Raiatea, 40
leagues (340 miles) to the Northwest. He
was born around 1725. Cook was born in
1728, thus he and Tupaia were
contemporaries in their mid-forties when
they met. Tupaia was a high priest of the
cult of the war god Oro and a member of a
family highly skilled in navigation. He was
driven from Raiatea by the invasion from
the neighbouring island of Bolabola
(Borabora) and arrived in Tahiti around
1760 with the establishment of the Oro
cult on the island. When Samuel Wallis
'discovered' Tahiti in 1767, he was the

Tupaia was a high
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navigation

consort of Purea, mother of a high ranking
chief. However, within two years, Purea
had lost much of her power and Tupaia
had likewise fallen from favor. Tupaia's
fate may might have something to do with
his keenness to join Cook and his
willingness to impart knowledge that
might have been in part secret.

Sometime after coming aboard the
Endeavour Tupaia drew a map of all the
islands he knew. Cook gives the names of
the islands that Tupaia identified in his
Journal in March 1770, by which time
Tupaia had been on board for nine months
and they were about to leave New Zealand
for the journey home via Batavia. The
actual drawing of the chart is likely to have been done many months before. Also, the original chart has been lost. All we have are the re-drawings of the original by Cook and Johann Forster who, with his son George, accompanied Cook on the second voyage in place of Banks.

What Cook says is that the names he wrote down were,

—taken from a Chart of the Islands Drawn by Tupia's own hands, he at one time gave us an Account of near 130 Islands but in his chart he laid down only 74 and this about the Number that some others of the Natives of Otaheite gave us an account of, but the Accounts taken by and from different people differ sensibly [sic] one from another in both in names and Number. The first is owing to want of rightly knowing how to pronounce the names of the Islands after them, but be this as it may it is very certain that there are these Number of Islands and very probably a great many more laying some where in the great South Sea, the greatest part of which have never been seen by Europeans.

There are problems in trying to 'read' this chart as evidence of the knowledge tradition of the Tahitians. A sense of the difficulties can be gained from its first critically and linguistically informed reader, the young Horatio Hale on the United States Exploring Expedition seventy years later. He begins by pointing out that 'when Tupia's map was drawn more than half the islands it contained were unknown to Europeans.' But Cook and his officers, knowing that toerau in Tahitian signifies the north (or northwest) wind, and toa the south, they concluded naturally that opatoerau and opatoa were names applied to the corresponding points of the compass, whereas opatoerau signifies, in fact, the point towards which the north wind blows je the south and opatoa, for the same reason, the north. By not understanding this they have so far as these two points are concerned reversed the chart completely and it is in fact printed upside down. But not content with this, it is in fact, apparent that these gentlemen (Capt Cook, Banks, and Lt Pickersgill whom Förster mentioned as having been shown the chart) overlooked Tupia while he was drawing and suggested corrections which his idea of their superior knowledge induced him to receive against his own convictions. This is clear from the fact that all the groups and islands with which the English were not familiar are laid down rightly according to the real meaning of apotoerau and apotoa but wrong according to the meaning these gentlemen ascribed to the words; while the islands whose position they knew (the Marquesas and Paumotos) are placed exactly as they should be, according to this mistaken meaning but altogether out of the proper bearings when these are rightly understood.

In unravelling the directional problem, Hale believed that Tupia had himself made mistakes. Hale, like many contemporary European commentators, was skeptical of the value of names and
locations recalled 'merely from tradition'. He was also concerned that the spelling of names varied greatly, quoting Forster's observation that 'some of the names were strangely spelt as there were never two persons in the last and former voyages who spell the same name in the same manner'. In addition, some islands were given twice. Nonetheless, Hale concluded that the chart proved 'beyond doubt the extensive knowledge possessed by the Tahitians of the Polynesian groups'. It was indeed extensive: though it omitted Hawaii, Easter Island and New Zealand, Tupaia's chart covered an area the equivalent of the United States.

Cook's view of Tupaia's geographical knowledge was often slightly muted, as can be seen in his qualifying remarks about the list of islands:

Those marked ++ Tupia himself has been at as he tells us and we have no reason to doubt his veracity in this, by which it will appear that his Geographical knowledge [sic] of those Seas is pretty extensive and yet I must observe that before he came with us he hardly [had] an Idea of any land larger than Otaheite. A similar ambivalence can be discerned in Cook's attitude to Tupaia's value to the voyage generally. Though he occasionally makes remarks like Tupaia always accompanies us in every excursion we make and proves of infinite service, he was less than charitable about Tupaia after his death from an unspecified fever, giving no recognition of his services despite the fact that he had in effect been the expedition leader throughout the voyage from Tahiti around New Zealand and up the Australian coast. Commenting on his expedition's losses in Batavia Cook notes on December 26th 1770.

But notwithstanding this general sickness, we lost but Seven Men in the whole: the Surgeon, three Seamen, Mr Green's servant and Tupia and his servant, both of which fell a sacrifice to this unwholsome [sic] climate before they had reached the Object of their wishes. Tupia[s] death cannot be said to be owing wholly [sic] to the unwholsome air of Batavia, the long want of a Vegetable diet [sic] which he had all his life before been use'd to had brought upon him all the disorders attending a sea life. He was a Shrewd Sensible, Ingenious Man but proud and obstinate which often made his situation on board both disagreeable to himself and those about him, and tended much to promote the deceases [sic] which put a period to his life.

Cook seems to have valued Tupaia's specific local knowledge in piloting the ship as opposed to navigating it and to have found him useful in dealing with the people they encountered. This was especially true in New Zealand where he could speak the language, though much less so in Australia where he could not. Cook also found relating to Tupaia difficult, and his reflections on those Islanders with whom he interacted most closely are ambivalent and patronisingly eurocentric. For example, Cook's efforts to resettle Mai, the Raiatean, in 1777, led him to reflect that 'he like the rest of his nation
was indifferent to things they learnt or saw. Europeans have visited them at times for these ten years past. Yet we find neither new arts nor improvements in the old, nor have we copied us in any one thing.62

However, Tupaia was equally a teller of tales, a trickster. That he had agendas of own seems apparent in his dealings with Maori. Banks frequently noted Tupaia’s claiming that Maori were liars. To him it was ‘a specimen of Indian reasoning’. For Anne Salmond, in her work on encounters between Europeans and Maori, it was an example of Tupaia’s Polynesian chauvinism.63 For me it is the kind of balancing act that a ‘Go-Between’ has to sustain. He or she must remain an authoritative and superior source of knowledge. Hence their informants must be represented as inferior and untrustworthy. Equally, the Go-Between has to sustain good relations with those from whom they derive knowledge. Maori, for example, thought highly of Tupaia. They inquired earnestly after him when Cook returned and were distressed to hear of his death, unlike the indifferent response of his compatriots. They named their children after him, and undoubtedly presumed he was in charge since they referred to the Endeavour as Tupaia’s boat.64

However, to return to the chart and navigation. James Morrison, boatswain’s mate on the infamous Bounty, commented that

It may seem strange to European navigators how these people find their way to such a distance without the help or knowledge of letters, figures, or instruments of any kind but their Judgement of the Motion of the Heavenly bodys [sic], at which they are more expert and can give better account of the Stars which rise and set in their Horison [sic] then an European Astronomer would be willing to believe, which is nevertheless a Fact and they can with amazing sagacity fore tell by the Appearance of the Heavens with great precision when a change of the weather will take place and prepare for it accordingly. When they go to sea they steer by the Sun Moon and Stars and shape their course with some degree of exactness.65

Such a gulf of strangeness, to some extent, explains why Tupaia’s chart is such a mess. Equally, as the French Pacific historian Adam points out,

Tupaia’s chart and what it meant to Cook, illustrates perfectly the incomprehension of the Europeans when faced with the nautical culture of the Polynesians. Tupaia’s knowledge could only be interesting and useful when set in the cartographic grid that allowed for an entry on marine charts used on European ships. The bearing of islands or the establishment of their direction by star positions was occasionally mentioned as a curiosity of no great importance. European knowledge alone was scientific. Other knowledge could not have a comparable value (my translation).66

While it seems to me that strangeness, scientocentrism and Quinian indeterminacy of translation are all
elements in the mix, Tupaia’s chart is best understood by setting it alongside Cook’s attempts to observe the transit of Venus. Could not Tupaia have written a letter of complaint to Cook along the lines of Cook’s to Maskelyne? Simple substitution of the appropriate terms and names shows the possibilities:

Mr C should have considered, before he took upon himself to censure these knowledge claims, that he had put into his hands the very original chart on which they were written in pencil, only, the very moment they were taken and I appeal to Mr C himself, if it is not highly probable that some of them might from various causes, be so doubtful to the cartographer, as either to be wholly rejected or to be marked as dubious and which might have been done had Mr. Banks, and Lt Pickersgill taken the trouble to enter them in the proper book. Mr C should also have considered, that this was, perhaps the only true original chart of the kind ever put into his hands; does Mr C publish to the world all the observations he makes good and had or did never make a had observation in his life?

