

MONTAGE

NEWS AND VIEWS FROM MONASH UNIVERSITY

Campus life beyond 2000

Monash University deputy vice-chancellor, Professor Lauchlan Chipman, has predicted that advances in information technology and telecommunications will transform the primary function of university campuses in Australia.

Professor Chipman said the teaching and learning roles of universities would be increasingly undertaken off-campus, while on-campus life would be more intensely geared towards personal development.

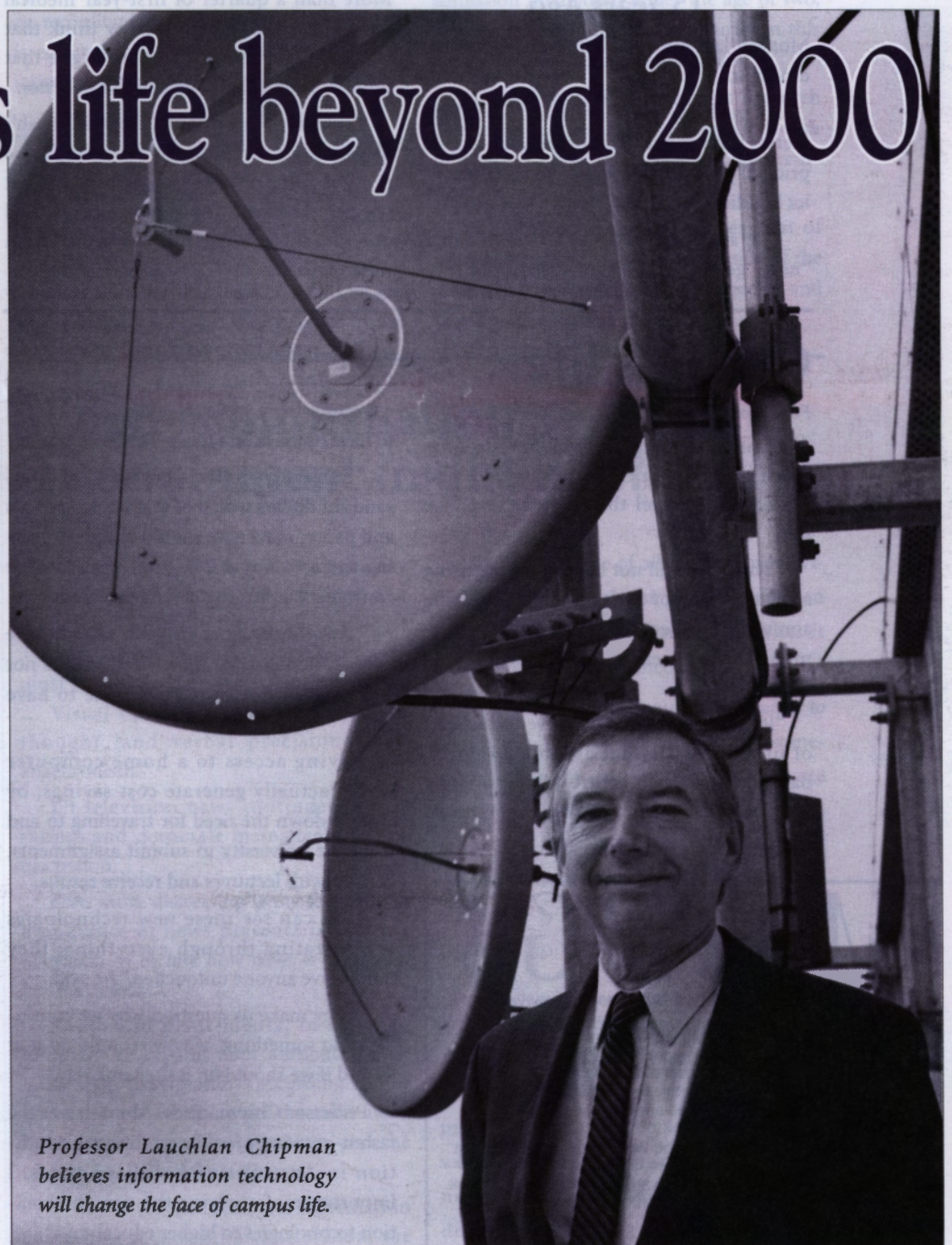
He said it was likely that in the future many academics would never set foot inside a lecture theatre. Instead, much of their teaching would be conducted via computer networks.

In such an environment, only a handful of specialist lecturers with reputations as great motivators, orators and even entertainers would attract students to on-campus lectures.

Professor Chipman said the transformation of students into potential leaders would become the mainstay of campus life instead of being on the periphery, "because that's the bit you cannot put on a computer file server".

He likened the challenges facing universities to those faced by the live theatre industry after the advent of film and television.

Continued on Montage 2



Professor Lauchlan Chipman believes information technology will change the face of campus life.

- Privacy on the information superhighway (3) • A new look at romance novels (5)
- Ned Kelly comes back to life (13) • Savant: When is information entertainment in disguise? (16)

NOW & THEN

25 Years Ago

The Audio Visual Aids Section undertook its first major motion picture film production on Groote Eylandt in the Gulf of Carpentaria for a project on aboriginal dance and music notation.

Despite the problems associated with the recording of the musicians and dancers in an outside environment in 30 mph winds, the exposure of cameras to suit aboriginal skins in the shade of the trees and a background of strong sunlight, the project was most successful.

15 Years Ago

Monash last week took delivery of its first dinosaur.

A "medium-sized" monster (about six metres from snout to tip of tail), it occupies pride of place in the foyer of the mathematics building.

The specimen is an exact replica of a "new" genus of dinosaur discovered by a

joint Polish-Mongolian expedition in the Gobi desert, Mongolia, in 1970-71.

5 Years Ago

The University Council has approved a partial ban on smoking at Monash, to take effect from 1 July.

The ban will result in a majority of areas within university buildings being designated non-smoking areas. Smoking will only be allowed in areas clearly marked with 'smoking permitted' signs.

This Month Last Year

More than a quarter of first-year medical students at Monash University think that Charles Darwin was wrong to argue that humans evolved from an ape-like ancestor.

Professor Roger Short, from Monash's Department of Physiology, found the same number also eschewed Darwin's theory that species evolved by natural selection, and one-fifth thought that Eve was created from Adam's rib.

Campus life

From Montage 1

"University campuses will have to offer much more on a personal experience and participation level than ever before," he said.

"The focus will not be on simply getting a job at the end of one's studies. Instead, the aim will be to become a leader in the community, in business or in the international arena.

"It will enable us to improve the aspects of university life that are not teaching-based, just as live theatre was ultimately enhanced as a result of the competition from film and television."

Professor Chipman said that in the future universities such as Monash could expect all their students and academic staff to have home access to a personal computer.

"University students have to buy thousands of dollars worth of text books, pencils and paper; maybe we should also be expecting them to buy a PC, or at least to have convenient access to one," he said.

"Two-thirds of our students already have a PC at home when they enrol, so it is not such a radical idea for everyone to have one."

Having access to a home computer would actually generate cost savings, by cutting down the need for travelling to and from the university to submit assignments, consult with lecturers and receive results.

"You can see these new technologies reverberating through everything; they don't leave anyone untouched," he said.

"They make us question why we continue to do something, why we should do it at all and if we should do it the same way."

Professor Chipman said Monash was the fastest-growing provider of distance education in Australia and realised the full importance of applying the new information technologies to higher education.

BY SUE HOBBS



Spike

Back to the future

It can't be said that Monash isn't ahead of the times. *The Northern Territory News* recently highlighted Monash's solar car as futuristic ... and so it seems. The story ran in an edition 'dated' Sunday 28 May 1995, but in real time was sent to the university on Monday 8 May 1995.

Drip, drip, drip

Meanwhile, in *Catchword*, the newsletter of the CRC for Catchment Hydrology, a notice advised of the next meeting of the Dead Hydrologists' Society. Wouldn't they all just evaporate or become part of a salt lake somewhere?

Ask a silly question, get a really silly answer

One Monash philosopher managed to give a most unprophetic answer to interviewer Terry Laidler's question on 3LO recently. Laidler: "What's a philosopher doing talking about public protest?" Monash logician: "You asked me to."

Believe it or not!

Have you read the recent reports in local newspapers regarding the development of the Monash transit system? Apparently, a monorail will be built to run between Caulfield campus buildings on either side of Dandenong Road. Newspapers have also reported that a light rail line is to be established between Clayton railway station and VFL Park at Mulgrave via Clayton campus and Wellington Road. News to us!

