On the eve of the 50th anniversary of Yuri Gagarin’s space flight, Flinders University space archaeologist Dr Alice Gorman reflects on the significance of that feat – with an Australian twist.

“Australians were fascinated by the idea of the first man in outer space, if media coverage around the 12 April 1961 mission is any indication, and they remain so,” Dr Gorman said.

“Sydney hosted an international trade fair in August that year and the Russian Pavilion was the largest and most popular at the fair,” she said.

“The pavilion was packed four or five people deep, there to see three 1:1 scale models of the Sputnik satellite, under a huge photograph of a smiling Yuri Gagarin.”

There was also a flurry of Australian and international media attention given to the Sydney Lord Mayor’s invitation to Gagarin to attend the fair.

“Gagarin was on an extensive international tour and was being greeted in the streets with adulation,” Dr Gorman said.

“But for all the attention and speculation, Gagarin didn’t make it to Australia.”

Her survey of newspaper accounts reveals the official reception of Gagarin’s achievement was tempered by Cold War hostilities.

“Leaders all over the world were congratulating the USSR but Prime Minister Menzies wouldn’t. He made no public statement,” she said.

“Journalists turned to scientists for comment, particularly at Woomera which had been the first tracking station to acquire Sputnik 1 in orbit.”

Yuri’s Australian story lost in space

going on page 2...
Government to face strong pressure on China

The Gillard Government faces a difficult challenge to resist pressure to take a tougher line on human rights issues in China when the Greens take control of the Senate in July, according to Professor Malcolm Cook.

Professor Cook said successive Australian governments had taken a pragmatic and principled stand in relation to China and had, as in the case of Prime Minister Rudd’s visit to Beijing in 2008, been prepared to canvass contentious issues like Tibet.

However, Professor Cook—who recently took up the position of Dean of the School of International Studies at Flinders after being a founding member of the distinguished Lowy Institute—said such pragmatism was about to be tested.

“The Greens take a strong line on Tibet, perhaps even stronger than the Labor Left, and this position is going to be a particular problem for the Labor Party when the Greens take control of the Senate and the Labor-Green alliance takes on a different weighting,” Professor Cook told Flinders Journal.

“I think this is a very big challenge for Labor but, if you look at the opinion polls, Australians overall seem to be quite pragmatic and they like strong trading relationships with countries like China,” he said.

“If I was Prime Minister Gillard I would keep that support in mind when I consider the foreign policy tension that will grow when the Greens gain the swing position in the Senate in July.

“In the run up to, and in the early days of, a generational change in China’s leadership in 2012, the country is going to be particularly sensitive to affronts, especially from major strategic trading partners like Australia.”

Professor Cook said the coincidence of the respective political cycles in China and Australia “could add a few more fireworks to this relationship in the period ahead.”

On a broader foreign policy front, Professor Cook challenged a view held in some quarters that Australia should be adjusting its focus in the face of the relative decline of the United States and the concomitant rise of China as Australia’s most important economic partner.

Professor Cook said the US remained Australia’s largest source of, and destination for, direct foreign investment – a situation that is unlikely to change in the foreseeable future. China, on the other hand, is Australia’s largest trading partner.

Dr Gorman said it is easy to underestimate Gagarin’s feat.

“They didn’t manage to track Gagarin’s flight, however, which led some to speculate whether it really happened.”

Dr Gorman said a comment by prominent Australian physicist and nuclear scientist Professor Harry Messel reflected the mood in some circles.

“There was an element of doubt in his comment: ‘If what the Russians claim is true, then it is a triumph over the free world…Scientifically, I’m happy; but from a Cold War perspective, I’m sad’.”

Menzies’ silence may have led to Moscow’s lack of response when the invitation was issued for Gagarin to visit the 1961 Sydney Trade Fair.

Australian journalist and Communist sympathiser, Wilfred Burchett weighs into this story, too.

“Burchett, whose passport was lost or stolen, moved his family to Moscow in 1956. He and Anthony Purdy were the only Western journalists allowed to have a face-to-face interview,” Dr Gorman said.

“They subsequently wrote a book together, Cosmonaut Yuri Gagarin: First Man in Space.”

Dr Gorman stumbled across a photograph of Wilfred Burchett’s father, George, presenting Gagarin with a boomerang in Moscow.

The caption reads: “Mr George Burchett presenting Yuri Gagarin with a boomerang on behalf of Australian peace workers with the hope that he and his fellow compatriots in their journeying to the stars will, like the boomerang, always return to Earth safely and to a world at peace.”

With human spaceflight programs increasingly under threat and technology able to accomplish many tasks remotely,

Dr Gorman said it is easy to underestimate Gagarin’s feat.