In Cook’s drawing of the transit, he shows a seemingly unavoidable blurring when two bodies encounter one another. In Tupaia’s chart, two knowledge traditions encounter one another and become blurred in the representation. The black blob effect applies in both cases. And in both cases, the problem is partly one of representation. Neither observational astronomy nor navigation is simply a matter of observation and calculation. They are both essentially performative as well. One of the problems of standardisation that Cook and his fellow observers of the Venusian transit were unaware of was the individual variation of each observer in such things as timing. This is now subsumed under error theory and each astronomer has her or his own personal error rating, rather like a golf handicap, which puts them all on a par. Cook, by virtue of his training in

The Polynesian navigational system was essentially strategic, that is, it was concerned not with accurate calculation of position but with what to do in particular circumstances

surveying, hydrography and instrumentally based observations using sextants and the famous Harrison watches, seems to have restricted his performative understanding to pilotage. For Tupaia however navigation was very largely performative. Though it too had components such as etak and the star compass, these were abstract and cognitive.

The Polynesian navigational system was essentially strategic, that is, it was concerned not with accurate calculation of position but with what to do in particular circumstances. Together, etak and the star compass provided a framework that
A CHART
representing the
ISLES of the SOUTH-SEA,
according to
the Notions of the INHABITANTS OF
o-TAHEITEE,
and the Neighbouring Islands,
collected from the accounts of
TUPAYA.

Chart representing the Isles of the South-Sea ... chiefly collected from the accounts of Tupaya [sic]. Engraving by William Fadden, from John Reinhold Forster, Observations made during a Voyage Round the World, London, 1778. Reproduced by permission of the National Library of Australia.
enabled a Polynesian navigator to be constantly aware of his position and orientation. A basic necessity for navigating in addition to establishing position was to be able to estimate the distance travelled having compensated for the effects of current, drift, wind and speed. The Polynesian solution, *etak*, was performative rather than calculative. The navigator conceived of his canoe as stationary and imagined a reference island as moving backwards against the backdrop of the rising and setting points of the stars thus dividing the voyage into segments: *Etak* provides a framework into which the navigator’s knowledge of rate, time, geography and astronomy can be integrated to provide a conveniently expressed and comprehended statement of distance traveled. It is a tool for bringing together raw information and converting it into the solution of an essential navigational question, “How far away is our destination?”

The system is also essentially strategic. One strategy employed is the technique of ‘expanding the target’. Low islands can be easily missed so the target is expanded by looking for patterns of ocean swells, flights of birds, cloud formations, and reflections on the undersides of clouds. The islands are also in chains as a result of their formation at the edge of crustal plates, so the navigator can orient himself by intersecting the chain at any point. Another strategy is that outlined by Geoffrey Irwin. According to his model of the way the islands were colonised, it was essential to minimise wastage of resources, time and human life. He argues that this was best achieved by sailing against the wind and up the latitude on the outward journey, since it ensured an easy return journey. Irwin makes a good case for believing that the ‘first exploration of the Pacific was navigationally systematic.’ But most importantly Irwin enables us to see Pacific island navigation as performative. It is a set of open-ended practices or strategies for handling uncertainty rather than a set of fixed techniques, rules, charts or calculations.

When Cook’s representationalism and Tupaia’s performativity met in Tupaia’s chart they formed an unreadable black blob. Perhaps the question to ask is not, ‘why did Cook never ask Tupaia how he navigated?’ since this would, in all likelihood, have produced more misrecognition. A better question is ‘why did not Cook or any other investigator, till Thomas Gladwin in the late twentieth century, sail with the islanders to see their navigation in action?’ One might speculate that this requires the anthropologically reflexive stance of the trickster to question the interrogator’s own capacities.

Just as the trickster or the jester gives voice to the silences and highlights the méconnaissance underlying the king’s power by performing the part of the king, in this performance I have sought to break some of the boundaries between knowledge traditions by suggesting ways in which Tupaia could have acted like
Cook and by asking what it was that prevented Cook from acting like Tupaia. This type of performance, I would suggest by way of conclusion, is a way of enabling knowledge traditions to work together, by creating a space in which they can be performed together. 

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NOTES


5 Méconnaissance also means non-appreciation, misreading, ungratefulness, ingratitude. Méconnaitre means not to recognise, to disown, to disregard, to slight, to ignore, to misjudge.


9 This erasure is analogous to that of the technician in laboratory work see Steven Shapin, 'The Invisible Technician', American Scientist, 77 (1989), 554-63.


16 John Cawte Beaglehole (ed.), The Voyage of the Endeavour 1768-1771 (Cambridge: Hakluyt Society, 1953), p. 154. Beaglehole notes that in his journal, Cook first wrote that he had 'not the least doubt' that the Tahitians were experienced in undertaking lengthy sea-voyages, but then chose to be more circumspect on this point.

17 Frederick William Beechey, Narrative of a Voyage to the Pacific and Beering's Strait, 1825-28 (2 vols; London: Richard Bentley, 1831), vol. 1, pp. 235-6, reported a similar incident. Tuwarri a native of Anaa, or Chain Island, 300 nautical miles east of Tahiti was picked up by Beechey on an island some 420 nautical miles to the south east - a total drift of 600 nm, as Beechey had already sailed 100 nm towards Maitea to the south west of Chain. Interestingly, Tuwarri drew a chart of the archipelago and, like Tupaia, assigned each a name 'though he could never recognise them.'

18 Beaglehole (ed.), Voyage of the Resolution and Discovery 1776-1780, p. 87.


22 Brian Durrans, 'Ancient Pacific Voyaging: Cook's Views and the Development of

23 *Voyage of the Endeavour*, p. 291.


26 Beaglehole, 'Cook the Navigator', in John Vincent Stanley Megaw (ed.) *Employ’d as a Discoverer: Papers presented at the Cook Bi-Centenary Symposium, Sutherland Shire, 1-3 May 1970* (Sydney: A. Sutherland Council, 1971), p. 123. Maskelyne's nautical almanac was based on the Greenwich meridian and became commonly used from 1767 - hence the meridian was eventually adopted as international standard; see Derek Howse, *Greenwich Time*, p.66.


28 Beaglehole, 'Cook the Navigator', p. 124. This haphazard state of affairs is noted by Glynn Williams, ‘Seamen and Philosophers in the South Seas in the Age of Captain Cook’, *Mariner's Mirror*, 65 (1979), 3-22.


30 Villiers, *Cook*, p. 18.

31 Villiers, *Cook* pp. 25-6.


36 Woolf, *The Transits*, pp. 4. 15.


38 Woolf, *the Transits*, pp. viii, 197.


40 Cook, as cited by W.H. Robertson, 'James Cook and the Transit of Venus', n. 20.


43 *Endeavour Voyage*, p. 448: 'he [Green] had long been in a bad state of hilth [sic], which he took no care to repair but on the contrary lived in such a manner as greatly promoted the disorders he had had long upon him, this brought on the Flux which put a period to his life.'


46 *The Transits*, p. 148.
is no doubt his presence on board when the ship was in New Zealand was the greatest advantage, affording a means of communicating with the natives, which prevented the usual gross misunderstandings which arise as to the object of the visit of an exploring ship. Without him, even with Cook's humane intention and good management, friendly relations would have been much more difficult to establish.'

61 *Voyage of the Endeavour*, pp. 441-42.


69 Geoffrey Irwin, 'Against, Across and Down the Wind: a Case for the Systematic Exploration of the Remote Pacific Islands,'

The point is often made that the entry of Aboriginal art into public galleries has involved a fundamental shift in perception from the anonymous, scientific categories of ethnography to the status accorded the aesthetic art object. But in celebrating the recognition for contemporary Aboriginal art we need to be mindful that discourses of Aboriginality are constituted in and through colonial power relationships. Post-colonialism may have cleared a space for wide-ranging critiques but it has not undone or overthrown the hierarchies which allow the dominant culture to secure its own identity whilst selectively excluding other cultural practices. Indeed it may well be that the much-celebrated shift between the two bounded categories of ethnographic artefact and fine art object may actually lend support for the narratives of progress, which incorporate Aborigines within wider formations of the national imaginary.