MONTAGE

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Driving home privacy on the superhighway

A Monash expert has called for the development of international regulations to protect the privacy and security of information on the much-touted information superhighway.

Professor Greg Tucker, acting head of Syme Business School on Peninsula campus, has warned that the superhighway may not reach its full potential unless privacy issues are adequately addressed.

Professor Tucker spent the last five months on sabbatical researching issues of privacy, security and intellectual property rights on the global information infrastructure for the Organisation for Economic Cooperation and Development (OECD).

Protection of personal data and privacy issues have been in the spotlight since the late 1980s as a result of advances in information and communications technology and increasing globalisation.

It is envisaged that the information superhighway, or global information infrastructure, will include high-speed interactive networks connecting businesses, governments and individuals.

Professor Tucker said a greater amount of personal information was becoming available on the networks, including driver license renewals, examination results, medical data, road toll payments, purchasing patterns and consumer habits.

"The availability of such a vast range of personal data in digital form provokes the danger of uncontrolled matching of data without an individual's knowledge or consent," he said.

"In this way it would be possible for third parties to establish individual profiles."

The challenge for international bodies was to determine whether governments, corporations or individuals should be responsible to monitor this flood of information.

"Should the role of government be to ensure that a system is installed which protects privacy, or should governments permit market forces to dictate the communication models and technological tools available, if any, in the information infrastructure?"



If such systems were not established, Professor Tucker warned, the superhighway would be under-utilised and "not reap the full social and economic benefits envisaged".

Currently, there are several disparate domestic information highways with their own privacy regulations, and it is expected that these will evolve into a global information infrastructure.

But because this information superhighway disregards national boundaries, regulations governing privacy issues needed to be developed on an international level, Professor Tucker said.

"Our legal systems have developed over hundreds of years, usually in one cultural context. The task is – over the span of a few decades and across all cultural boundaries – to formulate and put into place a set of rules amenable worldwide."

Professor Tucker said the expansion of the information superhighway into the business arena was largely dependent on the development of international regulations.

"The use of the information infrastructure as a marketplace for the provision of services will only succeed where the providers of the services are able to protect their work and ensure payment."

He said service users would also want to be sure the product was purchased in its proper form and was not a copy of the original.

"These issues need to tackled before a proper framework can exist for the development of a successful information superhighway."

The OECD is involved in bringing together the national programs to determine how the national information highways could develop into a "consistent and harmonious" international superhighway.

During his sabbatical, Professor Tucker represented the OECD at international conferences in Belgium, Canada and Korea, speaking on the issues governing the future of the global information infrastructure.

He is involved in ongoing research in the area and will take part in a proposed meeting on the issues, to be hosted by the Australian Government in Canberra in February 1996.

BY GEORGIE ALLEN

Painting an image of artists' lives



The image of artists starving in rat-infested garrets and remaining unrecognised until they die may sound romantic, but a Monash academic says it often means they are being ripped off and abused.

Mr Bernard Hoffert, who heads Monash's Peninsula School of Art and the Ceramic Design department at Caulfield, is coordinating a UNESCO research project into working conditions of artists around the globe.

The world cultural organisation has provided \$150,000 for the project to find out how closely member nations have followed the extensive list of recommendations it issued in 1980.

The recommendations were designed to promote and protect artists' working and living conditions, social status, professional recognition, training and financial well-being.

"It outlined what UNESCO believed were just entitlements regarding the economic and moral rights of artists," Mr Hoffert said. "It's one thing for a country to subscribe to these ideals but another to make sure they're implemented."

UNESCO's International Association of Art began surveying its 87 member countries five years ago to check on progress, but political upheavals, such as the dissolution of eastern bloc power, quickly made the data obsolete.

Mr Hoffert got the latest research project underway after becoming IAA president in 1993. Detailed questionnaires sent to IAA executives have been followed up by a series of regional meetings.

Strict guidelines regarding the make-up of each nation's IAA executive ensure that they represent a cross-section of artists in terms of age, sex, level of recognition and chosen media. The association aims to have executives who are in touch with

government art bodies, but who can represent artists without aesthetic, social, political or religious bias.

"It's not always possible to enforce but we pursue what we believe art should be – a cultural and humanising force," Mr Hoffert said.

Information collated from the project will be presented at a meeting in Canada next year. The project's ultimate aim is to refine UNESCO's original recommendations into charters of artists' rights, specific to the needs of each nation.

Mr Hoffert said the UNESCO umbrella gave IAA considerable lobbying influence, but it had been difficult to pressure governments when there was limited data about how their country's artists were faring.

He has no idealistic illusions of being able to instantly overturn oppressive artistic policies of dictatorial regimes, but Mr Hoffert said recent changes to the balance of power in the eastern European countries and South Africa had greatly reduced the problem of political censorship.

"And our work means that there is a worldwide infrastructure in place to take advantage of democratic reforms," he said.

Mr Hoffert travelled to Chile two years ago to speak at a conference of artists lobbying to re-establish cultural freedom after nearly two decades of repression under the Pinochet military junta.

His IAA connections gave him access to the democratically elected President Patricio Aylwin for discussions about establishing a ministry of culture.

"There wasn't much money around at the time, but we were able to put together a framework for supporting art as funds became available," Mr Hoffert said. "It was uplifting to see artists and politicians so committed to their national culture."

And how do conditions for Australian artists compare on a global scale?

"It's easy to highlight problems in developing or politically unstable countries, but that's no excuse for Western nations to be complacent about issues such as copyright protection and access to tax benefits and social security payments," Mr Hoffert said.

"But when you've seen African artists bartering their work for food, you can't be too critical of a funding body like the Australia Council."

BY GARY SPINK

Writing from the heart

If romance novels are the food of love, Australian women have enormous appetites.

Each year they devour millions of them: Harlequin Mills & Boon alone sells about 500,000 books a month, or one every five seconds, in Australia.

And if those figures are not enough to make sceptics sit up and take notice, the world of academia is also beginning to take the romance genre seriously.

Last month, Monash University's National Centre for Australian Studies (NCAS) joined the growing list of academic institutions promoting research into romance novels when it published Australia's first comprehensive bibliography of romance authors and novels.

Entitled *Love Brought to Book*, the bibliography was compiled by librarian Ms Juliet Flesch and launched at Kay Craddock Antiquarian Booksellers in Melbourne.

Ms Flesch, who heads the Collection Management Division in the University of Melbourne's Baillieu Library, worked for two years in her spare time to track down more than 100 Australian romance novelists.

Her detective work involved uncovering several pseudonyms to find the real names of authors behind such tantalising titles as *The Doctor Who Dared*, *Love Thy Neighbour* and *Fear Kissed My Lips*.

She said many romance writers used pseudonyms to protect their true identity and escape ribbing from work colleagues and late night telephone calls from fans.

One of HM&B's most successful Australian authors, and possibly Australia's biggest selling writer, is Emma Darcy – a *nom de plume* for Sydney couple Wendy and (the late) Frank Brennan.

Ms Flesch identified a handful of male romance writers, all of whom write under women's names. Victoria Gordon, for instance, is actually Gordon Aalborg, a former journalist living in Tasmania and founder of the Tasmanian Gundog Trail Association.

According to Ms Flesch, romance novelists deserve more recognition for

their contribution to Australian culture and fiction writing.

She said they were Australia's biggest selling novelists as well as its least known.

HM&B has 27 Australian authors in its stable who collectively sold 100 million books worldwide between 1984 and 1994.

These authors have access to more than 100 international markets, from Iceland to the Philippines. Their novels are often translated into other languages, including Turkish, Spanish, Greek and Lebanese.

Sales figures for romance novels only scrape the surface of the real readership level. Millions more are borrowed from public libraries, picked up in opportunity shops, flea-markets and book exchanges, and swapped among reader-networks.

