

Olympic Impact

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The Big Roo used in Norman Dawn's sound film, 'Showgirl's luck' (1931) looks strikingly similar to the kangaroos which paraded at Atlanta recently.

'PLASTIC ROOS & CHRISTINE ANU' - AUSTRALIA ON SHOW IN 2000

David Headon

The 2000 Games provide a unique opportunity. Besides being an athletic event, the Games are also part national advertisement and part national scrutiny. So do we kangaroo, didgeridoo or Christine Anu in 2000? Do we Sydney Symphony and Sutherland the show! Headon advocates the need for greater cultural awareness and sensitivity.

Dr. David Headon is director, Centre for Australian Cultural Studies, Australian Defence Force Academy, UNSW. Headon is Editor of *Crossings*, Bulletin of the International Australian Studies Association and The Encyclopedia of Australian Culture. He has published extensively on Australian sport, culture and literature.

Australia will be on global show in four years' time. The eyes of the world, now so acutely and readily focussed on a particular trouble spot, election or natural catastrophe in this era of rampant telecommunications, will be fixed firmly for several weeks, come 2000, on us. Yes, the swimmers, shooters, rowers, dazzling paralympians will receive their rightful share of publicity. But make no mistake. The international microscope will also inevitably sharpen on Australia as nation – its history, culture, character, sense of identity mores, significant symbols, even its moral behaviour.

For the host country, the Olympic Games are now much more than a sporting contest. They are also a test of character and will. A test of self-belief. Your athletes are on show. They're centre stage. But so too are your architects, taxi drivers, security services, hoteliers and entrepreneurs. The Atlanta Games surely confirmed this basic fact beyond any doubt. Many in the international media – here and elsewhere, rightly or wrongly – made value judgments according to the traffic chaos and clumsy security. Some even linked terrorism to America's fraying social fabric.

Australians gained a small yet instructive insight into this sort of pressure as the result of our contribution to the Atlanta closing ceremony. Everyone seemed to have an opinion on the performance, not least most of our eighteen million population. The inflatable plastic kangaroos failed to impress the NSW Premier; John Williamson loved them. So do we kangaroo, didgeridoo or Christine Anu in 2000? Do we Sydney Symphony and Sutherland the show?

My point here is to draw attention to the sheer weight of public interest. Right around Australia, newspaper editorials, television commentators, the radio shock jocks, all voiced an opinion. All publicised the

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The views expressed in this magazine are not necessarily those of the Centre for Olympic Studies at the University of New South Wales, nor are they the views of the Australian Olympic Committee or of the Sydney Organizing Committee for the Olympic Games.

'Plastic Roos and Christine Anu'

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issue that must not be lost on SOCOG, the NSW Government or the Federal Government. The Games *are* athletic performance; they are also part national advertisement and part national scrutiny. The Sydney *Daily Telegraphs* editorial of 7 August 1996, put it pretty well:

'The 2000 Olympics pose many challenges for Australia. Not the least of which is the question of the symbols we should use to identify and promote the nation ... The 2000 Games provide us with an extraordinary opportunity, not merely to re-examine ourselves, but to redefine our nation for the rest of the world.'

Quite simply, the Olympics are too important to allow the means by which we promote ourselves to be left solely to officials, coaches and advertising agencies—and to doctrinaire politicians bent on undermining the social and legal advances of recent decades.

Plastic kangaroos and plastic Aborigines?

Could someone have a word in the ear of the Prime Minister and the Minister for Aboriginal Affairs and tell them that our Aboriginal policies in 2000 will be subjected to the strictest international scrutiny. The Governor-General Sir William Deane was absolutely correct when he said, in the inaugural Vincent Lingiari Memorial Lecture on 22 August 1996, that:

'Genuine reconciliation between the Aboriginal and Torres Strait Islander peoples and our nation as a whole should be in the forefront of our national aspirations between now and 2001.'

I believe that we will be judged by the international community more stringently according to our relative success in this crucial area than what we do in the Olympic Stadium. And yet what have we witnessed in recent months? A new Aboriginal Minister intent on confrontation; the ATSIC budget cruelly cut; Aboriginal leaders either furious or deeply disenchanted after Federal Government cuts; the near disintegration of the Council for Aboriginal Reconciliation; and the distressing spectacle of the Australian Federal Police, with riot shields and helmets, in a physical confrontation with over a thousand Aboriginal protesters outside Old Parliament House. If opinions continue to harden on both sides, we are all losers. If we continue to regress to the callous pragmatism and short-sighted political point-scoring of earlier decades, then the Sydney Olympics will present our nation's worst profile. Next to the plastic kangaroos in the Stadium will be plastic Aborigines. Flesh and blood and soul Black Australia will be outside telling its story to the world. And who could blame them? The Prime Minister and the Minister have four years to work through a steep learning curve.

