

Biographical Research Takes to the Air

James Vicars, PhD Candidate, School of Arts

Flying in a seventy year-old biplane has added an important extra dimension to biographical research being undertaken in the School of Arts. The flight, in a De Havilland Tiger Moth first flown in 1939, has been recently undertaken by PhD researcher James Vicars in an effort to deepen his knowledge about flying in the 1920s and to write authentically about the short career of Australia's little-known first woman aviator, Millicent Maude Bryant.

Bryant won the 'race' to become Australia's first woman aviator in 1927 and was undertaking advanced flying instruction with Australian Aero Club when, in Sydney's worst peacetime maritime disaster, she was killed when the ferry 'Greycliffe' was cut in half by the liner 'Tahiti' barely eight months later. The flight which he himself took 'transformed' his understanding of what flying in such an aircraft was like. Mr Vicars' experiential research is enabling him to bring to completion a biographical account of Millicent Bryant's life, one of the two sections of his PhD by creative practice. The academic exegesis which accompanies it will be the focus of the remainder of his candidature.



PhD candidate James Vicars is pictured beside the Tiger Moth



Best Masters Research Award

Marc Jim Mariano – Winner of the Australian Agricultural and Resources Economics Society (AARES)



Dr Rene Villiano with Marc Mariano

Marc Mariano, a Master of Economics graduate at the School of Business, Economics and Public Policy (2009-2010), was awarded the Best Masters Research Award during the 55th Annual Conference of the Australian Agricultural and Resource Economics Society (AARES) held at Melbourne Victoria in February 2011. His thesis entitled "Farm-level Efficiencies, Productivity and Technology Adoption in Philippine Rice Farming" was jointly supervised by Dr Rene Villiano and Prof. Euan Fleming. Marc investigated spatial and temporal differences of rice productivity in different farming environments, and analysed the determinants of rice technology adoption in the Philippines. He found that farmers' education, machinery ownership, irrigation, mechanisation, capacity-enhancement activities and profit-oriented behaviour significantly encourage the use of certified seed technology and the adoption of productivity-enhancing crop management practices.

Medicinal Cannibalism in English Literature

Dr Louise Noble, English, School of Arts.

Louise Noble's new book has just been released by Palgrave Macmillan USA in their special series, Early Modern Cultural Studies 1500-1700. This study, which highlights the important intersection between medical history and literature, is the result of several years of intense archival and literary research. The book has been selected for review in the London Review of Books.

Medicinal Cannibalism examines an important moment in the long history of the medical use and abuse of the human body. In early modern Protestant England, the fragmented corpse, frequently identified as mummy, was processed, circulated, and ingested as a valuable drug in a medical economy underpinned by a brutal judicial system. In a meticulous engagement with an extensive range of medical, religious, and literary materials, Noble shows how early modern writers became obsessed with medicinal cannibalism and its uncanny link to the contested Eucharist sacrament. In the process, Noble clearly demonstrates that medicinal cannibalism is not simply a historical anomaly by pointing out startling continuities between early modern and contemporary medical consumptions of the body.



Dr Louise Noble



<http://us.macmillan.com/medicinalcannibalisminearlymodernenglishliteratureandculture>

RESEARCH NEWS

AGBU pig geneticist invited by Norwegian University of Life Sciences as thesis opponent

Dr Susanne Hermesch, Senior Research Fellow, Animal Genetics and Breeding Unit (AGBU)



Dr Susanne Hermesch was appointed as one of two opponents to evaluate the thesis and defence of Dr Eli Gjerlaug-Enger who presented her PhD thesis “Genetic analyses of meat, fat and carcass quality traits measured by rapid methods.” In the Norwegian PhD system, doctoral students are required to summarise their work in a concise presentation and are then questioned by each opponent during a public defence.

In addition to discussing technical details of the thesis, the significant economic implications of the work for the Norwegian national pig breeding scheme (Norsvin) were explored during the two-hour discussions between the two opponents and Eli Gjerlaug-Enger. New measurement procedures had been developed for meat quality traits and more specifically intramuscular fat content and fatty acid composition reduced costs of recording of these traits by 90%. In addition, doctoral candidates are given a topic unrelated to their thesis within the general field of their expertise ten days prior to the defence. “Should breeding companies invest in genotyping or phenotyping?” was explored by Eli Gjerlaug-Enger. This topic is of particular interest to international and national pig breeding programs considering the rate at which genomic information is becoming available on selection candidates. However this question is especially pertinent at Norsvin, who are the only pig breeding company world-wide that use computed tomography (CT) for performance recording. Live pigs are placed into a CT scanner to record body composition, meat quality and numerous other health characteristics.