This paper aims to unsettle and problematize these narratives by focusing attention on a third, more elusive term and ambiguous term, craft. In so doing, I do not want to project craft as a term of exclusion: all too often in focusing on marginalized terms, one merely replicates in reverse the skewed perspectives produced by earlier interpretations. My tactical use of the term craft, then, is not intended to create an alternative set of hierarchies through the privileged status accorded another set of discrete cultural practices. Rather my aim in reconfiguring craft is to explore the regional histories largely excluded from existing interpretations of Aboriginal art by what the Philippine writer Marian Pastor Roces calls, the 'amputating mechanisms at work in museological taxonomies.'

My paper draws upon a wider study aimed at recuperating the 'hidden history' of Aboriginal art in south eastern Australia. The idea that discourses of Aboriginality have imposed cultural hierarchies which have framed the selective response to Aboriginal art according to dichotomous oppositions has emerged in response to post structuralist thinking of the past few decades. If we consider, for a moment the usual binaries separating 'traditional' Aboriginal art from remote communities and contemporary art from the cities, we begin to see how restrictively these terms operate, encapsulating Aborigines within temporal and spatial boundaries that are inclusive and exclusive.

Translated into the regional history of the southeast, existing discourses of historical Aboriginality produce an apparent gap:
whilst knowledge about Aboriginal art in the nineteenth century continues to expand, and urban Aboriginal art gains increasing critical acclaim, little is known of the decades in between, from the death of the artists, William Barak and Tommy McRae at the turn of the century to the emergence of a contemporary Koori art movement in the 1970s led by artists such as Kevin Gilbert, Lin Onus and Trevor Nickolls—a gap which implies that traditional Aboriginal culture in the region died out, then re-emerged as if from a cultural vacuum, transformed into a post colonial culture of resistance.

The apparent historical absence I have identified mirrors, and in effect reflects the impact of government policies aimed at rendering Aborigines invisible. As W. E. H. Stanner has observed, for much of the twentieth century a 'cult of forgetfulness' erased an Aboriginal presence from the national psyche. Aborigines in the settled southeast bore the brunt of discriminatory policies: defined and categorized according to new, more scientific definitions of Aboriginality, excluded from missions and, in many instances, forcibly separated from their emotional attachments to kin and country. To rub salt into these colonial wounds, racial discourses have, until very recently, represented south eastern Aborigines as 'cultureless outcasts'. Whilst the art world venerated traditional Aboriginal art produced in remote communities, Aborigines living in the cities found themselves displaced 'between two worlds', neither black nor white, their cultural heritage relegated to almost complete obscurity within settler colonial politics of cultural identity.

In seeking to retrieve recognition for a dynamic Aboriginal presence in the south east, I do not mean to diminish in any way the legacy of anger and deprivation which is the direct outcome of generations of racial discrimination and oppression. Documenting the regional history of Aboriginal Australia intervenes in the colonial fiction that the only 'real' Aborigines with an authentic and traditional culture worthy of recognition are those living in more remote regions to the centre and north of the continent. The various objects with which I am concerned—small, portable seemingly insignificant items such as boomerangs, rush baskets, feather flowers and carved emu eggs—have long been overlooked by collecting and cultural institutions. Yet this array of beautifully crafted objects provide a remarkable insight into the cultural heritage of those Aboriginal people whom we now know as 'the stolen generations'. Like the biographies of the individual artists, these objects intersect with the events of colonial history.

Within the limitations imposed on a paper of this nature, I have focused on the work of two little known individuals: Wemba Wemba woman, Agnes Edwards and Wiradjuri artist Sam Kirby both of whom were associated with the mid-Murray township of Swan Hill, 300 kilometres north west of Melbourne. I aim to show
how they creatively responded to the limitations and opportunities offered by their particular circumstances, in town camps and in the pastoral industry living in dynamic co-existence with a settler colonial society. Outside the constraints imposed by institutions, Aborigines in the southeast never ceased to be involved in the production of cultural objects. These objects served multiple roles: inside the community circulating as toys and heirlooms, outside the community exchanged as gifts and commodities with members of the majority culture: missionaries, pastoralists, tourists, artists and dealers. My paper raises many questions for the writing of regional histories, how did craft practices evolve through the transformations effected by historical change and how might they work in particular ways to objectify identity for Indigenous minorities? In turn these questions raise a wider set of issues: how have the frames imposed by cultural and collecting institutions excluded recognition for craft practices and how might future curatorial strategies intervene in these historical narratives?

HISTORIES OF COLLECTION

I begin by examining how long-standing artistic hierarchies that differentiate between artefact/art object, fine art/craft and high art/popular culture have influenced the critical response to Aboriginal art and lent support for the discourses of Aboriginality that construct narratives of national identity.

Recent years have witnessed a growing interest in Aboriginal material culture: in place of earlier survey exhibitions concerned solely with fine art masterpieces we see an increasingly eclectic range of exhibitions. To name a few: Tandanya Aboriginal Cultural Institute, Canberra School of Art, the University of New South Wales, the National Gallery of Victoria and the Museum of Contemporary Art have all staged major exhibitions of fibre from

As evolutionism came to be regarded with increasing disfavour, anthropology viewed with growing scepticism the objectivity formerly thought to be contained within collections of material culture. Aboriginal material culture disappeared from view

Arnhem Land; in 1996 The Native Born at the Museum of Contemporary Art, Sydney juxtaposed bark paintings and textiles to explore their economic and spiritual connections to country, participants in the 1997 Venice Biennale included the Aboriginal painters, Emily Kame Kngwarreye and Judy Watson and the fibre of Yvonne Koolmatrie whilst the Campfire Group’s All Stock Must Go at the Second Asia Pacific Triennial at the Queensland Art Gallery (1996) confronted the (often ambiguous) relationship between Aboriginal art and the tourist
industry.

But it was not always so. Originally, objects produced by indigenous cultures were appropriated, collected and displayed heterogeneously, jumbled together like the 'summary of the universe' provided by earlier 'cabinets of curiosities'. Subsequently collections of material culture were ordered into taxonomic systems on the implicit assumption that they represented factual, objective data providing confirmation of evolutionary tenets. Yet, as Howard Morphy has observed in his analysis of the typologies implemented in the Pitt-Rivers collection at Oxford, the inherent reflexivity of these collections worked in the opposite direction, to undercut assumptions of primitivism and the unilinear progress of civilization with a cultural relativity which suggested both the unity and diversity of human culture.

Despite the major collections of material culture amassed by private collectors and institutions, during the following decades, interest in material culture waned. Tom Griffiths persuasively argues that 'The growing dichotomy between high and popular culture coincided in the first decades of the twentieth century with the height of social Darwinist influence in Australia ... [to give] particular authority to the Great Australian Silence.' With the establishment of the first Chair in Anthropology at Sydney University, functionalist anthropology emerged as a text-based, university discipline focused on the fieldwork and writings of the participant observer. As evolutionism could no longer sustain academic respectability, anthropology came to view with increasing scepticism the objectivity previously thought to be embodied in collections of material culture. Aboriginal material culture disappeared from view.

As the considerable literature on primitivism makes clear, it was the visual affinities which modernists located between their own aesthetic ideologies and the objects produced by non-Western and indigenous cultures which went some way toward undercutting evolutionism. Nor were these correspondences necessarily restricted to those who ascribed to modernist tenets. As a major patron of the arts and a trustee of the Felton Bequest, Baldwin Spencer, Director of the National Museum of Victoria, was amongst the first to recognize the creativity of Aboriginal artists, drawing parallels with Japanese, Chinese and British artists on the basis of technical ability and realism.

Primitivism was however betrayed by a paradox: Aborigines could be admired and romanticized as an exotic other but only when they were distanced in time and space from the modern world. 'Expectations of wholeness, continuity and essence have long been built into the linked Western ideas of culture and art' and in the response of both ethnographers and artists, authenticity was of paramount concern. For people 'without history', change was viewed negatively as evidence of acculturation and their capitulation to
capitalist forces. Also influential on the critical response to Aboriginal art was the growing concern with purism manifest in the new, scientific and biological discourses of Aboriginality which came to the fore by the turn of the century. As Nikos Papastergiadias observes, hybridity is one of the key axes through which discourses of purity and danger sustain positive and negative constructions of Aboriginality. When Baldwin Spencer stated in 1898 that 'In Victoria, there is not a single native who really knows anything of tribal customs,' he defined Aboriginal culture in a way that neatly coincided with government policies of integration and assimilation aimed at cultural genocide. By 1929, when the National Museum of Victoria staged the groundbreaking exhibition Australian Aboriginal Art the paradigmatic response was already in place: curatorial and critical responses recognized a regional cultural heritage from the past and art from remote communities but denied recognition for a dynamic Aboriginal presence in the southeast.