“Until Gagarin came down in one piece, we actually didn’t know if it was possible for a human to survive in space,” she said.

“What is commonplace now was a mystery then. It was only five years after the first satellite had been launched; can you imagine trusting your life to such untried technology!”

“I think Gagarin demonstrated for the first time that we are all citizens of the cosmos; he was the first person to see the Earth from the outside.”

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Vincent Ciccarello

Cover photo: Dr Alice Gorman with Soviet propaganda and a quarter-scale model of Sputnik

Photo: Ashton Claridge
Flinders hosts largest Indigenous medical intake

The single largest intake of Indigenous medical students ever in Australia has been accepted into Flinders University’s new Northern Territory Medical Program (NTMP).

The Flinders University cohort of 14 Indigenous students in first year medicine in 2011 – 10 based in the Northern Territory and four in South Australia – compares with the total of nine Indigenous students who graduated in medicine from all of Australia’s universities in 2009.

Dean of the School of Medicine, Professor Paul Worley said a major aim of the NTMP was to train people from the Territory, in the Territory, to work in the Territory in the future.

“Flinders recognises that training more Aboriginal and Torres Strait Islander people to become doctors and nurses and other health professionals is a critical part of the Closing the Gap initiative,” Professor Worley said.

“The NTMP adheres to Flinders’ pioneering principles of training students in and engaging with local communities. Given that the students in the program are bonded, they’ll be required to provide some clinical services in the NT following graduation,” he said.

“This will have a tangible effect on the number of medical graduates willing and able to work in the NT in the long-term, with numbers set to increase to a cohort of 40 students in the third and fourth years of the program.”

A total of 24 Indigenous and non-Indigenous students will enter the new four-year Flinders Graduate Entry Medical Program in the Northern Territory in 2011. Each student has already completed at least a Bachelor degree in another field.

Most have also successfully completed the GAMSAT (Graduate Australian Medical School Admissions Test). Others have gained admission via the new Indigenous Transition Pathway, which involves an interview and an intensive four-week preparation program.

“We also expect that as these high-achieving students graduate, young people in their communities will see them as mentors and role models,” Professor Worley said.

Innovation the key to manufacturing renewal

Two of Flinders University’s research strengths, medical devices and bioproducts, are among the fields Professor Göran Roos identified as having strong manufacturing potential for South Australia, according to Ms Kelly Burton, who is acting as “project catalyst” to the State’s latest Thinker-In-Residence.

Professor Roos, an international expert and consultant on intellectual capital, innovation management and strategic industrial policy, recently gave a public lecture on the positive future for manufacturing in South Australia.

In addressing the State’s prospects, Professor Roos urged government and industry to develop new products and paradigms for manufacturing, advocating a move beyond traditional industries such as automotive manufacture in order to “future-proof” business continuity by diversifying manufacturing sectors.

Professor Roos urged business to collaborate with researchers to ensure that their products and services were as innovative as possible.

“The ability to integrate multiple knowledge bases is key to product innovation,” he said.

Kelly Burton’s role at Flinders as Project Officer for the Medical Device Partnering Program (MDPP) has been an ideal preparation for her secondment as assistant to Professor Roos.

Ms Burton said the model represented by the MDPP, which brokers links between researchers, designers and manufacturers to ease the path of medical device products to market, fits with the strategies and practices advocated by Professor Roos.

Professor Roos said that as well choosing a suitable technology and pursuing the best possible design-based innovations, individual companies need to set up their business models to appropriate as much of the value created as possible.

On a macro-scale, Professor Roos said public policy can influence manufacturing growth through fostering conditions such as openness to immigration and foreign investment, high quality and flexible workforces, and strong research and education resources.

Ms Burton said that part of her role will be to assist Professor Roos assess the effects of his residency, which includes nine workshops on creating innovative business models with 10 individual South Australian companies.

“For me, it’s a wonderful opportunity for professional development in a complex but very exciting field,” Ms Burton said.

Flinders is a sponsor of Professor Roos’ residence, the 20th in the program.

Charles Gent
Report issues a challenge to get the future right

Federal and State governments and urban planners have been put on notice: tough and expensive decisions will be needed as Australia’s projected population growth by mid-century threatens to stretch infrastructure and natural resources beyond their limits, while waste streams and greenhouse gases accumulate.

A report by the National Institute for Labour Studies (NILS) at Flinders, in collaboration with the CSIRO, for the Department of Immigration and Citizenship modelled the impact on the natural and the built environment of various projected levels of net overseas migration (NOM), the difference between those leaving Australia permanently or long-term and those arriving.