The need for greater cultural awareness

I would be much happier, also, if our GamesTeam—officials, coaches and athletes—were exposed in varying degrees to a set of 'Australian Cultural Awareness' courses, according to the likelihood of their public exposure. If the Games were on next week, imagine what a field day mischievous overseas journalists would have sounding out, say, Arthur Tunstall on Black/White relations, Charlie Walsh on women's issues and Gennadi Touretski on social skills. Let's make our Games Team successful athletes and ambassadors by exposing them to courses

Message from the Vice-Chancellor

Professor John Niland

The publication of the first issue of Olympic Impact is timely and welcome. The University, through the Centre for Olympic Studies, is keen and able to contribute to the success of the Sydney Olympics. It can do so by raising important Games-related issues, thereby extending the wider debate on the Games. Olympic Impact also outlines a number of creative research projects and initiatives which will improve the delivery of the Games.



Editorial

Associate Professor Richard Cashman

The aim of Olympic Impact is to contribute to Olympic debates by identifying possible problems and suggesting answers and even solutions. Some of the articles are hard-hitting and even controversial. They are included in the belief that a frank and open debate on Olympic matters is desirable. Any criticism is offered in a constructive spirit.

Articles in this issue advocate the need for greater Australian cultural awareness; more precise tourist forecasting; the need to deliver on green promises and to develop a more comprehensive language policy. Another feature introduces two promising design projects to enhance the Games. Olympic Impact informs readers of Olympic-related activities at UNSW: research, teaching and other public activity. The magazine will also outline the many activities of the Centre.



which introduce them to seminal cultural issues such as Aboriginality, Black/White relations, Mabo legislation, Australian republican history, the resurgence of Australian film since the 1970s (and the rich turn-of-the-century history), the quality of Australian creative writing, the history of Australian multiculturalism and the lively multicultural debate, the history of rival football codes, Federation, the Australian Constitution, civics and citizenship—to mention a few. This sort of education would mean that when Mojo or Singo were called on to 'represent' Australia symbolically that Hoges, the Rock, surf and sun would not be the only images projected. We might even get genuinely representative images of cultural diversity and maturity. If that's the case, I'll not only cop the plastic kangaroos, I'll enjoy their playful cheekiness—providing the Bangara Dance Theatre and Graeme Murphy and Padma Menon, or their like, are there too. 

UNSW Olympians

Summer Games

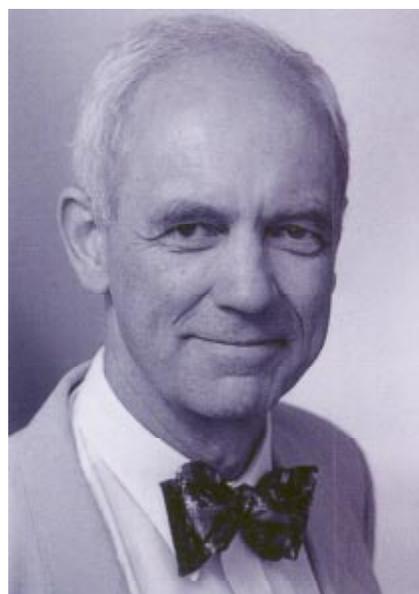
1964, Tokyo Peter Vassella	Athletics	Finalist 400 m
1968 Mexico Mike Wenden	Swimming	Gold 100 m (world record) Gold 200 m silver 4x200m relay Bronze 4x100m relay
1972 Munich Mike Wenden	Swimming	
1976 Montreal Phillip Cheetham Andrew Kerr	Gymnastics Water polo	
1980 Moscow Andrew Kerr Graeme Brewer Mark Carew	Water Polo Swimming Judo	
1984 Los Angeles Andrew Kerr Andrew Richardson Matthew Spies	Water Polo Judo Modern Pentathlon	
1988 Seoul Andrew Kerr	Water Polo	
1992 Barcelona Lars Kleppich	Windsurfing	Bronze
1996 Atlanta Jane Saville Carl Probert	Athletics Swimming	
1984 Sarajevo David Hislop Andrew Horsley	Cross-country skiing Skiing (Assist. Coach/Manager Cross-Country Team)	
1988 Calgary David Hislop	Cross-country skiing	

OLYMPIC 2000 TOURISM – THE ICING ON THE CAKE?

David Turner

Many people regard tourism as an Olympic cargo cult which will deliver a massive number of tourists before, during and after the Games. Turner scuttles some popular myths of Olympic tourism arguing for more accurate tourist forecasting.

David Turner is a Senior Lecturer in the Hospitality Management Unit, School of Marketing. An architect by profession, he was responsible for the establishment of the Mint and Barracks Museum in Queens Square (1982), the Riverside Theatres, Parramatta (1988, and regional art museums at Emu Plains and Armidale. His research interests include energy management in hotels and environmental perception.



David Turner

The Olympic cargo cult is alive and well. Popular myths abound promising booming tourism and showers of economic benefits. In the adrenalin rush to plan the Games, however, there is very little research being done to justify the euphoria. Even though SOCOG is having a dream run in signing up corporate partnerships, the public forecasts of visitor numbers are over four years out of date. The forecasts need urgent revision to get some reality into the planning process and to scuttle some of the popular myths about the 2000 Games.

continued on page 4



Olympic myths

There are two popular preconceptions about the 2000 Olympics:

- the Games will attract masses of tourists;
- tourism is set to go through the roof in the Olympic year.