During the decades to follow, the very considerable achievements of nineteenth century artists such as William Barak, Tommy McRae and Mickey of Ulladulla were relegated to obscurity. When a fine art market for Aboriginal art emerged in the post war period, it was the art of remote communities, initially bark paintings from Arnhem Land and subsequently the acrylic 'dot painting' style initiated by Papunya Tula in the Central Desert—but not, of course, the innovative watercolours pioneered by Albert Namatjira—which were acclaimed by the art world, arriving in the southern capitals 'trailing clouds of authentic (traditional) culture.' Recognition for a contemporary Aboriginal presence in the cities, waited until the landmark exhibition 'Koori Art '84' at Artspace, Sydney where the first generation of urban Koori artists including Fiona Foley, Trevor Nickolls, Lin Onus, Raymond Meeks, Avrill Quaill and Gordon Syron showed with artists from Central Australia and Arnhem Land.

RECUPERATING CRAFT

In his analysis of the art/culture systems governing the collection and display of indigenous objects, James Clifford makes clear the categories which hierarchically differentiate between the objects produced by indigenous cultures. In his semantic square it is the authentic '(scientific) cultural artifacts ... [which will be promoted to the status of authentic (aesthetic) works of art. Other collectibles—mass-produced commodities, 'tourist art,' curios, and so on have been less systematically valued'. Clifford concludes, that, within modernity, the categories and values imposed on indigenous objects always reflect 'the limits of ideological consciousness ... initial binary oppositions can, by the operation of negations and the appropriate syntheses, generate a much larger field of terms which, however, all
necessarily remain locked in the closure of the system.\textsuperscript{12}

Craft, as art historian Sue Rowley observes, is ‘everywhere, but also nowhere’ in Clifford’s semantic square.\textsuperscript{13} ‘Historically, [she argues] the boundaries between art and craft are constructed discursively’ through a series of dichotomous oppositions: if art is tied to modernity, rationality and progress, craft is systematically positioned as non-intellectual, conservative, and anti-modern.\textsuperscript{14} Equally the objects produced by these practices might be said to operate within different categories: whilst the unique art object produced by the artist/intellectual supports the myth of the avant garde, craft objects are, all too often, linked to the past, skill-based world of the rural artisan or, alternatively with indigenous cultures. Art/craft debates impinge on and are inflected through the wider social formations produced by the radical changes of modernity. Rowley points out that craft is defined as pre-modern precisely at the moment in time when modernism positions itself in relation to an emerging urbanized working class and the general commodification of mass culture. Moreover, as many writers in this field have argued, historical constructions of craft are inextricably linked to another social group and another arena of practice: within the domestic sphere of women, the time consuming labour of needlecraft becomes the quintessential symbol of femininity.\textsuperscript{15} Craft is thus categorically defined through its association with a series of subordinate others: artisans, working classes, women and non-Western cultures.

Of course, it is a mistake to see discourses as totalizing: they are always constituted through an historical matrix. Clifford is not concerned with minority histories that take place at the level of everyday life, but with charting an institutional response—the view from the top down. He could be accused of failing to take account of Indigenous perspectives, local knowledges and the meanings that accrue in the process of cross-cultural exchange. Nevertheless we need to trace the impact of these long-standing boundary disputes on the critical response to Aboriginal art. Howard Morphy recounts the situation at Yirrkala in the first decades of this century when missionaries viewed Yolngu handicraft ‘not for its own sake but as an instrument of moral development and as a means to integration’ within the wider community.\textsuperscript{16} In this instance, craft might be said to be positioned constructively within missionising discourses but in the critical response to the Hermannsburg watercolourists, modernists used craft pejoratively to imply a slippage toward the feminine and the commodification implied in the exchange with tourism.

In the changing response to Aboriginal productive endeavour, then, it is the shift from the artefact, operating like a metonym for a past, hunter-gatherer existence to the modernity implied in the art object, with all its associations with the
avant garde and authorial creativity which is privileged as a mark of progress. Caught in the space between these bounded categories, we see that craft will come to be positioned in antithesis to modernity, inevitably tied through its functional role and skill-based practices to ideas of ‘tradition’—with all the difficulties that this term engenders for contemporary manifestations of indigenous cultural identity. The result is craft practices in remote communities are viewed as inherently more authentic than in the southern states. Contemporary revivals and reinventions may be scornfully evaluated as ‘an echo of an earlier supplanted existence ... [and an] atrophied version of the way things were—a kind of Aboriginal Morris Dancing’—a critical response which defines Aboriginal subjects through the values attributed to their objects within dominant colonial discourses.¹⁷

A need exists then for a politics of representation for Indigenous craft practice. In place of any simple distinction between the use value of objects or their relationship to commodity exchange, I am concerned with the ‘symbolic capital’ that accrues around these objects and their significance in the politics of cultural identity at work in colonial regimes. Contributing to these debates Marian Pastor Roces draws upon linguistics to contrast the superficiality of the category ‘art’ with the layers of meanings cohering around the term, ‘craft’.¹⁸ Craft’s heterogeneity she argues, represents the very means of recuperating an Indigenous presence by undoing the mechanisms at work in a multiplicity of modernisms: subjective, ideological and institutional. Thus, the idea of craft emerges as a practice of inter-textuality, whose traces, echoes and repetitions, restructure and refer to a ‘pre-existing world of objects’ Craft is located outside institutional parameters, as a domain or estate which is simultaneously practice, concept and place. Within the domestic sphere, she suggests, craft lends meaning to objects through the layers of memory associated with individual and community identities; exchanged as a commodity in the public realm, craft mediates the social landscape between colonizers and colonized to contest imaginary formations of national identity. Craft thus becomes a means to renegotiating relationships between the tribal and the metropole. In an Australian context recuperating a politics of representation for craft straddles the gulf between Aborigines’ historically distinctive experiences in remote, rural and urban settings.

NARRATIVES OF IDENTITY IN THE SOUTHEAST

Agnes Edwards, the first of the two artists with whom I am concerned here, was born at Mellool Station south of Swan Hill and, as a young woman, she married Harry Edwards from the nearby Muti Muti group. In recent years, as Aboriginal people in a spirit of self determination have themselves undertaken historical
research, the precise details of Agnes Edwards' life—once taken as factual truths—have come to be questioned. Nevertheless, these revisions, Agnes Edwards remains a pivotal figure in the history of Swan Hill for both Aborigines and the wider community. With her introduction to Governor Hopetoun in the 1890s, Agnes Edwards attracted attention as the last of the 'full-blood' Aborigines in the region. Following her death in 1928, her status was such that a memorial was erected to Agnes Edwards as the 'Last Queen of the Moolpa Tribe' by the Australian Natives Association. Whilst such honours are appreciated by many, they are fraught with colonial ambivalence: by relegating Aborigines to the prehistory of white settlement they deny the presence of contemporary leaders and lend support for policies of assimilation.

However, my primary concern here is not with a reconstruction of Agnes Edwards' life but to place her cultural practice within a particular lived historical reality. In the latter part of her life, following the death of her husband in 1912, Agnes Edwards lived in a town camp improvised in the tradition of vernacular architecture from materials to hand: canvas, scrap timber and flattened four gallon tin drums. Typically such fringe camps were situated on the banks of rivers. Throughout the southeast rivers continue to represent a sustaining spiritual resource and a locus of cultural associations for Aboriginal people. Agnes Edwards' camp was no exception, sited on the Speewa anabranch of the Murray River in an area known colloquially as 'Black Aggie's Swamp'.
Traditionally town camps are a litmus to a bitter colonial history—the unwelcome outcome of racial politics that sought to exclude Aborigines from permanent residence in country towns. A more constructive response might recognize that, when Aborigines chose to live in such camps, free from the restrictions and regimented life of missions and stations, they maintained a greater degree of dignity and autonomy. Indeed Peter Read's history of the Wiradjuri people argues that the fringe camps, formed in the southeast, in deliberate defiance of restrictive government policies and local bureaucracies, parallel and predate by several decades, similar homeland movements in remote communities.

From conditions of relative poverty, and within historical conditions of racial discrimination and oppression, Agnes Edwards held a position of considerable respect through the invaluable contribution she made as a midwife to women in both the Aboriginal and non-Aboriginal communities. Drawing upon her intimate knowledge of the landscape, Edwards was able to augment her income with the sale of produce such as fish, ducks, eggs and rabbits. And in addition she produced an extraordinary range of crafts: feather lures and feather flowers, rush baskets, embroidery and small draw-string purses made from the skin of water rats and much admired by women from the wider community. Through her initiatives Edwards achieved a considerable degree of independence. Jan Penney records that she 'travelled in style in her buggy into Swan Hill every Saturday morning to sell her craft work and buy supplies'.