Development of new measurements and their incorporation within pig breeding programs is the focus of on-going joint research projects at Norsvin and the Norwegian University of Life Sciences. Susanne Hermesch is part of the international reference group for a current research project in Norway to develop selection procedures for robust, structurally sound pigs that will have increased welfare and was asked to comment on current research results. Overall, the visit will strengthen research collaborations between AGBU and researchers working in pig genetics in Norway.

Analysis of Cranial and Skeletal Human Variation

Dr Luca Fiorenza, Palaeoanthropology

Digital methods are becoming essential tools for the analysis of cranial and skeletal human variation, developing into a new discipline that is called Virtual Anthropology. The main research of Dr. Luca Fiorenza focuses on the application of these new methods in dental anthropological studies for dietary reconstructions in Pleistocene hominins, tooth associations and taxonomic assignments.

Within an international network, Fiorenza and colleagues produced several scientific papers published in the most important anthropological journals. Recently, the article “Molar macrowear reveals Neanderthal ecogeographic dietary variation” has been published on Plos One and it has been cited on the online edition of National Geographic Italia. Dr Fiorenza’s webpage can be found at: <http://www.une.edu.au/humanities/archpal/staff/fiorenza.php>



Poincare duality complexes with highly connected universal covers

Dr Bea Bleile, Mathematics, School of Science and technology



Dr Bleile has been working with Imi Bokor on Poincare duality complexes with highly connected universal covers. A Poincare duality complex of dimension $2n + 1$ with n -connected universal cover is uniquely determined by its fundamental triple consisting of its fundamental group, orientation character and the image of the fundamental class under the classifying map. They have been able to provide a necessary condition for a fundamental triple to be realised by such a Poincare duality complex and conjecture that the condition is not only necessary but in fact sufficient. However, they have also have struck a major hurdle trying to prove this.

Dr Bleile’s webpage can be found at: <http://turing.une.edu.au/~bea>

Statutory interpretation in Australia

Associate Professor Harry Geddes, School of Law

Associate Professor Geddes has been working on two research projects. The first is the 7th edition of ‘Statutory Interpretation in Australia’, Australia’s leading work on the interpretation of legislation, with Emeritus Professor Dennis Pearce (ANU). Although it is written primarily for practising lawyers, it is also used by students as a reference book. It has been referred to in judgments or cited in over 1500 cases.

The second project is the 8th edition of an introductory law textbook, ‘Laying Down the Law’, written with Catriona Cook, King’s College London, Robin Creyke, ACT-based member of the Commonwealth Administrative Appeals Tribunal and Associate Professor David Hamer at the Faculty of Law, University of Sydney. First published in 1985, it is Australia’s leading introductory law textbook for tertiary students.

A/Prof Geddes webpage is at : <http://www.une.edu.au/staff/hgeddes.php>



RESEARCH NEWS

Environmental Pollutants in Soil Systems

Dr Susan Wilson – Senior Lecturer in Environmental Pollution, School of Environmental and Rural Science.



Dr Wilson's research targets are about understanding the fate and behaviour of environmental pollutants in soil systems for improved risk assessment and management. Following installation of the new Agilent gas chromatograph mass spectrometer in the Agronomy and Soil Science Building in December 2010, we have in 2011 been able to build up internal research capacity in environmental organic pollution research to compliment the already established capability in metal pollution assessment.

Current projects include: a CRC CARE-funded project to understand the effectiveness of different organic amendments (e.g. manures) for bioremediation of contaminated soils polluted with polycyclic aromatic hydrocarbons (PAHS) (common pollutants on fuel/fuel processing contaminated sites); understanding the spatial distribution and mobilisation of contaminants (metals and organic pollutants) at Armidale Creeklands with cosupervisor Dr Darren Ryder (supported by HiCUB); effects of composted municipal waste application on NSW soils, with cosupervisors Dr Brian Wilson and Dr Paul Kristiansen. This \$400 000 project has recently been awarded through DECCW to support review of the forthcoming State regulation exemption.