The report’s conclusions have major implications for immigration levels and urban infrastructure planning in particular. The report predicts Australia’s ability to meet demand for basic resources, including supplies of water and transport fuel, is likely to become critical in coming decades, even without the added pressure of higher NOM levels.

Even at low levels of NOM growth, the population increases of cities and the tendency towards urban sprawl would still pose a major challenge for planners and policy-makers, the report says.

Given that most immigrants currently settle in urban settings in Sydney, Melbourne and Perth, these cities would be particularly affected.

The report calculates that given a zero NOM, urban area would grow by some 50 per cent by 2050, while a NOM of 260,000 would see the increase reach 150 per cent, resulting in major encroachment on land now used for fresh food production, increased traffic congestion and resulting declines in ‘liveability’.

“None of the adverse impacts, on their own, are beyond our capacity to manage,” said co-author Professor Sue Richardson.

“But even at current population levels, the natural and built environment is under stress. The real challenge is to increase our skills and determination to improve traffic, have denser yet more inviting cities, reduce our per capita waste and water consumption, and so on.”

“At that point we can welcome more people, without fear that our quality of life and natural environment will be diminished.”


Shakespeare’s ‘new’ play is no Hamlet

The staging of The Double Falsehood in London a month ago was the first professional performance for a century of a play that can now be included among the works of Shakespeare, according to a Flinders academic.

But Associate Professor Robert Phiddian, a specialist in English literature, warns expectant theatre-goers that it won’t be knocking Hamlet off its critical perch.

The play has a very checkered history. It was first touted as a rediscovered Shakespearean play in the 1720s by English playwright Lewis Theobald. Theobald claimed to have three manuscripts as basis for his claims, but they were never seen.

Associate Professor Phiddian said that it is almost certain that the play is an adapted version of a late comedy written by Shakespeare in collaboration with fellow playwright John Fletcher. Evidence describing a play by the pair called The History of Cardenio did not emerge until long after Theobald died.

“So The Double Falsehood’s claim to authenticity rests on the improbability of two plays based on the same episode from the Spanish novel Don Quixote existing independently,” Associate Professor Phiddian said.

Arden — an edition of Shakespeare’s works considered to be an arbiter of authenticity — published the play under its imprint last year.

Associate Professor Phiddian said the play also shows many hallmarks of Shakespeare’s comic approach — mistaken identity, cross-gender disguises and unrequited infatuations — even if it cannot claim to rival the Bard’s “purer” works.

At the same time, Associate Professor Phiddian said, no Shakespeare play exists in original, unmodified form.

He said that Shakespeare and the other English dramatists of the time were “jobbing playwrights” who worked more in the mode of modern Hollywood scriptwriters. Lines of dialogue and even entire scenes would be frequently dropped, changed or added by actors, directors or editors.

“None of the adverse impacts, on their own, are beyond our capacity to manage,” said co-author Professor Sue Richardson.

“But even at current population levels, the natural and built environment is under stress. The real challenge is to increase our skills and determination to improve traffic, have denser yet more inviting cities, reduce our per capita waste and water consumption, and so on.”

“At that point we can welcome more people, without fear that our quality of life and natural environment will be diminished.”


Professor Robert Phiddian

Associate Professor Phiddian said that while performances later this year by the Royal Shakespeare Company may prove entertaining, The Double Falsehood will only show echoes of Shakespeare’s full dramatic power.

“But one needs to remember that of the 35 plays we believe that Shakespeare wrote on his own, a dozen or so are seldom staged today for similar reasons.”

Charles Gent
Dental defects may shed light on extinct marsupial diet

An international expert on the analysis of tiny scratches, or microwear, on teeth to determine the role of diet in human evolution is helping Flinders researchers unlock the secrets of the diets of extinct marsupials.

Distinguished Professor and Chairman of Anthropology at the University of Arkansas, Professor Peter Ungar visited Flinders this month to begin work on an Australian Research Council (ARC) Discovery Project with Dr Gavin Prideaux and colleagues into the evolution of plant-eating marsupial diets over time.

By tracing how diet corresponded to environmental changes, the researchers hope to better understand why some marsupial species survived and others did not.

"Since Aristotle, people have explored the relationship between tooth structure and form – or morphology – and diet," Professor Ungar said.

"But tooth form may not tell the whole story. Teeth can be adapted for one purpose, such as eating grass, but that doesn’t mean they are always used for that one purpose," he said.

"Microwear analysis reflects the physical properties of the foods, whether they were hard or tough or soft, that animals ate in the past few weeks."

Dr Prideaux said Professor Ungar’s expertise is a vital element of the ARC project.