Through her extensive connections Agnes Edwards was able to maintain a circle of friends amongst women from the wider community. Operating from cultural values grounded in reciprocity, Edwards repaid their hospitality and kindness with gifts of fish, rabbits and feather flowers. In this way, by choosing to give food and objects which were highly esteemed and valued by their recipients, Aboriginals incorporated members of the majority culture within their own exchange relations: gifts implicated individuals in future relationships of reciprocity and indebtedness. And when women displayed Aboriginal feather flowers as part of their domestic décor, they incorporated an Aboriginal aesthetic into their homes.

Until very recently cultural and collecting institutions have largely overlooked the fibre work of Aboriginal women—a bias attributable to the ephemeral nature of fibre objects and the androcentric nature of early anthropology. Recent studies have overturned these assumptions recognising that a fibre item, no less than a boomerang or bark painting, is incorporated within the systemic meanings of Aboriginal culture. Early ethnography records many instances of feathers used in a ritual context and as commodities for exchange. In the southeast, for example, Aborigines carried feather whisks and women wore til-bur-nin or feather aprons in dances.
Feathers also operated as signs for intertribal meetings: attached to spears, they signalled a challenge to other tribes; along the Murray River, white cockatoo feathers worn in the hair denoted peaceful intentions.

The feather flowers produced since the late nineteenth century emerge from these earlier contexts and occur throughout Australia modifying and transforming an existing set of practices in response to changed historical circumstances. Usually early collections of such objects are characterized by a lack of identifying provenance but in this instance, we are fortunate that the status accorded Agnes Edwards probably ensured that her feather flower posy, in the collection of the Mildura Arts Centre, would be attributed. The posy typifies the feather flowers made by Aboriginal women in south eastern Australia with white and pink feathers from adult galahs and orange from young galahs bound together with the same looped buttonhole stitch used in coiled baskets and string bags from this region. Of course the difference is that, whereas feather flowers produced in remote communities continue to be used in ceremonial contexts, the feather flowers produced in the southeast for exchange as commodities fulfil a new role as decorative tableaus within the domestic sphere. Once denigrated as evidence of colonial dominance, such adaptations are better seen as a form of colonial mimicry: like the evident hybridity of Albert Namatjira’s watercolours they are "almost
the same but not quite; selectively appropriating from a Western genre, but from an Aboriginal world view.24

What roles did such crafts play in Aboriginal society? Talking with Wemba Wemba elder Nellie Moore, who grew up in the 1950s at Pinkeys, a fringe camp on the opposite side of the river in New South Wales opened up a rich store of memories. She fondly recalls her grandmother, Mary Moore, selling small and large posies of feather flowers for 7/-6 and 10/- each in local stores— a not inconsiderable sum when compared with the £7 to £10 basic wage then earned by men working in the pastoral industry. Whilst Aborigines had long been incorporated within a colonial economy, the production of feather flowers, rush baskets, boomerangs and carved emu eggs enabled Aborigines to retain a greater degree of independence by allowing them to avoid a Protestant work ethic of disciplined, organized labour. The production of such items also served to reinforce the continuation of cultural traditions. As oral histories reveal, women played a significant role as the central focus of Aboriginal households: they maintained relations with kin, supported the family economically when men undertook itinerant employment and in these circumstances it was women who protected children from being taken away. As the story-tellers of the community, women relayed stories from an earlier hunter-gatherer lifestyle and their shared experience of colonial history, and in this way, reinforced the sense of belonging which formed the basis of an Aboriginal sociality. Children's experiences were, of course, individual: whilst one may recall the feather flowers made as toys by an uncle, another will remember his mother’s stern admonition to strip the feathers from birds he had hunted with a slingshot for later use in posies of feather flowers. Through such a wealth of experiences, embedded in memory, children acquired a strong sense of their cultural identity that enabled them to withstand the pressures imposed by a colonial society.

Feather flowers were not just a means of economic survival however, they were equally significant as a form of aesthetic expression. In our conversation Nellie Moore remarked.

They were for food, that was to buy the flour, tea, sugar and meat... to provide the food on the table. They use that as an art thing now and it’s really not, it’s an industry thing... It was something that they were good at doing and to say that they done that and they got a joy out of making that... [Before] it was a decoration for corroborees [but in the fringe camps] we had nothing so we had to have something to look at... If someone made a feather flower they might’ve gone out and got a crane [feather] ‘Oh how beautiful.’ you’d say because you never seen anything like that. Even if someone made a dress you know, they sewed it themselves. They did the embroidery stitching and the stitching was so fine my mum used to do, it looked like it was done by machine... and all the jumpers used to be hand knitted... because you never had those decorations you’ve got
now... where you lived on the river bank you had nothing, you just had the bare essentials [so we'd] go and get gum leaves [and put feather flowers in the hut].

Nellie Moore's narrative adds to our understanding of the roles which craft practices played in the lives of Aboriginal families: economic, aesthetic, and political. Situated within their regional domain, fringe camps offered Aborigines a degree of autonomy within a colonial realm where they were able to live with relative independence maintaining many elements of a small-scale society. In this setting, the landscape provided some compensation; mediating continuities with the past, feather flowers mitigated the present. Aboriginal people may choose to deny the hybridity of their cultural practices through statements such as 'We've always done things this way' but Nellie Moore elects to historicize the cultural production of feather flowers, differentiating between their use in a variety of contexts; as part of ceremonial life, as an industry and as an art form.

Philip Clarke's research amongst Ngarrindjeri at Raukkan (Point McLeay) supports this interpretation. Despite state intervention aimed at modifying Aboriginal culture by changing its perception of time and space, he found that Aboriginal extended families tend to use the rooms in their homes as public spaces, decorating the interior in a culturally distinctive way.

Many homes of Aboriginal people I have visited feature large displays of family photographs on walls and in china cabinets. Often, objects such as clubs, boomerangs, sedge mats and baskets, feather flowers, painted stones, trophies and certificates, also decorate the rooms. The economics of decorating the home means that generally the objects must either be inexpensive or have been made by the owner or a relative. Most Aboriginal families take considerable pride in exhibiting a selection of objects that proclaim their Aboriginality. Household items associated with the pre-European material culture of the Lower Murray are considered to represent their links to the past Ngarrindjeri culture. For instance, Aboriginal visitors to houses of other community members may remark, when inspecting a sedge mat hanging on the wall or a bunch of feather flowers in a vase, that a particular ancestor of the maker was also a good basket-maker or feather-flower maker. Continuity with the past is stressed by Aboriginal people through knowledge of their kinship. Both objects and photographs are used to demonstrate that people 'know their culture'. In many Aboriginal homes, the decoration openly reflects how Aboriginal people perceive their Aboriginality, in both the local and national arenas.

Clarke's observations suggest the multiple roles fulfilled by Aboriginal craft practices within a domestic space where displays of heirlooms are emblematic of the past through the collective memory associated with individuals and their location within contact history. Like Marian Pastor Roces, Clarke suggests that these commodities
bridge the gap between private, localized experiences of ethnicity and the symbolic realm brought into play in the public arena in association with the more politicized affirmations of Aboriginality which emerged in association with the land rights movements of the 1970s. I turn now to this more contemporary era.

ABORIGINAL AND NATIONAL IDENTITY

The work of the Wiradjuri artist, Sam Kirby, further suggests how craft practices in the rural southeast might serve to objectify identity as both a private and public affirmation of ethnicity. Born in 1901, Sam Kirby was taken into care at the infamous Kinchellah Home near Kempsey, New South Wales. When he subsequently returned to Wiradjuri territory in his youth, he was fortunate to be brought up by his adoptive uncle, Alf 'Knocker' Williams with whom he worked in the pastoral industry. Undoubtedly the experience of institutionalisation caused alienation and trauma to Aboriginal children denying them access to their families and wider bonds of sociality with the Aboriginal community but allowance also needs to be made for processes of compensation and adjustment. Parallels with the Kimberley artist, Rover Thomas, further demonstrate how involvement in the pastoral industry could assist in the maintenance and extension of cultural knowledge: as men followed the cattle from one waterhole to another, they maintained connection with the 'mura' or Dreaming Tracks.

Boomerangs feature as one of the primary objects Kirby produced. For Aborigines in the southeast, the returning boomerang is invested with symbolic power as part of their distinctive regional heritage—despite its appropriation as a national icon. The wooden artefacts for which the southeast gained renown in the nineteenth century were engraved in complex compositions of chevrons, lozenges and zigzags distinctive to different regions—designs which empowered warriors and gave them identity and status in their community. Equally the finely crafted pokerworked boomerangs produced by Kirby in the 1960s and 1970s, fulfil a not dissimilar role as a contemporary expression of identity and difference within a colonial regime. Although some evidence exist for Aboriginal burnt designs in artefacts, the pokerwork technique employed by Sam Kirby derives from several sources: encouraged by nineteenth century missions, intrinsic to the pastoral industry where it served as a means of branding animals and identifying personal equipment and a popular form of folk art amongst turn-of-the-century itinerant workers.