Both are wide of the mark. The Games will attract some inbound tourists, but the numbers will be small in comparison to the underlying total inbound market. Some sections of the tourism industry are actually predicting that visitor numbers to Sydney may fall in 2000.

There is a third preconception, that the marketing of the 2000 Games, for which over \$500 million has already been committed in corporate partnerships with SOCOG (about half the planned target), is based on up-to-date visitor forecasts. Not so according to the major tourism bodies. The only current official forecasts are those prepared for the bid in 1992 by KPMG Peat Marwick.

The first myth – the Olympics will attract masses of tourists

KPMG (in association with the Centre for South Australian Economic Studies) in 1992 forecast a small, long-term increase in Australian inbound tourism. They predicted that in 2000 Olympic inbound numbers would represent approximately 3.3 per cent of the forecast total of 7.1 million, or 226 000 additional tourists. This percentage will be less in the years preceding and following the Games. The impact of the Olympics on established inbound tourism will be marginal. This first myth is fanciful and unsubstantiated.

The net GDP contribution of the Games is forecast to be approximately 0.0003 per cent in 2000, which also seems infinitesimal, yet in dollar terms is estimated at \$1.66 billion—a substantial pie for businesses with official Games' franchises and those targeting spinoff opportunities.

KPMG estimated that the net employment effect of the Games would rise to 20 000 new jobs in 1999, peaking at 33 700 in 2000. However, this employment spike would disappear rapidly by 2001, with only 15 000 new jobs.

It is the marginal nature of Olympics-induced tourism that appears to give it a low priority in the eyes of government agencies and tourism industry lobby groups at present.

The Seoul comparison

According to one source, previous Olympics are no indicator of future forecasts as each Games city has its unique economic and tourism climate. One creative perspective on Sydney's prospects was prepared by Geoff Carmody of Access Economics in a paper prepared in 1993, in which he compared Sydney with Seoul in 1988, with some striking similarities:

- South Korea is effectively an island nation, like Australia;
- Both cities are in similar time zones;

- South Korea's forecast inbound tourism growth curve in the early 1980s is quite similar to Australia's in the mid-1990s.

The findings of that study were that there was a lift in inbound tourism compared to trend, but that this began in the Olympic year itself, not before. The lift increased still further in the post-Olympic year and declined slowly thereafter. Carmody suggested that this comparison supported the broad findings of the KPMG Peat Marwick study, and that the main economic benefits of the Games will occur after the event, not during or before.

The second myth – that tourism will boom in 2000

Unless Sydney manages its marketing, inbound and domestic tourists may decide not to pay us a visit in the early part of 2000 because of a perception of overcrowding, full hotels and unfinished transport infrastructure. Atlanta experienced a major drop in visitor numbers in the leadup, and during the Games, because there was a perception that the city would be overcrowded. As it happened hotel beds were available at competitive rates throughout 1996.

If the Sydney domestic market is soft in the leadup period, there will be a strong visitor demand from sporting groups wanting to try out Sydney's facilities, acclimatise themselves, have trial events and participate in leadup meets. On the other hand, this will not be a big-spending market.

The convention market (which is big-spending) will suffer in the leadup period due to the Sydney Exhibition Convention Centre being taken over as a sporting venue for three months. This is good news for Melbourne which is already hosting 27 conferences Sydney could not take in this period. Regional conference centres such as Albury Wodonga and Coffs Harbour are also expected to do well, gaining overflow business.

After the Games, convention and incentive-based tourism are expected to do well, living off the legend and glamour of the event. This is where the real benefit lies, but only if the Games are a success. A major catastrophe, like Munich in 1972, could spoil the party.

Is anything happening?

The Tourism Forecasting Council of Australia and the Bureau of Tourism Research are the bodies undertaking official research on Australian tourism at present. Strategically however, their focus is on the big picture,

...continued bottom of page 5

HOMEBUSH BABEL? OLYMPIC COMMUNICATION BREAKDOWN

LANGUAGE SERVICES AND THE SYDNEY OLYMPICS

David Reeve

David Reeve argues that time is running out for SOCOG to develop a comprehensive language policy to deal with a wide range of language issues. Language policy was first treated as a serious issue at the Barcelona Games. Reeve argues that Sydney should follow the Barcelona model.

Associate Professor David Reeve is head of the Department of Chinese and Indonesian at the University of New South Wales. He has been involved in Indonesian-Australian relations for 27 years, as a diplomat, researcher, historian, language teacher, and as a lecturer in Australian Studies in Jakarta in the 1980s. He has published on Indonesian political history, Indonesian attitudes to Australia, and language issues.

Hordes of tourists lost and confused? A family panicking with a medical emergency involving their child? Traffic snarls because the police directions aren't clear to visitors? A press conference that breaks down when the volunteer interpreter freezes? A too-sensitive measuring device awards the gold medal to the wrong contestant-setting off a multilingual confrontation involving sporting, legal and high-tech terminology all at once?