In addition to the above, a project is being undertaken for the development of a robust routine ion chromatograph method to assess antimony species in environmental samples, with cosupervisor Dr Matt Tighe, supported by Straits Hillgrove Gold. An application has been submitted to the NSW Environment Trust for seeding funds to supplement the project.

Projects for which funding has been sourced so far this year are: 'understanding organic pollutants (PAHs) associated with the woodsmoke in Armidale air' (Environment Trust), and 'understanding organochlorine pesticide concentrations in NSW soils and impacts on bat physiology' (Environment Trust), with Professor Fritz Geiser.

Dr Wilson's website can be found at: <http://www.une.edu.au/staff/swilso24.php>

Has multiculturalism failed in multinational companies?

Dr Brian Denman, Organisational Change and Leadership, School of Business, Economics and Public Policy

Dr Brian Denman has been working collaboratively with a few of his PhD students to co-author papers in topics as diverse as multiculturalism in multinational companies and the implications for education and training, in conjunction with Ms Cornelia Cohrs; social responsibilities of Australian Universities concerning Occupational Health and Safety, with Ms Daphne McCurdy, marketing and promoting higher education in Saudi Arabia and the United Arab Emirates, with Ms Kholoud Hilal, and the internationalisation of the Professoriate in Vietnam with Ms. Phuong Thi Mai Nguyen.



Dr Denman is also co-authoring a book chapter with Dr Fawzy Bukhari of Saudi Arabia on University Scholarship in Saudi Arabia and preparing a research paper on higher education security as a new concept: technology transfer and the hidden curriculum, which will be presented at the CIES 2011 conference in Montreal, Canada this coming May.

Dr Denman's website can be found at: <http://www.une.edu.au/staff/bdenman.php>

Nurse-led policy to practice

Wilson, Rhonda L. PhD Candidate Lecturer Mental Health Nursing, School of Health,

Isaac, Warren G. Clinical Nurse Consultant, Tablelands Mental Health Service, Hunter New England Health



Rhonda Wilson

This research project will report on the development of a pilot transactional study of a nurse-led metabolic syndrome (MetS) risk reduction program in a rural community which integrates physical and mental health care service delivery to mental health consumers. Concern is mounting in regard to the physical health of mental health care consumers who take atypical antipsychotics and their subsequent increased risk of developing MetS.

A mixed methods evaluation research design yielding descriptive statistics and qualitative data will be analyzed and will inform the evaluation of the intervention program. Regular integrated physical and mental health assessment of participants will take place. The program is designed to enhance the general health and well-being of the participants, and a range of evidence-based nursing interventions will be implemented including nutritional, physical/lifestyle and psychosocial interventions. Physical health monitoring will target the high risk collection of MetS problems.

For more information contact Rhonda at email: rhonda.wilson@une.edu.au

RESEARCH NEWS

Hybrid Governance Under the Palm Trees

Professor Helen Ware, School of Humanities and Takuia Uak, PhD Candidate from Kiribati



Hybrid governance refers to the increasingly popular idea that developing countries should plan to take advantage of their traditional methods of governance at the grass-roots level, in combination with modern democratic systems at the national level. The counter argument is that traditional systems tend to be highly discriminatory: giving power only to old men and excluding younger, better educated men and all women. Whilst young men can at least aspire to elder status with the passage of time; in as many traditional societies women are not expected to speak in public meetings however old and respected they may become.

This research looks at the conflict between the Te Bau ni M... (the traditional crown/leadership of elders) and the Local Council in one island of Kiribati with less than two thousand inhabitants. The conflicted cast of characters includes the Mayor and Local Councillors, who opposed the elders and were ultimately 'sacked' by them; and the outsider female Clerk of the Council whose questioning of certain expenses started off the whole incident and who successfully went to the elders for support.

As a footnote, reference to "grass-roots" on the atolls of Kiribati is regarded as being patronizing, and implying that people are poor. In contrast the I-Kiribati consider their modest, but global-warming threatened, life-style is well suited to their culture and needs.