"We will examine three aspects of the fossilised teeth: their morphology, the stable carbon and oxygen isotopes contained in the tooth enamel, and their microwear," Dr Prideaux said.

"Each of these methods has its limitations. This collaboration is unique in bringing them together to give us better insights to the diets of these animals through time," he said.

Professor Ungar will take casts of fossilised marsupial teeth to his laboratory in Arkansas for examination using scale-sensitive fractal analysis.

His previous analyses of the microwear on teeth of human ancestors in Africa, using a geographic information system, offer an explanation of today’s obesity epidemic.

"As humans evolved in a seasonal setting in which preferred foods were not always readily available they developed a predilection for energy-rich foods," he said.

"We are programmed to consume foods that are energy rich, whether it’s sugars or fats. They’re easy to eat and they taste good to us for a reason."

Vincent Ciccarello

Take a detour on the road to obesity and ill health

With the recent release of statistics by the Cancer Council of Australia confirming that nearly a quarter of Australian teenagers are overweight or obese, Flinders University nutrition researcher Dr Anthea Magarey says that parents need to face up to the consequences of failing to address the issue of younger children who are overweight.

"The reality is that obese children tend to become obese teenagers, who in turn tend to become obese adults with high risks of heart disease, diabetes and other serious health problems," Dr Magarey said.

"Early intervention is the best way to halt this slide."

For parents willing to recognise and tackle the problem, help is at hand. Dr Magarey said the first group of families to complete the six-month Parenting, Eating and Activity for Child Health (PEACHTM) program based at Flinders was enthusiastic in its response.

While focusing on overweight children between four and 10, PEACH’s underlying strategy is to support parents in bringing about changes in eating habits and activity levels for the whole family.

Among most of the 16 participating families in programs across metropolitan Adelaide in the last year, Dr Magarey said the degree of overweight of the children had either stabilised or fallen. And apart from the program’s long-term health benefits, researcher Mrs Jo Hartley said that several children had reported big improvements in their self-esteem.

Dr Magarey said parents could not afford to be complacent.

"The issue to me is that there isn’t recognition of the seriousness and the potential effects of being overweight or obese," she said.

"Governments are doing their best to make policies that improve the environment, but it’s still up to individuals – and families – to make hard decisions about taking control."

"Programs like PEACH are there to help them."

PEACH will have another intake in April. Information for parents in Adelaide’s southern region who are interested in registering can be found on the website: http://www.flinders.edu.au/medicine/sites/peach_home.cfm

Charles Gent
Year 12s head to Flinders for maths and science

A group of eighty-four Year 12 students from seven southern region schools will soon be getting to grips with their Stage 2 specialist maths, physics or chemistry subjects on the Flinders University campus, thanks to a new program that will also give them a preview of university life.

Students taking part in the pilot Year 12 Science and Maths Academy at Flinders (SMAF) from this month will be taught via lectures, classes and hands-on projects in the University’s first-year laboratories and teaching spaces by teachers competitively selected from the participating schools.

The students will also have access to a wide range of facilities and resources, including the University’s library.

Manager, Education Partnership of the Southern Knowledge Transfer Program, Ms Darlene Voss, said the program was an exciting collaboration between southern region schools and Flinders.

“The venture is designed to enhance and support the teaching of Stage 2 maths and science aligned with pathways to university, while providing a sophisticated and secure learning environment for school-aged students,” Ms Voss said.

Ms Liz Mead, Principal of Aberfoyle Park High School, said that interactions with other like-minded students and Flinders student mentors in the adult environment of university would provide the students with new opportunities to understand their subjects give insights into future pathways and inspire them to achieve their best.

Professor Martin Westwell, Director of the Flinders Centre for Science Education in the 21st Century (Science 21), said the program would provide innovation in science and maths education.

“By working together, in partnership with Flinders, the schools will be offering the highest quality Year 12 courses. I’m delighted that the university is able to play its part in supporting the students, teachers and school communities involved,” Professor Westwell said.

The participating schools are Aberfoyle Park, Berri Area, Barmera Primary, Berri Primary, Glossop Middle School, Renmark North Primary, Monash Primary and Waikerie High. One student is placed at Mooraek Primary in the South East.

The ERPP has the support of principals in the Riverland who, over several years, have been working to have student teachers stay in their schools and communities for an extended period.

“Given what is occurring in many rural areas through the impacts of drought, climate change, globalisation and demographic shifts, the challenges of attracting and retaining professionals to rural areas will persist and are likely to intensify,” Professor Halsey said.

“ERPP is a fresh and bold solution that provides insights and opportunities that can only be gained by being immersed in ‘place’.”