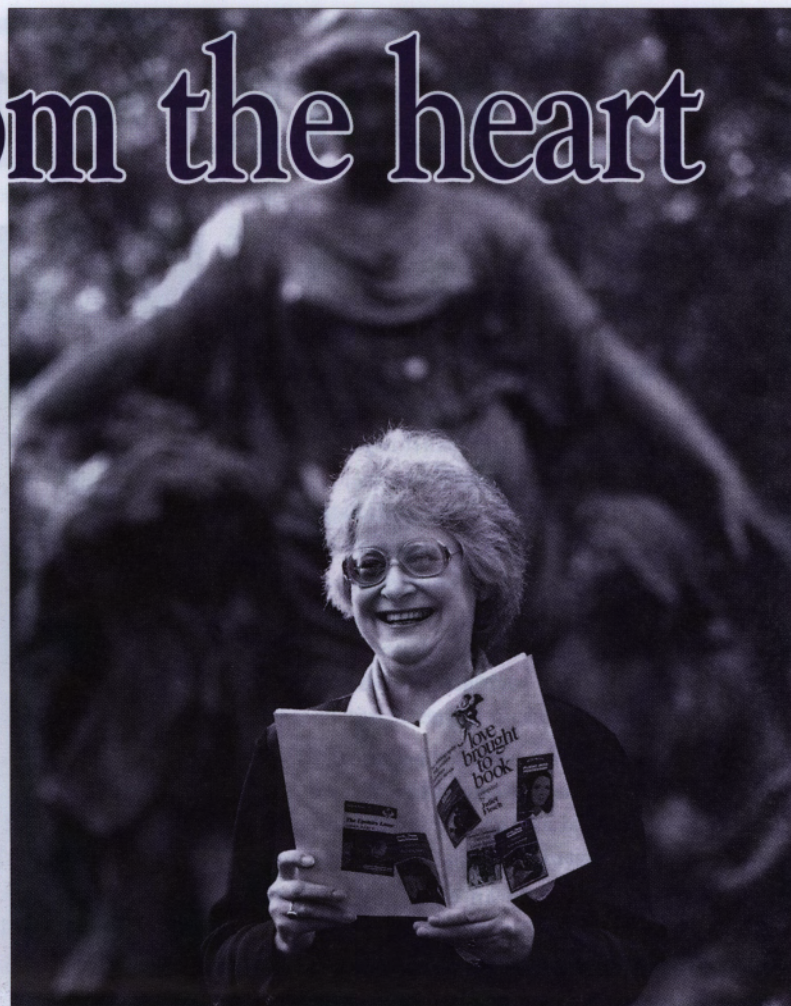
However, despite their huge readership the novels are poorly covered in the national bibliographic and biographic record and, according to Ms Flesch, their authors have been "determinedly consigned to oblivion".

"These authors are Australian and well-published; there is no reason to banish them or their books from the national memory," she said.

Ms Flesch believes most women read romance novels as pure escapism, rather than in the search for role models or out of a wistful desire to be the heroine.

"The romance novel puts no demands on you. These days it's there to compete against the cost of hiring a video, and I do think that reading places a greater stress on the imagination than watching a video."

Love Brought to Book also contains an essay from Australian romance writer



Ms Marion Lennox debunking the theory that romance novels are easy to write or written to a formula, and an essay by historian Ms Marlo Newton, titled 'Sorting through the trash: Studying romance novels'.

Deputy director of NCAS, Mr John Arnold, said Australian romance fiction was a very active area for publishing and recreational reading.

"But until now it has been a neglected genre in terms of academic study and general recognition as part of the creative output by Australian writers," he said.

"Hopefully, *Love Brought to Book* will give Australian romance writers and their books the recognition they deserve."

Mr Arnold said Monash published the book as part of the centre's major Bibliography of Australian Literature Project (BALP) and an on-going commitment to providing resources for Australian studies.

The aim of BALP is to compile a complete listing of all published creative writing by Australian authors. The finished bibliography is expected to include about 40,000 titles and some 12,000 authors.

BY SUE HOBBS

Listening to the deaf

The story recurs throughout human history: a minority group fights to preserve its traditions and culture against the values and expectations of a dominant community.

Associate Professor Don Miller from the Department of Anthropology and Sociology is conducting a major cultural study into one of Australia's minority groups – the deaf.

According to Dr Miller, there have been recent surges in pride within the deaf community comparable to those seen in movements such as feminism and black consciousness.

Tensions have arisen because the broader community has sought to play down differences and assimilate minority groups into mainstream culture.

"My job as an anthropologist is to understand the nature and parameters of these differences – to document what is distinctive about deaf culture and to understand the role played by sign language in these differences," Dr Miller said.

There have been recent surges in pride within the deaf community comparable to those seen in movements such as feminism and black consciousness.

Dr Miller and his collaborator, Associate Professor Jan Branson of La Trobe University, have received a \$215,000 grant from the Australian Research Council to study the language and the culture of Australia's deaf community.

He suspects that few Australians with normal hearing are even aware that English is not the first language of the deaf, whose language has its own special 'words', grammar and colloquialisms.



The languages used by deaf people have evolved with the changing needs of the users over thousands of years. The grammar of Auslan – Australian Sign Language – has more in common with Chinese than English, even though its roots lie in British and Irish sign language.

"Sign languages are fully fledged languages, as natural, as old and as complex as oral languages," Dr Miller said.

"There has been a misapprehension in the general community that they were developed recently as a means of educating the deaf.

"Wherever deaf people have been able to establish a sense of community, they have developed coherent systems of communication through signing."

Like many minority groups who suffer deprivation, Dr Miller explained, there are many things the deaf regard as being a dis-

tinctive part of their own culture, and resent attempts to change them.

He said the deaf community was keen to promote deafness as a difference rather than a deficiency.

"Many deaf people feel that their lives are being controlled by the hearing world," Dr Miller said.

He cites modern-day technological advances as one of the major problems the deaf culture has to contend with.

"Since the invention of the first hearing aids last century, the deaf community has been forced to submit to technological 'cures' for something they see as normal.

"This has reached its height with the cochlear implant. Many deaf people see it not just as a technological device developed to make them like 'second-class' hearing people, but as an overt attempt to change them physically, since the implant involves surgical intrusion into the body."

Creating a calendar with bite

Anne Geddes is famous for them. Elle, Claudia and Rachel have cashed in on them. Now students from Monash University's Department of Graphic Design have produced one.

But this calendar has no bikini-clad super models or cherub-faced babies featured on its glossy pages – just dogs.

The calendar is the result of many months' work by 14 final-year graphic design students for K. W. Doggett Fine Paper. A cooperative effort between the students, five staff members, 11 photographers, 14 dog owners and a number of very obliging canines resulted in the creation of the dogs-with-attitude calendar entitled *Doggytricks*.

An annual promotional venture for the company, the calendar does not depict dogs playing their usual doggy games like 'catch the frisbee' or 'fetch the ball'. These dogs are out of the ordinary.

When K. W. Doggett approached the Graphic Design department to design and produce its 1995 calendar, the first thing the students had to do was track down dogs with creative possibilities.

One of the project coordinators, Mr Bruce Edwards, said: "Some dogs suggested by the students had great possibilities but were breeds not found in Australia.

"The dogs featured in the calendar were 'discovered' through kennel clubs and all are pedigrees."

The dogs were 'interviewed' by the students to assess their temperament and determine whether they were sufficiently docile and obedient.

After finding suitable dogs, the students had to organise sets, props and photographers. Some of the sets and props were quite



elaborate, such as a 44-passenger bus, cheerleaders from the North Melbourne Giants Basketball Club and a press and type foundry.

One student, Ms Kerrie Stephens, said her 'model', a Curly-Coated Retriever, was extremely well-behaved, even during the hour it took to put its hair in rollers.

*The dogs were
'interviewed' by the
students to assess
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and obedient.*

It took another hour-and-a-half to set up the shoot and two takes to get the photo that was eventually used in the calendar. The result is November's pampered pooch enjoying the works at the beauty salon.

"The hardest part was getting the dog to look where we wanted it to," she said. "But the breeder was really good with the dog, which made things a lot easier."

Other interesting doggy poses included February's zinc-smeared Irish Water Hound donning an inflatable plastic ring and goggles on the edge of a diving board, April's Dalmatian shaking off its spots after a bubble bath and June's dog-world super hero, the Doberman, leaping a tall building.

Ms Stephens says the project had been a great experience. "I have included the work in my art folio, and it has received very positive responses from prospective employers."

According to the head of Graphic Design, Professor Brian Seddon, staff and students were quick to recognise the creative possibilities of working with the esteemed Doggett name, and the concept for the 'Doggytricks' theme soon evolved.

He said the marketing strategy was designed to reinforce the Doggett name and that the response so far had been "one of delight".

Spokesperson for K. W. Doggett Fine Paper, Mr Markus Berzins, said the response to this year's calendar had been "exceptional" with people still contacting the company for extra copies.

The company will sponsor an annual award for graduating Monash graphic design students who demonstrate consistently high performance throughout their course.