Suicide Bereavement Research continues to grow at UNE

Dr Myfanwy Maple, School of Health



Researchers at UNE continue to take a lead role in research investigating bereavement following suicide. Dr Myfanwy Maple is a key expert in both national and international reference groups that are collaborating to bring bereavement issues and postvention support to the forefront of Government and non-government policy and service provision in the area of suicide prevention, intervention and postvention. In addition to contributing to the professional and practice communities, Dr Maple is expanding knowledge through a number of research projects in this important area. This includes initiating research to investigate the number of people affected following a suicide. Over the past decade since Dr Maple began at UNE working in this area, there are now several students extending this work.

In addition, Mr Warren Bartik has recently commenced an APA funded PhD study to investigate the impact of suicide on friends who reside in rural communities, which follows the completion of a pilot study in 2010 examining the experience of young people who have lost a friend to suicide. The pilot was funded through an internal FoTP research grant awarded to Drs Maple (Health) & Edwards (Education), along with Mr Bartik in this position then with NSW Health.

Mrs Dorothy Ratnarajah, a UNE Master of Counselling (Honours) graduate has recently completed her PhD research that investigated the family experience of suicide, identifying the different narratives of bereavement depending on the class of relationship with the deceased.

Dr Maple's webpage can be found at: <http://www.une.edu.au/staff/mmaple.php>

Launch of Australian Folklore, 25 March, 2011.

Report by Associate Professor John Ryan, School of Arts

Assoc Prof Ryan is most pleased to report that this UNE milestone event took place recently at the conclusion of a Seminar for HFRC members / The School of Humanities, chaired by Professor L. Garland. The launch was conducted by Emeritus Professor W.G. Maddox who had presided at the first N.E. one in the same building, nearly 20 years earlier. The publication itself has had a steady progression in both quality of contents, as well as in the range of overseas contributions, as is made clear in the 'Preface'. In that time the discipline has reformatted itself to be concerned with often reaching out across to proximate countries, and a number of global aspects of the discipline, rather than exclusively focusing on the past/ the pre-industrial societies of Australia's immigrant communities.



The journal has had a co-editor in more recent years, in Dr Robert James Smith of Southern Cross University, one of the regional universities always keen to record Australian culture. While many contribute to a journal such as this — and the larger contents for all 25 issues are now listed sequentially - it is A/Prof Ryan's firm belief, one paralleled by like experiences in the Celtic regions, Canada, Waikato, and the Baltic countries, that the smaller countries 'see most of the action' and reflect most perceptively on it.

Associate Professor Ryan's webpage can be found at: <http://www.une.edu.au/staff/jryan.php>

RESEARCH NEWS

Researching Regional Questions

Prof Brian Dollery, Economics, Director of the Centre for Local Government



Following UNE's emphasis on 'regional engagement' through research, the UNE Centre for Local Government has focused on researching regional questions. Professor Brian Dollery and colleagues at several other Australian universities are investigating the new Regional Development Australia (RDA) network, and especially the uncertainty surrounding the role of the RDA network. This research project seeks to shed light on the RDA framework by drawing on the literature on new types of multi-tiered governance, especially the theoretical work on Type I and Type II bodies.

Dr Bligh Grant is working with colleagues on research into 'place-branding' the Wine Industry for regional economic development. Centre members have investigated the challenges facing local producers. Collaborative papers are being published in *Australasian Agribusiness Perspectives*, and government responses to changing market conditions have been investigated. Centre members contributed evidence to the NSW Legislative Council's Inquiry into Wine and Grape Prices in October 2010.

Papers on the industry are being delivered at the American Association of Wine Economists Annual Conference in Bolzano, Italy and the International Conference on 'Wine in the World: Markets and Globalization' at the Faculty of Economics and Business Studies, University of Zaragoza, Spain.

The Centre's webpage can be found at: <http://www.une.edu.au/clg/>

Analysis of the Stone Artefact Assemblages

Dr Mark Moore, Australian Research Fellow, School of Humanities

Research by Dr Mark Moore (Australian Research Fellow, School of Humanities) progressed on three fronts in early 2011. Firstly, analysis of the stone artefact assemblages, assisted by undergraduate students Yinika Perston and Dean Fleming, has resulted in metric data for ca. 4000 stone flakes and cores from the Kimberley excavations in 2010. Results so far indicate an early reliance on quartzites and cherts for tool-making followed by a shift to quartz crystals in later prehistory (probably post-dating 1500 BP).