Typically Kirby divides his boomerangs symmetrically with four pairs of concave arcs engraved with geometric forms denoting his Wiradjuri domain. These paired elements, reminiscent of the carved trees unique to the region, are interwoven with the flora and fauna to represent a cultural landscape. In the most prominent
position, at the apex of the boomerang, Kirby depicts the Australian continent with his leitmotif of hands clasped in friendship superimposed. Across the map of Australia and inside the boomerang Kirby has engraved the text, 'Australia, Friendship, No colour bar'.

In one sense the boomerang can be seen to affirm Kirby's ongoing spiritual connections to landscape as an embodiment of identity. Operating both as an artefact and art object the boomerang reaffirms Indigenous connections to country established over millennia prior to colonisation. For Aborigines in the southeast, landscape is power: inscribed with the presence of ancestral stories, shared communal experiences and the relation of individuals to particular historical events and sites. The boomerang also reads as a sign of Aborigines' political struggles for civil rights and representation, reappropriating the symbols of the nation state in the fight for freedom, equality and justice. The particular circumstances in which this boomerang was manufactured and presented as a gift to Greek born Alick Jackomos, a lifelong supporter of the Aboriginal cause, soon after his arrival in Swan Hill as Aboriginal Welfare Officer also bear scrutiny. That the boomerang was presented as a gift in 1967, the year of the successful Commonwealth Referendum granting citizenship to all Aborigines, highlights the significance of such objects in exchange relations and their symbolic role as an expression of individual and community identity at a time of changing Aboriginal consciousness.

Reprise, rather than originality, characterizes Aboriginal craft. Driven by an Aboriginal world view, key themes recur. As Janet Wolff points out, the emphasis placed upon individual creativity in the West tends to skew our understanding, but cultural production is more usefully thought of as an ongoing collaborative process where meanings accrue over time and space. Artists and their audiences are
involved in cyclic relationships. Contrary to modernist conceptions of development and progress, Bennetta Jules-Rossette’s study of tourist art in Africa found meanings flowing in a cyclic pattern: commodities embody particular values for the community concerned; in exchange they signal a further range of meanings and in turn, artists respond to, and mirror, the expectations of consumers. In craft practice repetition of content and style, serves to relocate art in the public realm and enables audiences to engage as receivers and respondents. It is not surprising that Kirby’s carved emu eggs encode the same sign system. Echoing the symmetry found in his boomerangs, the emu eggs are divided bilaterally with his totem of the Morning Star at the top and particular plants either side. Frequently the darker side of the egg will depict a lone Aborigine fishing in the river surrounded by animals, birds and dense forest whilst the lighter side might represent a founding image from colonial history such as the arrival of Cook in Botany Bay superimposed across the continent of Australia with linked friendship hands and heraldic Aboriginal artefacts beneath—the entire illusion of reality carved through the layers of hard, brittle shell with consummate skill.

The idealized image of the Aborigine as ‘noble savage’ forms a recurring theme throughout Wiradjuri art appropriated from the colonial stereotypes available through school texts and the popular illustrated press. In the past anthropologists have dismissed such nostalgia as an illusion: writes Marie Reay, ‘without hope for a different future, [Aborigines] look backwards to a Golden Age which is believed to have existed in living memory.’ But the ‘culture of poverty’ position she and others have adopted denies the historical consciousness of Aborigines in the south east, and their many creative adaptations in the face of rapid cultural change. There is indeed an element of nostalgia in the work of Kirby however this does not necessarily invalidate Wiradjuri art as inauthentic. Nadia Seremetakis, writing on the part played by the senses in the construction of material culture as historiographic space, takes issue with the tragic and negative associations invoked by the Western idea of nostalgia as a sickness or maladie du pays. Like Marian Pastor Roces she offers a constructive reading of nostalgia as a means of enframing the past. In this instance, the trope of the Aborigine as noble savage operates as an enabling device: a representation which empowered Wiradjuri by sustaining continuity with the past during a period of continuing discrimination and oppression.

Equally the image of Cook arriving in Botany Bay must be located within the growing corpus of Aboriginal stories which surround key figures from colonial history: Queen Victoria, Captain Cook and Ned Kelly. As Deborah Bird Rose makes clear through her analysis of these stories
'each individual's lived experience is both personal and shared; each person's past is both unique and collective.' She contends that the Captain Cook stories relayed by Hobbles Danayari of the Yarralin people, address the moral relationships produced by the act of dispossession, drawing attention to the gap which exists between the rhetoric of assimilation and the myths of egalitarianism which underpin an Australian ethos. In Lacanian terms sites such as Botany Bay are overdetermined, burdened with 'a double meaning': standing at the same time for 'a conflict long dead' and 'a present conflict' —that is, for that process of condensation and displacement which occurs through the ideological contradictions incorporated within a colonial context. Through his representation of the Endeavour's arrival in Sydney Harbour Kirby 'reclaim[s]...social and cultural identity through an appropriation of the moment in which lived experience is symbiotically linked with time and others.' Set against glorious images of clouds, billowing sails and rolling waves, time is mobile, both past and present. In some images Cook's arrival is located in the past with Aborigines watching from the foreshore; in others his arrival is pursued into the present as when the Endeavour passes before a lighthouse. Kirby's work plays upon a deliberate ambiguity. Through his appropriation of historical narratives and emblems of the nation state Kirby appears to reaffirm settler colonial narrative of identity. But in reality he subverts these narratives, retelling the story from below, drawing attention to the gap between the rhetoric and reality of the universal democratic ideals of equality and freedom and
the exclusion of Aborigines from representation in the modern nation state.

**REFRAMING CRAFT**

Despite the widespread acclaim and recognition for contemporary Aboriginal art it is evident that, in the paradigmatic shift from ethnographic artefact to art object, art world systems have revalued Aboriginal objects according to their own aesthetic criteria. In the binary division which prevails between traditional and contemporary Aboriginal art, there is a sense in which the critical, curatorial and scholarly responses have overlooked a colonial context for Aboriginal art. By arguing for a craft problematic, this paper intervenes in these long-standing boundary disputes. In place of the evolutionary assumptions that relegate craft practice to the unfashionable periphery of cultural production as an anachronistic and conservative residue of the past, the minority history I have examined calls for a social history of Aboriginal art arising from the colonial dialogue between black and white.

Identifying the hidden history of regional Australia establishes the cultural continuity of the southeast. Aborigines in the south east are not the hapless victims of colonial stereotypes. Like Aborigines elsewhere, experiencing radical change, Aborigines in the southeast drew upon the landscape as a spiritual and economic resource and a means of adjustment and adaptation that allowed for the transformations effected by historical change. In the personal philosophies of practice articulated through these artefacts, Aboriginal culture is performed not just conceptualized. It is culturally constituted through the actions which actively link individuals to their community through a particular lived relationship to reality. The Aborigines with whom I am concerned are not in some way separated from the experience of modernity. Rather we see how craft practices represent a strategic intervention at the level of everyday life, that enabled Aborigines to incorporate an emerging Aboriginal nationalism. At a time when assimilation made any overt display of Aboriginality well nigh impossible, it seems craft practices had the effect of breaking down barriers, insouciantly slipping past the discrimination and oppression encountered in the wider community to enter the national consciousness.

The history of craft practice I have examined has both historical and contemporary significance. Contemporary Koori art from the cities did not emerge out of nowhere fully formed as a post colonial expression of resistance. Its origins lie in ancestral connections to country, in a cultural heritage forged against the grain of colonial history and in the land rights movements of the 1970s. Elaborating upon this background in greater detail, a great many urban Aboriginal artists including Fiona Foley, Robert Campbell Jnr, Lin Onus, and Ian W
Abdulla have remarked that it was their experiences as children observing and participating in the production, decoration and display of artefacts with family members that provided them with a strong sense of their Aboriginality. It is ironic that involvement with the production of tourist souvenirs—viewed with disdain by art world systems—contributed to the strong and abiding sense of cultural identity that enabled Aborigines to survive generations of oppression and discrimination. In the south east as in remote communities, what Peter Wollen terms 'para tourist art' provided Aborigines with the opportunity to expand the 'ambition, complexity and scope of their work' through new institutional structures of support that were 'ambiguously enabling and supporting'. Craft practices provided the platform for a contemporary Aboriginal artistic expression.