These are Olympic scenarios occurring to language professionals



David Reeve (left) with Professor Moegiadi, Cultural Attache, Indonesian Embassy.

in Sydney, as they feel mounting dismay at SOCOG's lack of urgency in getting its language planning together. SOCOG previously planned to appoint a languages co-ordinator in October 1995. Then the planning slipped to February 1996 before being advanced to 'after Atlanta'. Now Atlanta is well over, and language professionals fear that SOCOG has left its planning too late.

The Barcelona example

For the Barcelona Olympics, language planning started four-and-a-half years in advance, and every day was needed. According to reports, this was 'the first time that an Organising Committee decided to treat the subject in depth' well before the Games; in the end this foresight was shown to have been more than justified'. In Barcelona, 'the Language Services were organised in five sections: translation and correction of

continued overleaf...

Olympic Tourism ...continued

not one-off events like the Olympics, and they do not see the issue as one of their core responsibilities. Nevertheless, it is understood that they may consider the issue of the Olympics in 1997. It is not yet clear what priority and funding the Olympics will receive from them.

Forecasting — out of date

Planning for the 2000 Olympics is proceeding on information and forecasts that are fundamentally sound, but are now out of date. Accurate visitor information is essential if the many facets of the Games are to be successful, in particular:

- the planning of accommodation demand and supply;
- transport planning;
- marketing official and unofficial Games merchandise;
- marketing Sydney as a destination before and after the event

Without proper forecasts there is a real risk of oversupply or undersupply of merchandise, accommodation and services at key periods before, during and after the Games. After Atlanta the world will expect the Sydney Games to be run far more professionally. Accurate forecasts will also enable the full revenue potential of the event to be realised.

The tourism industry and the Games' planners should be lobbying vigorously for proper Olympic tourism studies to be carried out. Since they are the ones who stand to profit, they should also contribute the resources to make them happen.

texts, interpretation, announcers, style books and sports glossaries and language hosts'. Sydney needs to plan for all these areas.

Why does SOCOG feel that 'it's early days yet; there's plenty of time'? Apparently SOCOG plans to provide major language services in the bare minimum of languages legally required; the official languages of the Games are English and French. Certainly SOCOG will have highly qualified teams of interpreters and translators for the two weeks of the Games, and the 10 000 athletes. But the Sydney games involve much more than the two weeks. There will be many major events on either side of the Games. There will be hundreds of thousands of tourists and visitors who also need to be catered for.

SOCOG believes that much can be done with volunteers, from Australia's multicultural and language-learning communities. But volunteers need training too. Crisis management is a learned skill. The Atlanta Games have shown the problems inherent in relying on volunteers, with its volunteer bus drivers and security guards.

Australia has a good reputation for the standards that have been brought to the interpreting and translating fields in the 1980s and 1990s, with testing and accreditation through NAATI, with training programs in TAFE colleges and universities, with professional organisations like AUSIT. But just as our sporting and tourist infrastructure is to get a lift through the Games, so our interpreting and translating profession should be given a push to the next level of international standards.

All those tourists and visitors need language services. At the Centre for Olympic Studies seminar in September 1996, Joe Lo Bianco reported on discontent with language services provided at Atlanta. How ready is Sydney to offer a satisfying experience for our vastly rising numbers of tourists from China, Korea, Hong Kong and Indonesia? Some of my students did a survey of Indonesian language provision for tourists in Sydney; they found just one pamphlet, for the Sydney Aquarium! Melbourne is far ahead in this respect.

Keeping a Multicultural Bid Promise

If Sydney doesn't have a good, broad coverage of languages, then we are effectively breaking a promise to the world. Australia's multicultural and multilingual society was an important element of our successful bid. Mrs Keating spoke in several languages to the IOC, as did some of our sporting stars. If we do not provide well-planned services, a key feature of our bid will have been ignored by SOCOG.

What needs to be done?

At the Centre seminar, Susan Hovell announced that she has been appointed by SOCOG to write a report on language services at Atlanta. This report and the official report on Atlanta were due for publication in October 1996, along with the separate evaluation of Atlanta language services prepared by Joe Lo Bianco and the National Languages and Literacy Institute of Australia. This will be the time for SOCOG to grasp the opportunity for planning, and to call on the advice of language professionals, who are keen to help, but who have felt increasingly depressed and alarmed since mid-1995. Sydney and its visitors deserve high-quality language services. How long can SOCOG postpone its planning? ●

HOW GREEN IS GREEN ENOUGH IN 2000?

ACHIEVING AND ASSESSING THE GREEN OLYMPICS

Deo Prasad

The promise of the Green Olympics offers Australia opportunities for demonstrating Australian cutting-edge technologies and skills. Many questions need to be raised. Are there adequate procedures for assessing the 'Green' Olympics? While the guidelines for a 'Green' Olympics are in place there is a need to drive the processes to ensure that the level of delivery is what is best for Australia.

Associate Professor Deo Prasad is the Director of the SOLARCH Group at UNSW and has had long involvement in ESD and the Built Environment. He sits on a number of government and other committees on the subject. He has published extensively and has jointly authored *Global Warming and the Built Environment* and *Energy Efficient Australian Housing*. He has recently finished his term as the chairperson of the Australia New Zealand Solar Energy Society.