Quartz crystal was used as a source for blanks to retouch into tiny spear tips (less than 25 mm long). Analysis of a stone artefact assemblage from northeastern New South Wales has documented two previously undocumented stone flaking trajectories. The discovery has resulted in a significantly more nuanced understanding of the stone tool flaking technology in that part of Australia.

Analysis was also conducted on an assemblage of flaked bottle glass from late 19th century Aboriginal campsites in southeastern Queensland. Replication work was begun, focused on the technical aspects involved in making hafting notches in bifacial stone tools using the indirect percussion technique.

This project and other replication studies culminated in a day-long workshop by the New England Knapping Guild at Mt Hyland Lodge on 19 March. Over 20 participants from throughout the region received hands-on instruction in stone tool making and learned traditional fire-making techniques using wood hand drills and other devices.

You can hear Mark describe his toolmaking shed on: <http://www.abc.net.au/local/stories/2011/02/09/3133988.htm>.

Soils Group - New projects for 2011

Report by Dr Chris Guppy, School of Environmental and Rural Sciences



Within the Soils group in ERS we have kicked off delivery of a number of research projects. Non-destructive identification of root responses to applied nutrition by cereals, detection and measurement of soil and plant nutrients using portable X-ray fluorescence has been carried out, as well as the identification of the P mineral species in soil extracted in standard soil phosphorus fractionation techniques using the Australian Synchrotron, similarly isolating any differences between plants and mycorrhizae in the P minerals they access.

In addition, measurement of plant responses to addition of phosphorus solubilising organisms have been carried out, investigation of metal chelating compounds or silicon on P uptake, isolation of the contribution of break crop rhizosphere activity on the mobilisation of recalcitrant P reserves to wheat in rotation, detection of nitrous oxide emission from improved and native pastures on the Northern Tablelands, isolating the release and loss of nitrogen from a range of fertiliser products under hot, flooded soil conditions, and determining the effect of livestock trampling on subsequent cereal growth using livestock collars, micro-CT scanning of soil and a range of cutting edge precision agricultural tools.

Dr Guppy's webpage can be found at: <http://www.une.edu.au/staff/cguppy.php>

RESEARCH NEWS

Virtual worlds as a teaching and learning tool

Dr Sue Gregory, School of Education

Sue Gregory, Lecturer in ICT Education, researches the efficacy of virtual worlds as a teaching and learning tool. 2011 has seen Sue researching, presenting and publishing with teams in the following areas: UNE ALTC grant as lead on VirtualPREX, designing and implementing a 3D virtual professional experience environment for pre-service teachers (UNE, CSU, UniAde, Curtin, ACU, Hamburg); a scoping study on virtual worlds in higher education, interviewing academics from Australia and New Zealand, with survey data collected on virtual world activities, funding and support obtained, dedicated development, views on successes and problems (UNE, CSU); a comparison of avatars in class (UNE, several universities in Hamburg, Germany); a look at professional development on Sloodle through machinima (UNE); opportunities for teaching and learning in virtual worlds (UNE); virtual worlds engagement, performance and practice (UNE); an educator's perspective of learning and teaching through Second Life reporting on learning outcomes across institutions (UNE, UniSA, CSU, SCU); taking the distance out of education through teaching and learning in a virtual world (UNE, USQ, SCU, CSU, Monash, EdServicesAust); study of novice/expert educators teaching and learning in a virtual world (UNE); evaluation of iPad as a learning and teaching tool from the perspective of academic/student/insider (UNE).



Dr Gregory's virtual worlds webpage can be found at: <http://www.virtualclassrooms.info/>

Preservice Teacher Preparation and Support for Professional Experience



Dr Yvonne Masters, School of Education

This research project gathers the perceptions of teacher education students, both on-campus and off-campus, regarding the preparation and support that they received for their initial professional experience placement. From this data, further refinement of professional experience units and preparation and support practices will occur. This will add to the current body of knowledge around improving professional experience for teacher education students. Preliminary data analysis is indicating gaps in the preparation of students and their perceptions as to what might assist in the future. The difference between internal and external students appears

to lie in their perception of personal readiness rather than in attitudes to preparation. The diversity of views will now provide an impetus for change and development.