Dismantling the hierarchies dividing art/craft, artefact/fine art and fine/popular culture allows for a more open ended dialogue about discourses of Aboriginality. Yet despite institutional initiatives dedicated to a more dynamic and inclusive representation of Aboriginal culture, the majority of public collections remain focused on canonical works of art. In the past, cultural commentators have called for the inclusion of acrylic 'dot paintings' in museum collections, equally we might call for the greater inclusion of Aboriginal crafts in the collections of art galleries. Such a curatorial strategy would not be restricted to a few key works but take the form of a radical intervention at all levels of the collection. Such a program might offer the opportunity for a critical rethinking of the frames which implicitly govern collecting and exhibition policies of art institutions. If, as Dipesh Chakrabarty commented in an earlier issue of this journal, 'History is a subject primarily concerned with the crafting of narratives' then inserting minority histories of craft practice into the collection and exhibition program of public galleries intervenes in the narratives of progress that inform discourses of Aboriginality. A more creative and imaginative history of Aboriginal art would give voice to the heterogeneity of Aborigines' distinctive historical experiences and their political struggles for recognition. In this more complicated and contested picture of Aboriginal creative endeavour, a bark painting, an acrylic dot painting, an urban installation and a pokerworked boomerang represent different, but equally significant expressions of cultural identity and difference.

**SYLVIA KLEINERT**

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ACKNOWLEDGEMENTS

Assistance from the Humanities Research Centre allowed me to present an earlier version of this paper at the conference for ‘Science and Other Indigenous Knowledge Traditions’ at the Cairns Campus of the James Cook University in 1996. A Fellowship at the Centre for Cross Cultural Research allowed me the time to revise the paper for inclusion in a special edition of Humanities Research. The research for this paper could not have proceeded without the support and interest of members of the Swan Hill Aboriginal community: Doug Nicholls, Nellie Moore and Lucy Connelly.

NOTES


7 Eric Wolf, Europe and the People without History (Berkeley: University of California Press, 1982).


10 Clifford, On Collecting Art and Culture,’ p. 225.

11 Clifford, ‘On Collecting Art and Culture,’ pp. 222-223


15 Rowley, 'Positioning craft as cultural practice,' p. 12.
23 Gerrard Krefft 'On the Manners and Customs of the Aborigines of the Lower Murray and Darling,' *Transactions of the Philosophical Society of New South Wales* (1862-1865) p. 364.
26 Philip Clarke, 'Aboriginal Use of Space in the Lower Murray, South Australia,' Paper delivered at the Conference of Museum Anthropologists in November 1993.
32 Rose, 'Remembrance,' pp. 143-145.
34 Rose, 'Remembrance,' p. 135.
35 Peter Wollen *Raiding the Icebox: Reflections on Twentieth Century Culture* (London Verso 1993), p. 196
Timing is all-important for exhibitions. The placement of *Papunya Tula: Genius and Genesis* as the Art Gallery of New South Wales’ main Olympic event bespeaks a desire to exhibit Aboriginal culture to international visitors as among the best of all Australian culture. During the Games few people visited the exhibition. Indigenous cultural heroes were no match for Indigenous sporting heroes like Cathy Freeman. She, the papers suggested, by bringing the nation together as one mob of barrackers, had taken a giant leap towards reconciliation. But David Williamson rightly warned that “much as it made us feel warm and progressive as we cheered Catherine’s victory, we recent Australians have no real right to call her ‘our Cathy’ or celebrate her victory deliriously as if it were our own. Until we do complete the process of reconciliation, she’s nobody’s Catherine but her own, her family’s and her people’s.”

The same might be said of the Pintupi, Warlpiri, Luritja, Anmatyerre and Arrernte people whose art graces the walls of *Papunya Tula*. Theirs are Cultures within a culture: focussed, strong, Indigenous cultures persisting within the weaker, dispersed and multi-ethnic farrago that is modern Australia, which now claims them. As is often stated, the paintings on board and canvas of Papunya Tula exist only to communicate from Culture to culture: because the outside wanted them, because the old people realized painting could help white Australia understand the Indigenous Culture within.

To its credit the Sydney gallery and its Indigenous curator Hetti Perkins have done far more than assemble a predictable survey aimed at the broad public. Both the show and its splendid catalogue are full of riches, even for initiates of Papunya art. The drawcard of the exhibition is the unprecedented chance of seeing a large collection of early ‘boards’. These are the paintings on irregularly-proportioned, small sheets of masonite that initiated the movement in 1971-72. The boards began to achieve cult status in the late 1980s, when histories of Papunya Tula began suggesting their exceptional nature.
Limited in number (between 600 and 1000), intricate in design, they possessed a startling variety of designs and stories, some of which were said to breach desert protocols for divulging sacred information. This was a factor soon corrected, but one which helped make the early boards irreplaceable. Meagre, hard-won profits saw the boards supplanted by the expansible support of stretched canvases, and Papunya art boomed in scale. In the late 80s the boards were becoming museum-pieces, and state galleries scrambled to buy what they had neglected in the 1970s, purchasing clutches of boards as the symbolic seed-beds for their Western Desert canvases. In the new millenium, with auction-houses like Sotheby's organizing sales of "Important Aboriginal Art", the most valuable works are early Papunya boards (Johnny Warangkula Tjupurrula's Water Dreamings in the exhibition made just under half a million dollars in mid-2000).

The Papunya boards function culturally as the new Australian antiquities. Just thirty years old, most of their authors, middle-aged initiates when painting them, have sadly now passed away (Warangkula and Ronnie Tjampitjinpa are exceptions). Aura is in abundance here: these comparatively unedited images have a direct relation to ceremonial designs for body and sand painting of incalculable antiquity. This idea helps invest the boards with ritual and visual authority. Like old Arnhem Land barks, they seem physically less like exchanges with Euro-American modernity than the later big canvases. It is astonishing to see such an ensemble.

Occupying the first two large rooms in the exhibition, the sixty-odd boards (and supports like the schist tjuringa-shapes of Kaapa Tjampitjinpa) strike one, in an art-historical sense, with the freshness, quirkiness and non-systematicity of their designs. Any one of them (for example Mick Namarari Tjapaltjarri's 1972 work featured on the cover of this issue) is more interestingly unorthodox than most standard Papunya-school canvases post-1980, even if they lack the visual gravity conferred by scale in the Tingari-cycle site-and-path paintings that define the Pintupi contribution of the movement in the 1980s.

Over half of the ten essays in the outstanding catalogue throw light on this moment of 'genesis', through to the beginnings of the outstation movement. There is an album of moving texts provided by the former art advisors Geoff Bardon, Dick Kimber, John Kean, and Daphne Williams (the latter as recorded in interview with Hetti Perkins). Actually every one of the ten essays in this book is substantial, there are no duds. Vivien Johnson writes at the top of her form, and Fred Myers gives a preview of his new book on the developing market for Papunya art. Commissioning Paul Carter and Marcia Langton to write on Papunya was a great move, and they do not disappoint: Carter breaks new ground by attempting to specify and interpret, via Bardon's un-published writings, just what
occurred in the first months of painting in the squalid polycultural ‘death camp’ (Bardon’s term) that was Papunya in 1971. All of these essays give a mythopoetic and writerly quality to the book. But they hardly, as Nicholas Bothwell opined, produced an air of unreality broken only by the Aboriginal intellectual Marcia Langton: she, no less than the somewhat Aboriginalized art advisors, is in awe of the artists’ achievement in transforming country and myth into paintings of unique resonance. It is always challenging to decipher the curatorial stresses in exhibitions, even ones so magnificent as this. *Papunya Tula* emphasizes not only the start of the movement (as expected), but its recent past and implicitly, its future prospects. I was surprised to see two large rooms (after four devoted to the mid-70s to early 90s work that constitute the mainstream) given over to paintings made in the last two years. This means the exhibition closes on a weaker note, where selection by visual excellence has given way to commercial realpolitik. *Papunya Tula* went through some dark days in the early 1990s, due to a combination of the death of senior painting-men, the move of key artists beyond the co-operative’s dealer network, and commercial competition provided by the emerging Yuendumu, Balgo and Utopia art movements. The leading *Papunya Tula* dealer Gabrielle Pizzi was concerned to see a new generation of *Papunya* artists emerge. This exhibition does not miss the chance to proclaim that they have done so. In these late-90s rooms, resurgent first-generation painters Mick Namarari and Ronnie Tjampitjinpa (and the late Yala Gibbs and Timmy Payungka Tjapangati) are strongly present. Their work makes a new departure: the replacement of grids of interlocking roundels (that comprise the classical design for Tingari stories) with a new design. One might call it a rectangular maze-pattern. It covers the painted field with cells of parallel lines which deviate and merge in places. Perkins and Hannah Fink relate it to the ‘interlocking grid pattern’ of certain early boards and artefacts of the westernmost Pintupi. In the hands of the young artist Ray James Tjangala this motif achieves a crisp resonance, still in keeping with the recognized *Papunya* aesthetic of technical exactitude. But generally the exhibited works of the last two years seem a mixed bag, in need of rigorous editing. At the risk of political incorrectness, I suggest the substantial wall-space given to the main new group, Pintupi women, needs to be justified curatorially. The avenue of the catalogue was available to detail their differing aesthetic and the interesting history of their involvement, but apart from two pages on the women by Vivien Johnson, the opportunity was not taken up.