BY JULIET RYAN

Quality video compression sets Monash among world's best

Australian research into video compression has led to the development of quality standards which are setting the pace for the rest of the world. Montage profiles the team spearheading the research.

One of the few services in the world capable of customised compression of high quality video for interactive compact disks (CD-I) and computer-network based video-on-demand was recently launched by Siemens in Melbourne.

Monash University will use the compression service to create a pilot video library service where the collection is stored digitally and accessed via computer.

And early next year, the university and Siemens will seek to commercialise a desktop video-conferencing unit capable of

voice, text and video exchange that will not require specialised video encoding hardware.

These are just some of the applications of a successful collaboration between Monash, Siemens, Telecom and the Australian Computing and Communications Institute, which is developing and trialling communication technology in the educational sector before expanding it to business.

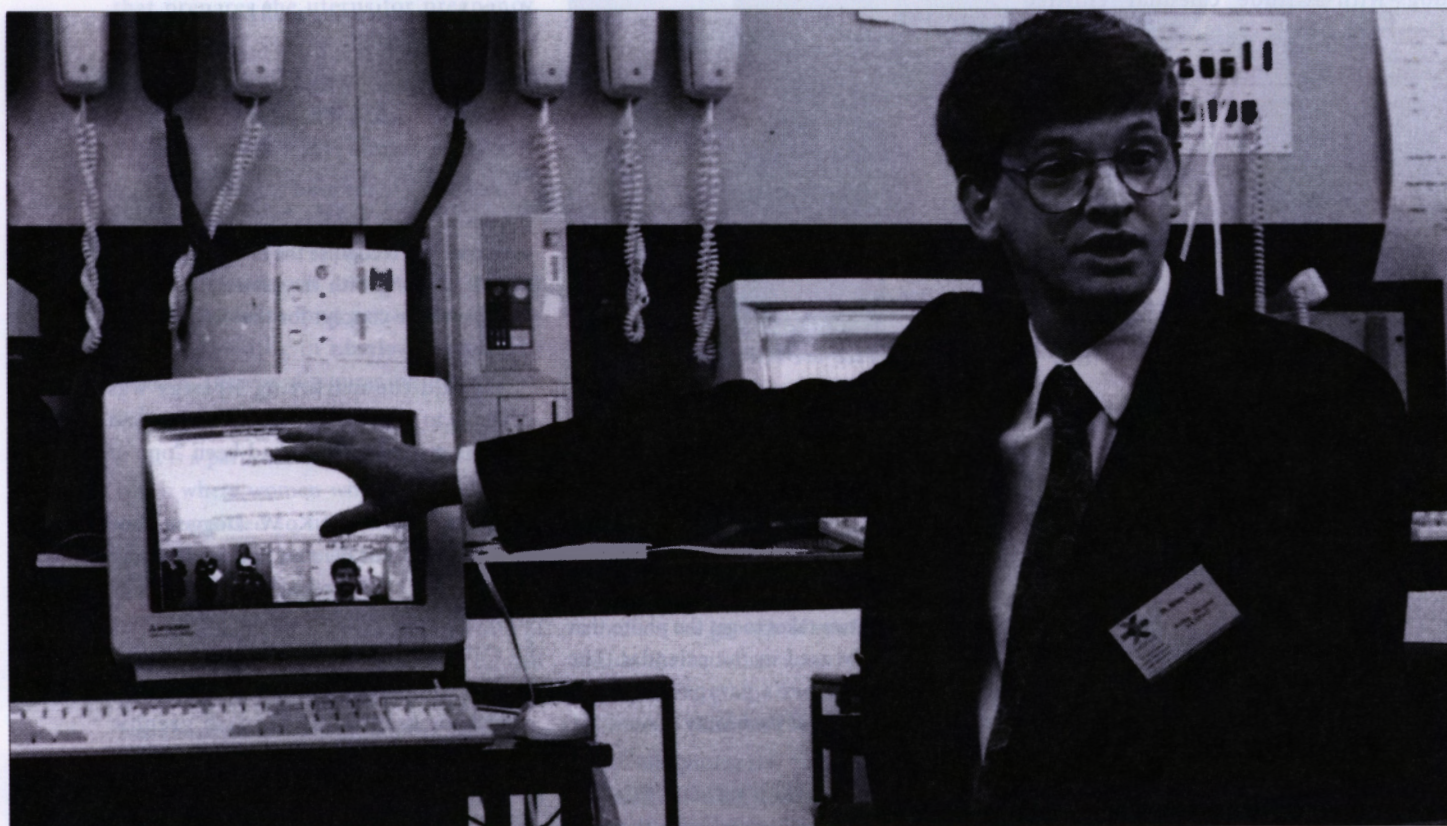
"Our aim is to establish a sound core of expertise in multimedia and high speed telecommunications technology to provide

advice to Australian industry," said Dr Bruce Tonkin, deputy director of the Advanced Network Systems Performance and Applications Group (ANSPAG).

ANSPAG is funded partly by the Federal Government's Cooperative Research Centres Program and is based within the university's Electrical and Computer Systems Engineering department.

Expertise in digital video compression is at the heart of the successful transfer to Siemens of a system that will market Australian technology to the world through the company's 156 offices worldwide.

It is the first commercial product of a project aimed at applying the MPEG (Motion Picture Expert Group) standard to the compression of video footage for use in such applications as video entertainment, distance education, video training and multimedia.



Dr Bruce Tonkin demonstrates the technology that puts Monash at the forefront at video compression research.

Immediate beneficiaries of the service are Australia's film, television and advertising companies, who will no longer need to send their videos overseas for expensive encoding.

Dr Tonkin explained that the new low-cost technology also puts it within reach of mainstream business.

"Most people are familiar with the use of video through video cassette recorders. This video is in analogue form and is subject to distortion when transmitted over long distances or copied multiple times," he said.

"Digital video is video converted into a form that can be directly manipulated by computers. It can be transmitted and received without any distortion and is increasingly used within the film and television industry.

"In its raw form, digital video requires very high capacity transmission links and very large capacity data storage. For example, a 70-minute video when uncompressed would need 100,000 floppy disks or 200 CDs to store it."

The software technology developed at Monash compresses the video data by a factor of 144 and has been incorporated into the Siemens Eikona MPEG Encoding System for transferring video to digital media such as CD-ROMs at a cost of less than \$100 per minute.

Dr Tonkin said the technology had immediate application for industrial training and education. It also opened up a new field where product promotion and technical updates could be effectively supplied on digital video.

With this technology, a company could use an in-house video camera to produce visual material, have it compressed onto CD, then distribute multiple copies to customers.

"The real estate office of the future will be able to video-tape houses as they are put on the market and provide customers with CDs for viewing at home," Dr Tonkin predicted.

"In the automotive industry where garages are required to install new compo-

nents, manufacturers could send out instructions on CD in both video and text."

Advances in communication technology, such as the World Wide Web and the optical fibre network currently being laid by Telecom, will make it possible to provide on-line access to image and video information.

The university and Siemens will seek to commercialise a desktop video-conferencing unit capable of voice, text and video exchange that will not require specialised video encoding hardware.

The pilot video library service at Monash, when it goes on line at the end of the year, will provide a model of how a business could distribute product material to its branch offices over a digital network.

Applied to a real estate office, this technology will enable property video clips to

be stored and updated centrally, and retrieved on demand by regional offices.