“There are also substantial benefits for employers of teachers in recruiting from a pool graduates who have firsthand experience of rural contexts.”

Flinders will be conducting research into the ERPP, to assess its benefits and impact.

The ERPP is receiving financial support from the Yulgilbar Foundation, the Department of Education and Children’s Services and Credit Union SA.

Charles Gent

Program extends student teachers’ stay in schools

Flinders University is leading a radical new education program with nine student teachers currently undertaking a six-month placement in schools in South Australia’s Riverland and South East.

The Extended Rural Practicum Program (ERPP) is designed to give students an extended firsthand experience of the opportunities and challenges of teaching in a rural population centre.

Sidney Myer Chair of Rural Education and Communities, Professor John Halsey said the ERPP was inspired by Flinders’ highly successful Parallel Rural Community Curriculum (PRCC) for medical students.

“An enduring issue for education in rural Australia is attracting and retaining teachers,” Professor Halsey said.

“The PRCC has had an impressive track record in attracting graduate doctors to rural communities. This is a unique opportunity to do a similar thing for rural education,” he said.

“Instead of a placement of a few weeks, the student teachers will spend an entire semester learning, working and living in a rural centre as part of their preparation for careers as teachers.”

Eight students are placed in the Riverland: one each at Loxton High, Swan Reach, Seaford 6-12 High School and Wirreanda High School.
More than 1100 swimmers, including 16 Flinders staff and family, met the challenge of windy and choppy sea conditions in the Brighton Jetty Classic this month. But there was also plenty of action on land with Flinders’ sponsorship of the event and the associated sculptures competition. Flinders staff were on hand to introduce prospective students to the University’s courses, engage with the public and manage a very popular graffiti wall that will now adorn the Brighton Surf Lifesaving Club.
Ashton’s Vietnam holiday photos a labour of love

University photographer Ashton Claridge got to taste the Vietnamese equivalent of ‘hard yakka’ during his holiday there last month.

A leisurely three-kilometre bike ride from the central coastal city of Hội An to a neighbouring village with his wife — also an avid photographer — and a local guide in search of interesting photo opportunities became a rewarding but exhausting day of farm labour.

“Our guide introduced us to a farmer who walked us around his property and gave us an introduction into the variety of salad greens and herbs that he was growing” Mr Claridge said.

“Even though it looked like a community operation, labour on the farm was provided entirely by the extended family,” he said.

“After the tour and a demonstration in manual farming methods he then said ‘Now your turn!’.”

Before they knew it, Ashton and his wife were wearing conical hats, or Non La, purple tunics and carrying a yoke.

“We gathered river weed, which is used as compost; we were given a hoe, instructed on how deep to dig the rows, filled the rows with the river weed and covered it with a layer of soil,” he said.

“We then went off to the nursery, gathered the seedlings, planted and watered them in the previously prepared soil.”

Filling two buckets on either end of the yoke with water from a well, carrying and carefully pouring it onto the plants was an art that took some getting used to.

“The speed at which the Vietnamese family was working was most impressive and they made it look so easy. It gave us a good appreciation of their methods and the skill involved.”

The workers were rewarded with a healthy lunch of salads, fresh from the garden.

“We were also given a mini cooking class, where we tried our hand at making Vietnamese pancakes using freshly picked greens and herbs as well as pork and shrimp.”

The Claridge’s now have some 1000 photos to sift and sort.

“When we travel, we enjoy getting involved in the grassroots level. It’s the interactions and experiences with the people and their lifestyle that are most rewarding,” he said.

“But I’m glad we didn’t have to work in the rice paddies — that did look like hard work.”

Vincent Ciccarello

Art works respond to a sense of place

At times arresting and vibrant, at others contemplative and sparse, a series of contemporary works has come home to South Australia after a critically successful tour of Spain.

The latest exhibition in the Flinders City Gallery, *Intangibles in Terra Australis*, brings together works by Indigenous and non-Indigenous local artists to explore the idea of place and the elusive qualities.

The wide-ranging artistic approaches respond to geographically diverse locations, both urban and rural, of where we live.

“This exhibition sets out to demonstrate how intangible issues of the land are dealt with by both groups of artists,” said the exhibition’s curator, Arun Bassas.

“Despite the fact that Indigenous and non-Indigenous artists in this exhibition are historically and culturally diverse, it is important to recognise that the production of art coupled with the appreciation for beauty in general, have been and continue to be integral features of almost all societies.”

The exhibition includes painting, photography, sculpture and installation by more than 20 artists.

The exhibition runs until March 20.

Charles Gent

* Tiger’s Creation Story * by Tiger Palpatja, 2005. Courtesy of Tjala Arts

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