When too much space is given to the end what suffers is the middle: the great experimental canvases that so electrified the art world in the 1980s. It seems incredible that the famous Warlpiri artist Michael Nelson Tjakamarra is given only one work (admittedly a masterpiece, the
iconic *Five Dreamings* of 1984), whereas the darling of the Sydney curators, the Pintupi painter Mick Namarari, is given fifteen. Pansy Napangati, who was the most productive innovator at Papunya at the end of the 1980s, is present in just one work and her few female peers of the day are not shown. While Clifford Possum Tjapaltjarri and his brother Tim Leura Tjapaltjarri are well represented (especially through the legendary Warluguling collaboration of 1976), there is another great lacuna in the exhibition: the 'truck-size' painting from the National Gallery of Victoria, the astounding Napperby Death-Spirit Dreaming of 1980. Even at seven metres it could have fitted in the central room that is graced by a temporary ground-painting in sand and ochres. The exhibition privileges the 'classical', severe Pintupi tradition of Papunya Tula art.

Absences are always felt when an exhibition takes on the burden of dealing in icons. But there are many things made famous through reproduction to gladden the viewer's eye. The room with Uta Uta Tjangala's magisterial *Yumari* and *Old Man Dreaming* is a highpoint of the show. *Yumari* in paint and canvas is enormous, in burning reds and blacks, and contains an indelible lesson in the giant figure of the old man and his member, distended in punishment for a wrong-way sexual affair. Curiously, three leading non-Indigenous interpreters of Papunya art witnessed the collective making of *Yumari* under Uta Uta's supervision in 1981. The anthropologists Vincent Megaw and Fred Myers both photographed it, while the artist and collector Tim Johnson's documentary painting of the men at work recently resurfaced in a Christie's sale, its price skyrocketing due to the prestigious nature of its subject.

A final word goes to the catalogue: its first half is a beautifully understated album of top quality color plates of exhibited works. Fine visuals continue in the essay section with photographic portraits, many unfamiliar, of key Papunya artists by lensmen like Jon Rhodes. More domestic shots record the series of art advisors. Portraits of so many artists no longer living abetts the elegiac quality of the texts. Artists' biographies, list of works, bibliography and a substantial chronology of the movement are nicely understated. The last color plates in the album, of four big communal canvases made at the two painting outstations, Kintore and Kiwirrkura (each in collaborative men's and women's versions) best capture the movement's continuing promise. These works will be auctioned for the purchase of kidney dialysis machines, an intelligent diversion of some of the big money that so fetishizes Aboriginal art into the realities of harsh life in the Western Desert communities.

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NOTES
The premature death of Koori artist Lin Onus at the age of 47 in 1996 was a serious loss to Aboriginal and Settler art worlds. The artist died while in his artistic prime, surrounded by blank canvases and contemplating a new series of works. Margo Neale, the curator of the groundbreaking Emily Kngwarreye retrospective, has now put together an exhibition of Onus’ work with an accompanying publication, *Urban Dingo: The Art and Life of Lin Onus 1948-1996*. Onus deserved such recognition, and both the exhibition and publication will encourage further analysis of an unpredictable and multi-faceted artist.

There are major differences between Kngwarreye and Onus and their respective exhibitions. With Kngwarreye the retrospective summed up her life’s work as a painter and confirmed, without question, her status as major artist. While questions of the authenticity/inauthenticity of some of her works remain, Kngwarreye’s significance is fully established. Onus is a different case. The high modernist aesthetics which translate Kngwarreye’s paintings for a fine art market are less applicable to his work. Onus appropriately described himself as being from the ‘bower bird’ school, and not surprisingly brought popular elements and overt politics into his art.

 Appropriately *Urban Dingo* looks at Onus from a range of perspectives. Sylvia Kleinert situates Onus in the context of Koori art in Victoria; Gary Foley provides a political history of Onus; there is a discussion of Onus as an Aboriginal post modernist by Ian Mclean; Bernard Luthi looks at Onus as a cultural translator in the international arena; and a reminiscence of a friendship and artistic collaboration is offered by Michael Eather. Tiriki and Jo Onus conclude by providing an all-encompassing chronology of the artist’s life and career. Notwithstanding the value of these essays and the wealth of information they provide, I believe the contributors would acknowledge that there is still room for further work. Onus remains an enigmatic figure and the evaluation of his life’s work is an unfinished project.

Connected through his father Bill Onus to Koori art and politics in Victoria, Onus was also linked, through his Scottish-born mother Mary McLintock Onus, to European society and culture in a manner few Aboriginals of his generation would have experienced. He grew up in a family where European high culture combined
with contemporary Koori culture. Neale suggests that his 'cross-cultural background afforded him a glimpse through many slightly ajar doors'. In life and art Onus reconciled, or attempted to reconcile, elements which many would have regarded, in an imperfect world, as mutually exclusive. Foley tells us that in 1971 Onus, Bruce McGuinnes and Bob Maza reclaimed Bunwurrung land in Sherbrooke Forest by building a bush hut. The hut was later burnt down by neo-nazis. In contrast three years later Onus applied for the position of Station Officer with the Country Fire Authority; after three months of competitive examinations and assessments Onus arrived at the final interview only to be put in his place with the words, "Onus, Onus... are you any relation to that Abo up in the hills?" Onus shouldn't have been surprised and it was an incident many Aboriginals would simply have walked away from, but he persevered as a volunteer firefighter for the CFA.

If Onus was complex as a person and as an artist his support for Aboriginal artists and communities was uncomplicatedly generous. One of his most important contributions, and one which I think is under-emphasized in Urban Dingo, was made as Chair of the Aboriginal Arts Board of the Australia Council. Quite simply, when he took over the Board was on the brink of disintegration, beset by scandals and failing in its responsibility to serve indigenous artists. Onus' leadership helped save it, and the Australia Council and Aboriginal arts are in his debt. As Chair one of Onus' best qualities was his collegiality. He was unfailingly generous to other artists and a believer in a freemasonry of artists which could connect across cultures. This underpinned his relationship with Maningrida painter Jack Wunuwun and his family; and Onus wrote an important essay "Language and Lasers" which talked of the reciprocal exchange between Aboriginal artists from 'urban' and 'traditional' cultures.

If there is a shortcoming in Urban Dingo it would be because none of the artist's early work is reproduced or discussed. In the 1980s I remember seeing some of those paintings hanging in the offices of Koori organizations in Victoria and being impressed by them. A future project would be to locate and catalogue as many of these works as possible before they are lost. The resonances of those sensitive, understated paintings of river landscapes and bunyips can be found in what I regard as the best of his later works.

Urban Dingo contains a range of paintings and artworks from the late 1980s through to a masterful 1996 painting "Baru ga Warrinyu (Crocodile and fruit bats – waiting for lunch)". My inclination is towards those works which show Onus' painterly skills, and particularly his ability to represent water and light to provoke hypnogogic affects. Appropriately Urban Dingo opens with one such painting, the
magnificent 1995 landscape “Bir Warrarra, Bama (Red sunset at Barmah)”, and includes further examples like “Birrikala Djini Bunarong Bugaja (Butterflies in Sherbrooke Forest, 1993)”.

Though the meeting with Maningrida artist Jack Wunuwun had profound consequences for Onus as a man, the superimposition of traditional motifs in his work often strikes me as heavy-handed. In “Gilgirri Rruki, 1991-92”) traditional motif, composition and whimsy are all effectively combined, though the striking “Jimmy’s Billabong” (hung in the National Gallery) seems less nuanced in the manner it creates its effects. Onus does not always succeed in integrating the conceptual aspects of his works into his painterly vision. As a portraitist Onus also had shortcomings. The 1995 painting of Gary Foley (which includes John Laws and Jeff Kennett) has been acclaimed; there has even been a suggestion that it should have won the Archibald prize. Yet here Onus struggles as a draughtsman and resorts to visual cliches as a background. Similar criticisms could be made of the 1996 painting “Archie Roach, Ruby Hunter & Mr T”.

The point of making these observations, which relate to only a small part of his total work, is that Onus’ achievements as an artist are significant enough to withstand pertinent criticism without any diminution of his importance. The last thing his work deserves is for a premature critical orthodoxy to establish itself, and the touring retrospective exhibition will provide the opportunity for further critique.

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