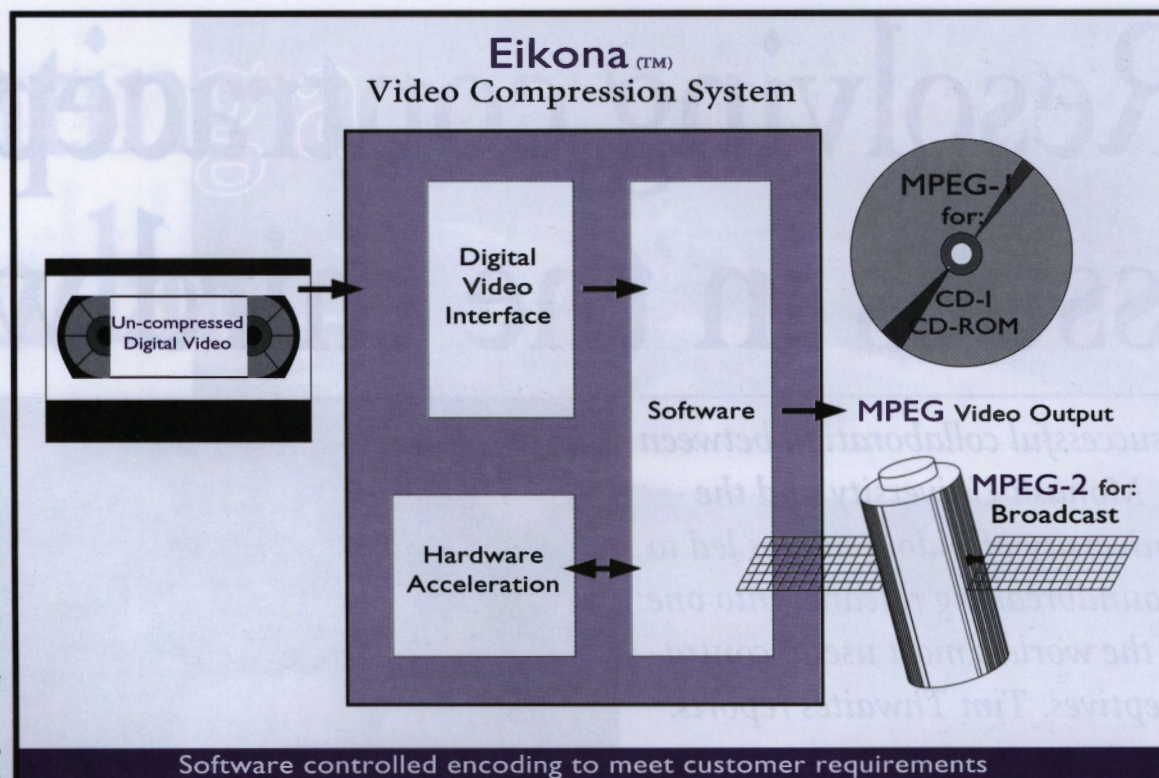
The expertise gained in video compression through these projects has prompted the Video Communications Group at Monash to develop a video conferencing system for the individual personal computer which is capable of communicating with large expensive meeting-room systems.

The group has shown the feasibility of performing video coding and decoding in software on a PC equipped with readily available audio and video cards in a manner compatible with international standards. The aim is to reduce the additional costs of adding this technology to a PC, so that its installation does not cost more than the purchase price of the PC.

An early application of the system will be in the distance education field where students at one campus will be able to communicate directly with tutors at another campus, enabling them to receive individual attention.

In the business area, Dr Tonkin said, the low cost opened up a new world of executive communication, in particular where that communication had a visual component.

As in the Siemens deal, Monash is seeking to transfer the valuable intellectual property to local Australian industry for export.



Resolving contraception issues in the third world

A successful collaboration between Monash University and the University of Indonesia has led to groundbreaking research into one of the world's most useful contraceptives. Tim Thwaites reports.

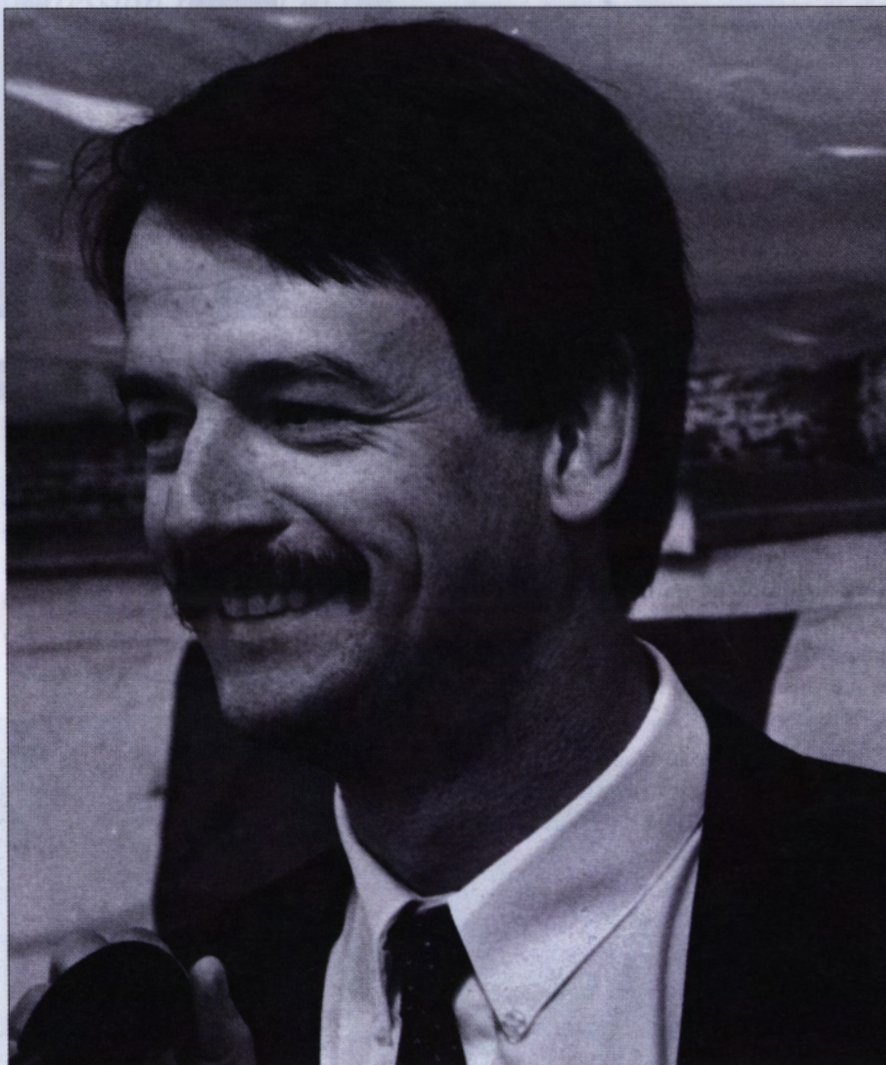
Monash University and Indonesian medical researchers have discovered the cause of a common side-effect which discourages many women in developing countries from using a popular contraceptive.

The contraceptive, Norplant, is a steroid called progestogen, which mimics the action of the human hormone progesterone that prepares the uterus for pregnancy. A slow-release capsule implanted under the skin of the upper arm, Norplant stops women ovulating and can prevent pregnancy for up to five years. It is popular with family planners in developing countries because it is easy to administer and maintain.

But it has one major side-effect: Norplant causes long periods of uncontrolled bleeding in nearly one-third of women, thereby discouraging many from using it.

It is a particular problem in Muslim cultures, where women who are bleeding are not permitted to undertake many daily activities such as praying, cooking and caring for their family.

The collaborative Monash-University of Indonesia project, which has been funded by the World Health Organisation (WHO), has already had some important spin-offs. As well as discovering the cause of the bleeding, the project has provided an avenue for training Indonesian researchers and could also lead to important advances



Dr Peter Rogers.

in other areas including the treatment of cancer.

The Monash and Indonesian researchers have discovered that progestogens not only cause the lining of the uterus, or endometrium, to become thin, but also stimulate the growth of small blood vessels within the endometrium. In some women, these capillary blood vessels are especially prone to rupture and uncontrolled bleeding.

Women with Norplant implants do not ovulate, and therefore they do not menstruate. But bleeding from the ruptured

capillaries can occur more often, and less regularly, than menstruation.

According to research team leader Dr Peter Rogers, of Monash's Institute for Reproduction and Development, the bleeding is the only well-documented side-effect of one of the most useful contraceptives for the developing world.

"No other convenient contraception is ready for implementation on a wide scale," he said. "There is massive worldwide demand for this kind of contraception – about 600 million couples."

Dr Rogers said Norplant had several advantages: training people to implant the contraceptive was relatively easy; implants removed the need for daily pills or monthly injections, both of which could be difficult to deliver and maintain in remote areas of tropical countries like Indonesia, especially in the rainy season; and the implant could be removed in a simple procedure, reversing the contraceptive effect.

And because women using Norplant do not menstruate (the bleeding comes from a different source to menstrual blood), the contraceptive reduces total blood loss, leading to improved blood iron levels. As well, only very low dosages of progestogens are required for the implant to be effective.

For these reasons, WHO was keen to support a study of the impact of Norplant on the endometrium. Dr Rogers and his Indonesian counterpart, Dr Biran Affandi, set up a program which takes advantage of the fact that Indonesia has some of the biggest and most efficient family planning clinics in the world.