One of the key characteristics of the Sydney bid was the offer of a 'Green Olympics'. The task of delivering these promises may seem astounding considering the commercial realities of developing large infrastructure projects. The Olympic Co-ordination Authority (OCA) has established an Environmental Advisory Panel and a number of Expert Advisory Panels to assist in the delivery of its promise. Green Games Watch, a body comprising representatives of the environmental bodies, is also lobbying to ensure that the promises are met. A project of such magnitude and visibility should be seen as an opportunity to demonstrate Australian collective expertise and technologies to the world.

Are we going to deliver a greener Games?

The Atlanta Games made significant claims of innovation and showcased their green credentials but there was little evidence of this during the games. A 300KW photovoltaic system on the aquatic centre roof was the only exception.

The OCA has committed to developing the Homebush Bay area in a manner consistent with the Environmental Guidelines for the Summer Olympic



Deo Prasad

Games, document presented to the IOC in September 1993. These guidelines deal with issues such as:

- energy conservation and use of renewable energy resources;
- passive solar-building designs as appropriate;
- management systems to enhance efficiencies selection of building materials on the basis of their thermal properties and life-cycle impact (including end-of-life issues);
- urban design and environmental impact use of innovative technologies and showcasing Australian technology.

Measuring green initiatives?

So what is it that will demonstrate that the promises have been met? Are there enough measures in place to judge against? What are the various issues within the design and construction sector that require measurement? Can we reach a zero pollution result? What are the costs and who bears it? Design and procurement decisions are being made today but the project will be showcased in 2000 – will it be outdated? How green is green enough in 2000? These questions need to be looked at now and not in 1999. While the OCA has established necessary guidelines and processes for promoting them, the task clearly is to drive the processes now to ensure that there is an excellent level of delivery when environmental and other externalities are costed.

The need for a holistic approach

Australia has claims to world leadership in a number of technologies and there are emerging industries which stand to benefit from such exposure. Support groups such as the Energy Research and Development Corporation and the Sustainable Energy Development Fund have resources to support innovative approaches and technologies. The design of sustainable built environment requires a holistic approach to a wide range of considerations. These include:

- urban planning and site considerations;
- the materials used and their embodied energy and toxicity issues;
- life-time operating energy impacts;
- overall energy management, energy supply mix issues;
- waste and water management and recycling.

A number of decisions may have capital cost implications and justifiable only when environmental and other externalities are costed.

Leadership by the University of New South Wales
The University of New South Wales has proven leadership in this field and cutting-edge technologies which stand to have a major impact on industry development in the future. This is one area where collaboration between industry, university and the games management can lead to significant advantages and ensure that opportunities for Australia are maximised.

CONFERENCES — OLYMPIC AGENDAS

The Centre for Olympic Studies will host a series of Conferences—Olympic Agendas. One-day conferences will focus on a particular theme, whereas two-day conferences will provide an overview of Olympic progress.

Olympic Agendas — Marketing & Tourism 4 April 1997

Themes will include:

- marketing
- advertising
- tourism
- identity

Olympic Agendas Review — Three Years to Go September 1997 (a two-day conference)

Themes will include:

- design and identity
- community impact and support
- environment, transport and infrastructure issues
- issues relating to elite athletes

DESIGNING THE GAMES – TWO PROJECTS

Ron Newman

Two students from the School of Design Studies have designed projects which could enhance the Games. One is a project to 'mark the city', the other a plan to develop an 'Olympian Communicative' device.

Associate Professor Ron Newman is the Head, School of Design Studies, College of Fine Arts, The University of New South Wales. As a professional designer who joined the university a few years ago, Dr. Newman brings a mix of design and business experience to the education of designers. He was editor of *Design Australia* for six years and has held various executive roles within the Design Institute of Australia.

Marking the City

The Olympic Edge Project proposes a series of permanent markers on each of the Olympic sites around Sydney. Visitors travelling along the Olympic Edge – from one venue to the next – will recognise that they are entering another Olympic site. The markers link the events which may be far apart, from the sailing events on Sydney Harbour to the rowing on Penrith Lakes.

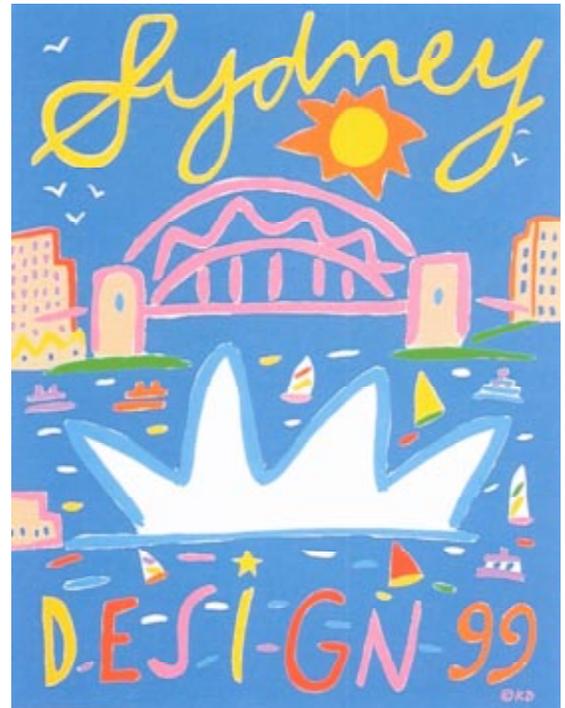
The design of the markers is based on the geometry of the Olympic Rings and involves laying the fragmented elements of the rings over the city, with Homebush being the nucleus of activity. Each marker stands as an information centre on the Games, the sport, the site, the project. After the Games the interactive element of the markers will continue, by updating current sporting events at the site or local community events and information.