The group analysed endometrial tissue taken from three groups of women – Australian women who have not been exposed to Norplant (which is not available in Australia), Indonesian women with implants who have experienced only a few days of bleeding and Indonesian women with implants who have suffered from prolonged bleeding.

According to Dr Rogers, the findings of the research contradicted conventional wisdom. It had been thought that because progestogens led to a thinner endometrium, there would be fewer blood vessels. In fact, the samples showed a 50 per cent increase in blood vessels in women with implants, whether they had bleeding problems or not.

“There is massive worldwide demand for this kind of contraception – about 600 million couples.”

The researchers are now concentrating on ways of treating the bleeding problem. One possibility is to find a way to alter the structure of the active progestogens in Norplant so they do not encourage blood vessel growth. Another is to add a compound to the mix to inhibit blood vessel growth. And a third is to investigate what happens at times, such as during menopause, where the endometrium thins, without an increase in blood vessel numbers.

Dr Rogers said the findings had worldwide implications, as most steroid-based contraceptives could lead to breakthrough bleeding.

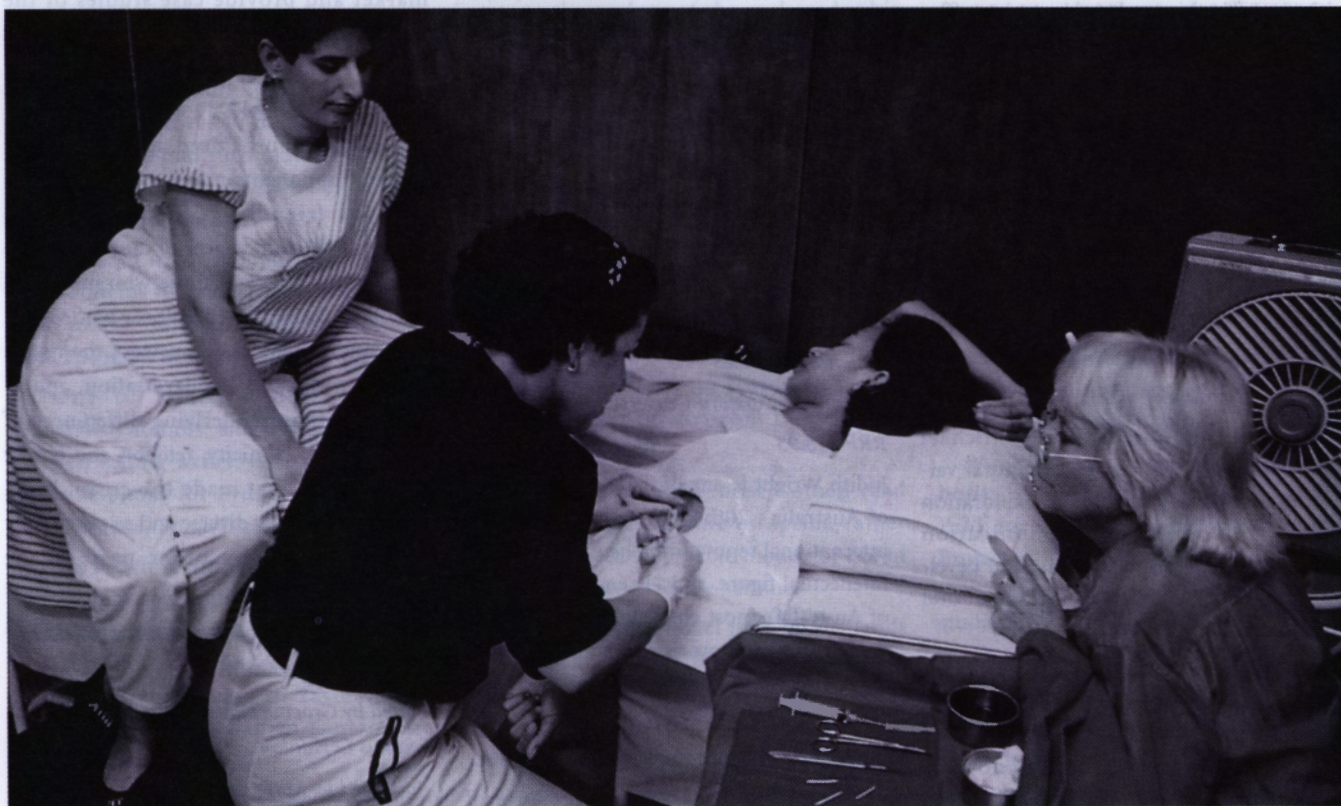
“If we can discover what causes the problem with Norplant, we can apply it to all contraceptives used in the same way.”

The study overlaps a current thrust of cancer research. Substances that can control blood vessel growth could be a useful weapon against cancer, since the growth of tumours depends on nourishment delivered by blood vessels.

The good working relationship established by the research team has resulted in Indonesian scientists being trained in the latest laboratory tissue culture and biochemical testing techniques in Melbourne. Dr Rogers also visits Jakarta about three times a year and has helped set up a Master of Reproductive Science at the University of Indonesia.

Norplant has been approved recently for use in both the US and the UK, and two of the best known medical schools in the US – Johns Hopkins and Yale – have approached the University of Indonesia to learn more about the contraceptive.

The project, which has been underway since 1990, has established the group as the world's foremost authority on the effects of Norplant.



Norplant is implanted under the skin of the upper arm, preventing pregnancy for up to five years.

Penetrating the veneer of cream brick

Are Melbourne's post-war south-eastern suburbs one of the most characteristic landscapes of modern Australia?

According to Monash University historians, the cream brick suburban frontier is an expression of what many Australians aspired to after the Depression and Second World War.

The Department of History has launched a book *The Cream Brick Frontier: Histories of Australian Suburbia*, which focuses on the growth of the outer suburbs.

One of the book's three editors, Mr Seamus O'Hanlon, said that when the war ended and life began to return to normal, Australians started to realise their dream of a separate dwelling for every household.

"Between 1945 and 1975 Australian cities grew and spread as increasing affluence, the car and full employment brought the possibility of home ownership within the reach of millions who had never before contemplated the prospect," he said.

"The call of the pastoral frontier was replaced by that of the new suburban frontier: the cream brick frontier."

Mr O'Hanlon said people who built after the war were faced with many obstacles including shortage of materials and government restrictions limiting the size of their houses to 12.5 squares.

But while the prospect of owning a home was plausible to many people, memories of war and hardship were still fresh in their minds.

"Extravagances were frowned upon because people were wary about another depression – two bathrooms in the same house didn't become acceptable until the seventies," Mr O'Hanlon said.

"Both men and women had money after the war. They were eligible for war service loans at low interest rates but didn't want to overindulge so they built small, timber homes with the basic essentials. Once the people owned their homes they knew that no-one could throw them out."

The Cream Brick Frontier looks at post-war Australian suburbia and argues that

rather than being bland and monotonous, the suburbs are a vital and living feature of our historical development.

The authors also compare Australian and American suburbs, look at the role of the public sector in the suburban housing market and provide case studies of the builders of the suburban dream, such as AV Jennings and Merchant Builders.

One of the book's 11 authors concludes: "What the suburbs need are neither out-and-out opponents nor uncritical defenders, but friendly critics prepared to penetrate the thin veneer of cream brick, to listen to the voices of those who made and inhabited them, as well as those who visited and condemned, to deconstruct the myths of uniformity and standardisation, and to recognise those underlying differences of gender, class, ethnicity, religion and family composition that made the cream brick frontier as socially diverse and as potentially interesting as any other part of the Australian landscape."

The Cream Brick Frontier: Histories of Australian Suburbia

Edited by Graeme Davison, Tony Dingle and Seamus O'Hanlon

Published by Monash Publications in History
RRP \$17.95

Inter-Cultural Communication At Work: Cultural Values in Discourse

By Michael Clyne

Published by Cambridge University Press

RRP \$110(hardback)

In this interdisciplinary study, Michael Clyne examines the impact of cultural values on discourse. Through an exploration of the role of verbal communication patterns, he sets out to integrate and develop a linguistic framework of inter-cultural communication.

He draws on data from recordings of spontaneous communication in the Australian workplace between people of vastly different backgrounds, notably European and Asian, who use English as a lingua franca.

Michael Clyne is professor of linguistics at Monash University.