The project was designed by Emma O'Connor who graduated from the Bachelor of Design Degree in 1995 and has been employed by Cox Richardson Architects and Planners (Architects and Planners of a number of the Olympic venues) since 1994. Emma has trained as a full-time elite athlete for the last five years, receiving a Ben Lexcen sporting scholarship from the University of New South Wales.

'Olympian Communicative'

Simon Lau is designing 'Olympian Communicative' as his graduating project in the School of Design Studies. Simon has developed a project which will enable visitors to an Olympic venue to have greater access to desired information. He believes that many tourists will be overwhelmed by a large amount of information at each Olympic site.

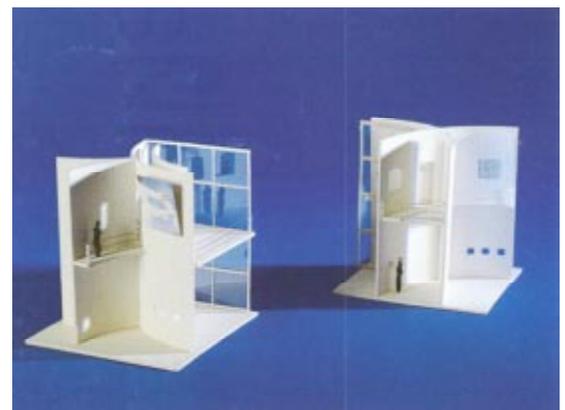
To address the problem Simon has designed a hand-held system for use in the 2000 Olympic Games. The product can be used at any of the five main Olympic locations, providing spectators with a flexible communication tool in the form of a hand-held electronic visual system. The system would enable each user to keep track of concurrent events at various sites. The aim of this project was to merge the hardware and software-based technologies to provide the best possible User Centred Design. To address this issue, Simon sought an interdisciplinary



Ron Newman is chair of Sydney Design 99 which will focus both on the practice of Design and Australian Design, which has innovative and creative.

nary design process that integrates hardware and software elements for this electronic visual system that makes sense to the user.

Olympian would use a digital cellular network known as the Personal Communications Network. All required processing will be performed by the central processing units located in the five Olympic venues. The core component structure of Olympian is a two-



Two of the twelve markers, 12 metres in height, which are part of the Olympic Edge project.

way pager unit. It will provide the user with input options of designated requests and this information source will be retrieved from the main system. Olympian will be hired to visitors on a daily basis and returned when the visitors leave the venue. To cover the costing of the entire information system Olympian will be able to simulate advertisements while Olympian is in idling mode. ●

Centre Activities 1996 Public lectures

'Designing the Games'

Mr Michael Bryce, Chair, Design Committee, SOCOG
Wednesday 24 May 4.30 pm, College of Fine Arts.

'The Cultural Olympics:

The Festival of the Dreaming'

Ms Karilyn Brown and Ms Rhoda Roberts, SOCOG
Thursday 17 October 5-6.30 pm
Valentine Annex, Kensington Campus, UNSW

Project Seminars

'Homebush Babel?

Olympic Communication Breakdown'

Associate Professor David Reeve, Dept. of Chinese and Indonesian
Mr Joe Lo Bianco, Director of Languages Australia
Ms Susana Hovell, Spanish/French Interpreter at the Atlanta Olympics
Tuesday 24 September 12.30-2 pm
Committee Room No. 1, Level 2, Quadrangle Building, Kensington Campus, UNSW

'How Green are the Olympics?'

Associate Professor Deo Prasad, SOLARCH
Ms Leanne Philpott, Centre for Wastewater Treatment
Wednesday 6 November 12.30 to 2 pm
Committee Room No. 2, Level 2, Quadrangle Building South, Kensington Campus, UNSW

Olympic subjects taught at UNSW in 1997

Two subjects, 'The Modern Olympics' and 'The Olympics: The Event and its Impact' will be offered in the School of History and General Education respectively in 1997. Future issues of *Olympic Impact* will list other Olympic subjects or subject modules in other faculties.

Archives donated to Centre

Memorabilia relating to the bid of the Sydney Olympic Games Citizens' Council for the 1996 games was handed over to the Centre by the Powerhouse Museum on 18 September 1996. The collection includes two videocassettes, outlining Sydney's submission, banners and posters, and the 'bid book', which details proposed Olympic venues and strategies.

Australia's unique record

Australia is one of only two countries (the other being Greece) to have attended every Summer Games of the modern Olympics. The claim that Great Britain was the third country in this exclusive group has been refuted effectively by Harry Gordon, author of *Australian and the Olympic Games*. The British, according to Gordon, took 'credit retrospectively for the presence of three Irish athletes in St Louis [in 1904], even though ample evidence existed to show that the athletes concerned saw themselves as representing Ireland, never Britain'.

Home page

The Centre for Olympic Studies is establishing its own home page which will be operational by November 1996.

Directory of Olympic Studies

The Centre is producing a Directory of Olympic Studies at the University of New South Wales which identifies some sixty academics involved in Olympic-related research. The Directory lists each staff member, their research interests and publications, teaching and Olympic links as well as contact points. The Directory, which will be updated on a regular basis. It is available on request at no cost.



Unisearch is the commercial company of the University of New South Wales, linking the expertise of the University to the needs of Industry, commerce, the professions and Government. Operating since 1959, the company has completed over 20 000 projects for some 10 000 clients, ranging across consulting advice, strategic research, training and technology commercialisation.

The strength of Unisearch is innovation, combining leading-edge technical expertise with independence, confidentiality, rapid response, commercial commonsense and firm project management.

The Centre for Olympic Studies wishes to thank Unisearch Ltd for its financial support for this issue of *Olympic Impact*.

THE UNIVERSITY OF SYDNEY
INSTITUTE OF TRANSPORT STUDIES
THE AUSTRALIAN KEY CENTRE

TRANSPORT FOR THE OLYMPICS ~

Making it work: A first forum
Tuesday 5 November, 1996
8.30am-5.30pm

*Learn from past experience
Discuss planning processes for Sydney 2000
Get creative: Make it Work*

Vital for all members of Transport, Tourism, Hotels, Real Estate, Investment, Security industries, and anyone else connected with the Olympics

Speakers:
Jack Murray, SOCOG;
David Roger, Roads Chief, IA Olympics;
Bill Ferryth, Olympics Bid Operator (LA, Atlanta);
John Stott, CEO, State Transit Authority;
Concord Mayor Peter Woods;
Jim Boonjale, President, NSW Bus & Coach Association; Calhoun Springs, NSW Police Service;
QANTAS; NRMIA, hotel industry

PLACES ARE LIMITED

For further information or application forms please contact:
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The University of Sydney NSW 2006

tel: (02) 9351 0071/75
fax: (02) 9351 0088
e-mail: itstinfo@its.usyd.edu.au

The number of Australian Athletes at each Summer Games

(m – male f – female)	(Total)
1896 1m	1900 3m
1904 2m	1908 29m*
1912 26m* 2f (28)	1920 12m 1f (3)
1924 37m	1928 14m 4f (18)
1932 8m 4m (12)	1936 29m 4f (31)
1948 68m 9f (77)	1952 75m 10f (85)
1956 270 m 44f (314)	1960 161m 27f (188)
1964 192m 42f (234)	1968 119m 24f (143)
1972 143m 27f (170)	1976 149m 35f (184)
1980 96m 27f (123)	1984 169m 71f (240)
1988 162m 69f (231)	1992 184m 96f (280)
1996 254m 171f (425)	

* The Australian team which competed as Australasia in 1908 and 1912, included a few New Zealand athletes on each occasion.

Australia's best medal performances — Summer Games

At Home	Gold	Silver	Bronze	Total
1956 Melbourne	13	8	14	35
Away				
1996 Atlanta	9	9	23	41
1960 Rome	8	8	6	22
1972 Munich	8	7	2	17
1992 Barcelona	7	9	11	27

Australia's worst medal performances — Summer Games

	Gold	Silver	Bronze	Total
1904 St Louis	0	0	0	0
1936 Berlin	0	0	1	1
1976 Montreal	0	1	4	5



The Centre for Olympic Studies was launched on 21 May 1996 by Mr Phillip Coles AM (Centre) of the Australian Olympic Committee. (Others, left to right: Mr Anthony Hughes, Associate Professor Richard Cashman, Acting Vice-Chancellor Professor Tony Wicken and Professor Roger Layton). (Photograph Genevieve Cashman)

ATHLETE TRAINING: TRAINING OF ENDURANCE ATHLETES TO THE 'RHYTHM OF RUNNING'

Albert Avolio

Research on the 'rhythm of running' has suggested ways of possibly improving athletic performance for marathon runners. Avolio argues that a natural 'rhythm of running'—the co-ordination of heart rate, stride length and stride rate—could be exploited to achieve beneficial effects.

Dr. Albert Avolio is Associate Professor in the Graduate School of Biomedical Engineering at UNSW. His research experience is in the structure and function of the cardiovascular system, including modelling of the circulation and analysis of blood pressure and flow. His current interest is in applying these techniques to human movement.

The human locomotion of running involves energy expenditure associated with vertical body movement, ground impact, and the interplay between the cardiovascular system, the respiratory system and muscle contraction. In endurance performance, the main physiological limitation is the ability to achieve and maintain a high level of oxidative metabolism in exercising muscles.

Maximal exercise increases oxygen uptake some eight to tenfold, and in endurance athletes it can be as high as twentyfold. For a given maximal heart rate, changes in oxygen consumption are essentially determined by changes in stroke volume, that is, the volume of blood

ejected by the heart in each beat. So, for a similar level of 'fitness', endurance performance may be affected simply by mechanical manoeuvres that modify ventricular ejection.