Australian Writers: Judith Wright

By Jennifer Strauss

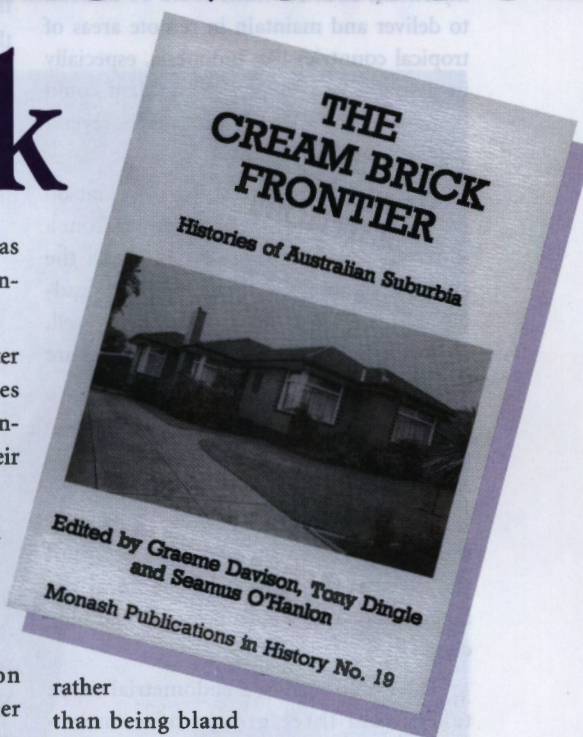
Published by Oxford University Press

RRP \$18.95

Judith Wright is one of the most significant of Australia's 20th century poets, with an international reputation. She is also a major intellectual figure, actively engaged in some of Australia's most challenging social issues – environmental protection and land rights for Aborigines.

This book looks at Ms Wright's poetry in the context of her work as activist and critic.

Jennifer Strauss is associate professor of English at Monash University.



Ned Kelly rides again

The world's oldest feature film has been restored to its former glory with advanced digital technology developed by the Monash ANSPAG group.

Film buffs will be able to view rare and old archival footage, thanks to a restoration technique that allows it to be shown as video on CD-ROM and CD-I.

The first proof of this method is already accessible over the Monash University computer network – the 1906 classic *Story of the Kelly Gang*, believed to be the world's first feature film.

Mr Paul Richardson, a Siemens research engineer with the Advanced Network Systems Performance and Applications Group (ANSPAG) and developer of the film restoration technique, said he had purposefully maintained the authenticity of the original *Kelly Gang*.

But he digitally removed an extraordinary range of age-related artifacts including image fade, grain noise, separation of the emulsion from the substrate, scratches, dirt and mould.

"Many of these age-related problems may be traced back to latent flaws introduced by the primitive chemical technology of the time," Mr Richardson said.

"Virtually every pixel in every frame of the film is degraded by at least one of these artifacts.

"Unfortunately, you can't remove bad acting or camera shake," he added.

The film restoration technique is an important spin-off of Mr Richardson's PhD research at Monash University.

"I found that when the *Kelly Gang* was compressed using standard digital video compression technology, it actually looked much worse than the original," he said.

"This is because the MPEG (Motion Picture Expert Group) compression standard is optimised for statistics of modern film and video whereas the statistics of old film are quite different."

The noise contained on the original leads to 'blocking' effects after compression, which dominate the image and detract from the content.

"Unfortunately, the human visual system is distracted far more by the blocking artifacts than the age-related ones.

"So it became necessary to modify the statistics of the film into a form more acceptable for MPEG coding if it was ever to be distributed in compressed digital form."

Mr Richardson worked with the National Film and Sound Archive in Canberra to see how the technology could be applied to help the archive make its stores of historical footage, such as the *Kelly* film, more widely available using the emerging digital video media.

The process begins at the archive, where the original film undergoes a lengthy preservation process, part of which entails its transfer onto modern film stock.

The film is then put through a telecine process where it is converted into an uncompressed digital video

format. Software then removes extraneous noise that causes blocking before the video is compressed.

Mr Richardson said the National Film and Sound Archive was considering using the process to restore other films. They are also very interested in a variation that enables the production of high quality still images from degraded film.

Siemens have already incorporated the restoration process into their MPEG compression service, enabling them to restore degraded films to their former glory, and offering film archives around the world a new medium for distributing historically significant film material.



An example of how the damaged 1906 *Kelly gang* film footage has been repaired using video compression techniques. Before treatment (top), and after (bottom).

A language for all cultures

Esperanto may not have achieved world peace, but it could play a vital role in improving language education in Australian schools.

A Monash research team has initiated an Esperanto project, which uses the international language as a general introduction to language study.

Recent European research has shown that learning Esperanto enhances students' ability to pick up a second European language later on.

In one study, students who had learnt Esperanto for only a year before doing two years of French became as proficient in French (and in some cases excelled) as those who had studied it for three years.

One of the project team members, Professor Alan Bishop from the Education faculty, said the team was interested in finding out if the same benefits applied to the learning of Asian languages.

"Esperanto's advantages include its simple grammar, regular rules and no irregularities, which makes it easier for children to understand language structure and gives them a good basis to compare structures of other languages," Professor Bishop said.

The Monash project was launched at three Melbourne primary schools last October. Research assistants will monitor 250 Year 5 and 6 students both throughout their Esperanto course and as they continue to other languages at secondary level.

The results will be compared to those of students without Esperanto training, as well as those who continue an Asian language begun at primary level.

Because of Esperanto's simple nature, classroom teachers involved in the pilot program do not need to

be fluent in the language. After in-service training from Professor Bishop's wife Jennifer Bishop, who is a fluent Esperantist and president of the Melbourne Esperanto Society, the teachers act as facilitators using resource materials developed by the team.

The Directorate of School Education has approved the project as a LOTE program, but it is jointly financed by Monash and Australian Esperanto associations.

Research assistant Ms Judy Williams said if the pilot was successful, the team would apply for national funding to expand the program to other states.

"Other schools have expressed interest, and children learning Esperanto in other countries are already sending letters to our students," Ms Williams said.

"That's another advantage Esperanto has over other languages. It's wonderful that children learning Indonesian are able to communicate with their peers in Indonesia, but Esperanto students can write to children in many countries and communicate on similar levels," she said.

"It gets back to the original ideal of using the language to promote peace and international understanding."

Esperanto was devised in the 1880s by Dr Ludovic Zamenhof, a multilingual Jew from Russian-occupied Poland who believed a common language would ease racial conflict.

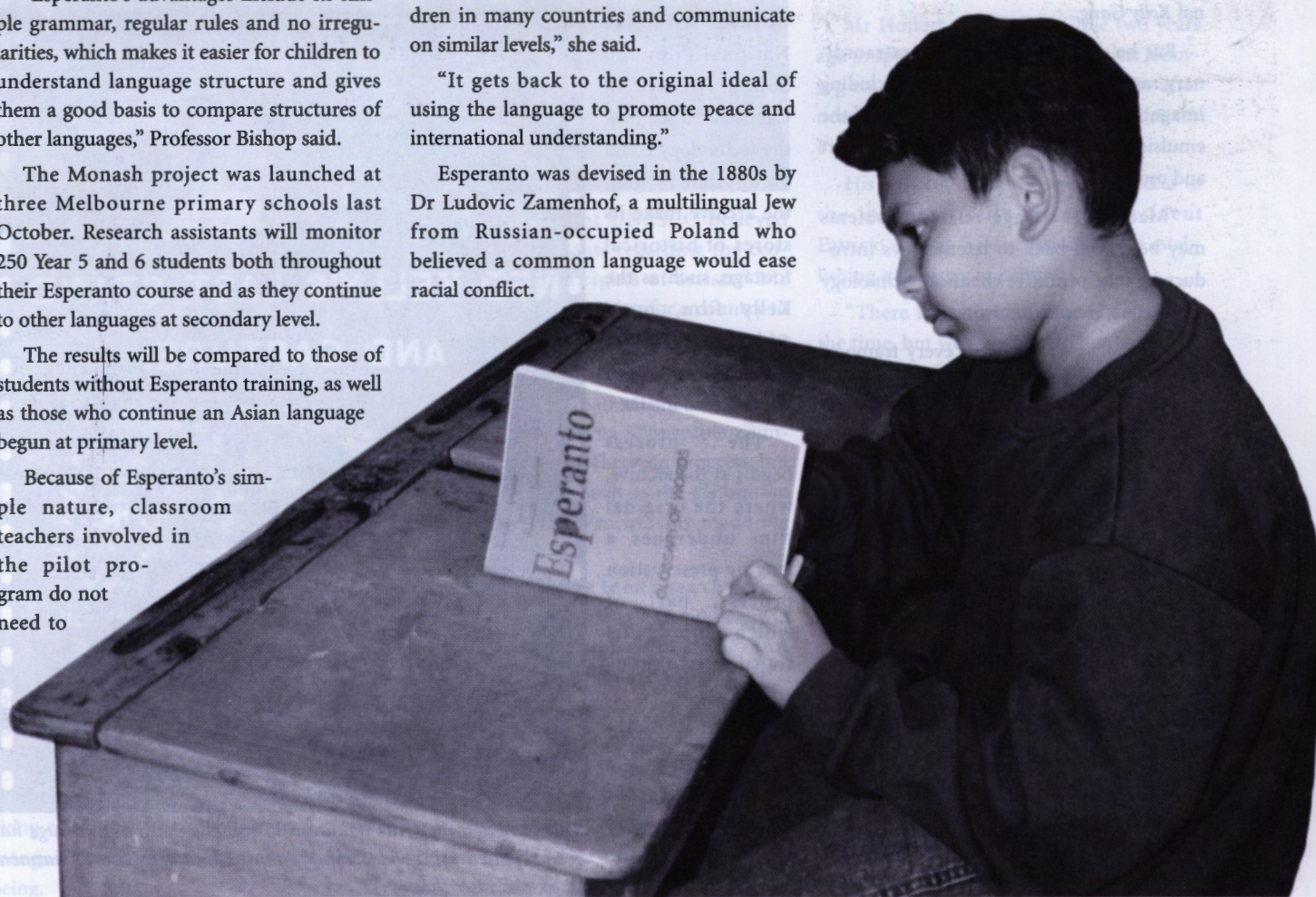
Esperanto fell short of universal acceptance, but it was declared the official world language by the League of Nations in the 1920s and is spoken in more than 100 countries.

"Interest in Esperanto was probably strongest after the world wars, but it has gained recent popularity with people communicating on the Internet," Professor Bishop said.

"There is obviously much greater growth in the use of English due to the influence of the US media, but there is also plenty of worldwide concern about its potential to overtake regional languages.

"But because Esperanto is not connected to any specific nation, it will always be a second language, promoting understanding of other cultures rather than domination of one over another."

BY GARY SPINK



Fashion, Decor, Interior

What do Wedgewood patterns, advertising displays and computer-generated architecture have in common?

They are the inspiration behind the exhibition *Fashion, Decor, Interior*, opening at the Monash University Gallery next month.

Melbourne artists Tony Clark, Stephen Bram and Lyndal Walker work individually, but their art incorporates aspects of design commonly used in mass production, architectural interiors and design.

Fashion, Decor, Interior is curated by Ms Natalie King and runs from 7 June until 15 July. The three artists will give a floor-talk in the gallery in June. Telephone 9905 4217 for further details.



Lyndal Walker prepares pieces for the exhibition in her Melbourne studio.

Pratt prize

Monash student Greg Phillips was recently awarded the 1994 Pratt Prize for the best chemical engineering design project by students from the University of Melbourne, RMIT and Monash.

The prize of inscribed certificate, medal and \$2000 is awarded annually by the Victorian group of the Institution of Chemical Engineers.

Mr Phillips' project involved the design and evaluation of a plant to improve the octane number of a light naptha stream in a refinery.

Dr David Brennan, lecturer in the Department of Chemical Engineering, said the project was "of a high standard throughout with careful attention to detail and excellent standard of drawings and design documentation".

The art of music

An exhibition of CD covers designed by second-year painting students was recently held at Monash's Caulfield campus.

What started out as a class project turned into a major exhibition of textured CD cases focusing on the theme "The sublime".

The exhibition, which attracted outside sponsorship and support from local businesses, recording labels and university executives, is expected to become an annual event for the university's Department of Art and Design.

Third Lucinda Lecture

Sir Anthony Mason gave his final presentation before his retirement at Monash University recently.

The Alexander Theatre was packed for the Third Lucinda Lecture this year when the

then Chief Justice of the High Court of Australia spoke on 'The Australian Constitution - Towards 2001: Minimalism, Monarchism or Metamorphism'.

He argued that Australians needed a better understanding of the constitutional framework to comprehend and discuss the possibility of constitutional reform.

Pointing a finger at accidents

Fingers being jammed in doors is a serious problem that can lead to cuts, fractures, misshapen fingers and amputations.

It is also a significant cause of hospital admission in children under the age of two, with one-third of finger jam injuries in this age group resulting in hospitalisation.

Monash University's Accident Research Centre has received funding from Vic Health to determine how these accidents are occurring.

The centre found that 60 per cent of injuries were caused by the hinge side of the door and has recommended that creches and kindergartens install finger guards.

When is information entertainment in disguise?

From Montage 16

movement. You are required ... to pay attention to no concept, no character, and no problem for more than a few seconds at a time ... bite-sized is best, complexity must be avoided, nuances are dispensable ... Visual stimulation is a substitute for thought, and verbal precision is an anachronism."

Yet television news continues to pull ratings and dominate mainstream public discussion.

Even more distressing is the fact that its dominance of news presentation allows television to dictate how news is presented in other media.

Radio and print media, in order to maintain or expand their audience, must tailor their presentations according to this entertainment ethic - enter the radio news bulletin and magazine segment, and the tabloid and pictorial newspaper.

If this is true, if our total information environment now mimics television, the social and cultural dangers are significant.

The bottom line of all this is that television's parody of serious public discussion has begun to change our idea of what it means to be well-informed.

Neil Postman, in *Amusing Ourselves to Death*, puts it this way: "I am saying something far more serious than that we are being deprived of authentic information. I am saying that we are losing our sense of what it means to be well-informed. Ignorance is always correctable. But what shall we do if we take ignorance to be knowledge?"

The challenge in recognising that television is an entertainment technology, not an information technology, is to put entertainment technology in its place. Only then can we assume the responsibility to look for more appropriate means of gathering and delivering serious news, comment and analysis.

When is information entertainment in disguise?

Kevin Dillon, a Monash University research engineer, takes a look at the dangers of television news and its influence on other media.

Television, which emerged in the late 19th and early 20th centuries as a blend of telegraphy and photography, has changed the purpose of mass communication.

No longer is the principal aim of mass communication to inform the community – entertainment has become the overriding objective.

Aside from some significant economic priorities such as the need to rate well and the high cost of originating content, entertainment is the imperative because television's 'vocabulary' (to a greater extent than that of the written word) has an aesthetic value in its own right – one watches television as opposed to reading text.

This is the basis of television's success; it is popular because it is spectacular. By providing visual stimulation, it entertains and amuses.

This need not be a problem because entertainment is a necessary and rehabilitating activity. But when television tries to be serious – as it must when presenting news – it can become dangerous because its 'vocabulary' doesn't lend itself easily to serious content.

How does this lead to televised news being dangerous?

Most obviously, televised news allows only a limited

selection of content because getting news footage is an expensive exercise.

In addition, any individual or group that wants to present a message to the community must adjust this message to suit television's 'vocabulary'.

In other words, the message must be visually absorbing, and it is easy to see where this has led. Consider, for instance, the rise of the political image-maker and the decline of the speech writer, televised political debates reduced to 'entertaining' slanging matches, and human rights and environmental activists staging arrests to get air time.

Television news stories are also presented in

brief, with an average length of 45 seconds. This trivialises their message by inferring that its implications may be considered in a very short time. Viewers are rarely, if ever, required to carry over any thought or feeling from one story to the next, and no time is offered for analysis or expansion before the next story flashes onto our screens.

Less obvious, but perhaps equally damaging, is the introduction, interruption and conclusion of television news programs with music, which serves the same purpose as it does in drama programs. It creates a mood for the entertainment, further blurring the line between serious public discussion and entertainment.

These unreal aspects are reinforced by the amiability of the news presenters. By offering no visible emotional response, newsreaders play characters who are only marginally serious and who steer clear of authentic or deep understanding.

So television viewers are presented not only with fragmented news but also with news which has little context or consequence and almost no seriousness.

In short, television news is first and foremost a form of entertainment.

Robert MacNeil, the executive editor and co-anchor of the *MacNeil-Lehrer Newshour* broadcast on SBS, describes the format of news presentation in the *New York Education Quarterly*:

"The idea is to keep everything brief, not to strain the attention of anyone but instead to provide constant stimulation through variety, novelty, action, and



Continued on Montage 15