For marathon runners the average speed is close to 20 km per hour—at Atlanta the marathon of 42.195 km was run in 2 hours, 12 minutes. For a stride length of between 175 and 240 cm, the average step rate is 150-190 steps per minute, that is about 3 per second. This is similar to the range of maximum heart rates found in humans during sustained exercise. This tantalisingly close relationship between heart rate and step rate suggests the possibility of synchronisation that might lead to improved cardiovascular performance. The relationship between heart rate and step rate is relevant in the general locomotion of sustained running (be it endurance performance, training, exercise assessment of cardiac patients on a treadmill).

Their interaction is suggested by the finding of a 'beating' phenomenon in arterial pressure during running, whereby a close relationship between heart rate and strike rate leads to periods of low pressure pulsation alternating with periods of high pressure pulsation. This suggests the possibility of a physiological mechanism whereby, under optimal conditions, heart rate and step rate become entrained, and linked with such precision that a type of active resonance is generated, optimising function of the heart in the upper body and contracting leg muscles below.

The mechanism has been proposed for sustained running, where heart rate and stride rate may become



Albert Avolio

synchronised, and with such favourable timing that the negative pressure generated by upward body movement reaches the heart during systole, increasing ejection of blood from the heart and decreasing the energy needs of the heart. The positive pressure component due to ground reaction forces returns during diastole, increasing perfusion of the coronary arteries of the heart. The result is a type of counterpulsation brought about by vertical body movement, where, with correct phase relationship between heart ejection and foot-to-ground strike, improved cardiovascular performance may be achieved.

The aim is to use the results of this research to find ways of possibly improving athletic performance in endurance runners by characterising the combination of heart rate, stride length and stride rate in individual performers so as to see whether some have a natural predisposition to develop a resonance effect

Two Centres for Olympic Studies launched

Richard Cashman and John A Daly

Two centres for Olympic Studies were launched in May and June 1996. The respective directors of these two centres, Richard Cashman and John Daly, report on previous academic Olympic initiatives in Australia, which provide the background for recent developments.

Olympic Research in Australia (John Daly)

The concept of a centre for Olympic Studies, linked to a University was proposed by John Daly in 1982. The original idea suggested one national location (in Adelaide) but provided for a national 'staff', made up of Olympic scholars from around Australia. Most of these people would be located in tertiary institutions but the concept would allow for others, such as Olympic historian Harry Gordon, to be involved.

A national journal, emanating from this Centre in Adelaide, would proselytise the philosophy of Olympism and the educational ideas of de Coubertin while encouraging a critical analysis of the modern Olympic movement in Australia.

Of late the idea was extended to allow for 'leadership' and 'coordination' from Adelaide while encouraging the establishment of a centre in each state. This would allow for each centre to link with its State Olympic Council and thus provide an education 'arm' for existing councils (soon to be 'Branches') of the Australian Olympic Committee (AOC). Olympic Academies, on a regular basis, could be conducted by the centres in each state under the auspices of their council but they could also encourage Olympic scholarship in tertiary institutions in their state.

Olympic Academies had been conducted in Australia from the mid-1980s under the leadership of Ian Jobling, University of Queensland, and included John Daly, Bob Paddick and Frank Pyke as the original Academy staff. Initially deemed to be the Oceania Olympic Academy,

the concept was successful from the first and over 100 delegates from the Pacific countries (Australia, New Zealand and the Islands) attended the first Academy in Canberra in 1985. The Academies were run on a regular basis and followed a pattern of explanation and discussion of the philosophy of Olympism, critical analysis of the Games and the Olympic Movement along with historical studies and so forth. When New Zealand developed its own Academy, the Oceania Academy became the Australian Olympic Academy. This still exists as a 'without walls' Academy, convened whenever the need is expressed to provide a national education forum for particular population groups (such as young people and the media) and indeed several have been convened under the direction of John Daly for Olympians prior to their Games experience. It is anticipated that any future national Academy will draw staff from centres for Olympic Studies.

To date there have been two centres established with the encouragement of the Australian Olympic Committee, at the University of South Australia under the direction of Professor John Daly, and at the University of New South Wales, where Associate Professor Richard Cashman is Director. John Daly has been given the task of national coordination of these centres and the development of an Olympic Society which will provide a source of contact for Olympic scholars around Australia. This will eventuate in the near future and may be termed The Pierre de Coubertin Society (Australia), thus linking it with similar groups overseas.

It happened at the Olympics

The most famous Olympic marathon runner was, of course, a loser, Dorando Pietri of Italy, who received illegal help in the 1908 Games in London. Four years earlier, in St Louis, the marathon winner, Irish – born Thomas Hicks (USA) had even more, and stranger, assistance. He not only received support from his 'attendants' on the course but was sustained over the last few kilometres with eggs, brandy and doses of strychnine – breaking just about every rule in the book.

Abebe Bikila (Ethiopia) won the 1960 marathon running in bare feet, and in 1964 became the first man to win twice – despite having had his appendix out six weeks earlier.