Dr Master's webpage can be found at: <http://www.une.edu.au/staff/ymasters.php>

Second Life: Harnessing virtual world technology to enhance student engagement and learning

Drs Yvonne Masters and Sue Gregory, School of Education

Technology is often used in higher education to deliver a range of online materials to students. Most commonly this online delivery occurs through learning management systems such as Blackboard, Moodle and Sakai. However, with the emergence of virtual worlds there is an opportunity to harness this technology to enhance student engagement and learning in new and innovative ways. Yvonne and Sue have conducted several research projects which explore engagement, performance and practice in the virtual world of Second Life. The first two projects have provided data to demonstrate that students were engaged in their learning and appreciative of this innovative approach to teaching and learning online.

In 2010, we commenced a new research project to ascertain whether students learning via this virtual world environment performed better in their assessment tasks than those students who used a traditional learning management system. Data indicate that this is the case. Further development of the research in 2011 and 2012 will continue, particularly in regard to the efficacy of virtual platforms for enhancing teaching practice.

UNE –SOE – African Research Adventure sails into New Waters

Dr Charles Kivunja, School of Education

Following successful capacity building projects in multigrade education at the University of Zambia and Kyambogo University in Uganda, School of Education researcher, Dr. Charles Kivunja, networked new connections during his recent SSP to enable UNE to provide capacity building in multigrade education at Uganda's most distinguished Makerere University as well as the University of Nairobi in Kenya.

Partnerships are being negotiated with both these Universities and planning is underway to conduct research into the efficacy of solar-powered eTablets in multigrade education at these Universities.



Dr Kivunja's webpage can be found at: <http://www.une.edu.au/staff/ckivunja.php>

RESEARCH NEWS

Pork CRC Nutrition Research to Pay Producer Dividends

Paying closer attention to nutrition in their pre and post weaning pigs promises to pay dividends for pork producers thanks to enhanced intestinal and immune development, survivability and performance. Supported by Australia's Pork Cooperative Research Centre (CRC), South Australian Megan Edwards (*pictured at right*) was admitted on February 21 to the degree of Doctor of Philosophy by the University of New England (UNE), NSW, having completed her PhD on early nutrition and the weaning transition. In four experiments under commercial conditions Dr Edwards assessed the influence of various nutritional strategies, including extrusion as an alternative milling process, amino acid supplementation, non-nutritional effects of creep feed and the use of two nutraceutical products, spray-dried porcine plasma and a yeast derived protein meal. (*media release authorised by Pork CRC*)



More information can be found at: www.porkcrc.com.au

Handbook of Political Islam

Prof Howard Brasted, School of Humanities, Acting Director of UNE Asia-Pacific Centre



Professor Howard Brasted and Dr. Adeel Khan have just completed a commissioned chapter for a new Routledge project entitled Handbook of Political Islam. Divided into six sections the project aims to bring together a number of international scholars to reflect on the various aspects of the intersection between Islam and politics. Brasted's and Khan's brief was to investigate the "Clash of Civilizations theory", which was originally announced by S.P. Huntington 15 years ago, not only from the hitherto little explored Muslim perspective in general, but also from an Islamist perspective in particular, focusing on the views of Osama bin Laden and Ayman al Zawahiri. The initial volume of the Handbook of Political Islam is scheduled to be published in the second half of 2011.

Professor Brasted's webpage can be found at: <http://www.une.edu.au/staff/hbrasted.php>

The Professional Doctorate - Generational Change in Australia?

Adjunct Professor TW (Tom) Maxwell, School of Education

Preliminary results from a study of the 39 Australian university websites reveals just over 200 extant professional doctorates and a further 30+ that have been withdrawn in recent years. This means that since 2000, the number of Professional Doctorates has increased by about 100%. Preliminary analysis of thirty five interviews from a stratified random sample of Professional Doctorate co-ordinators revealed that some Professional Doctorates in Australia appear to be under stress. There are a range of reasons for this including lack of numbers, and competition from other universities. Some co-ordinators anticipated that the impact of the newly determined Australian Qualifications Framework would be considerable in some professions such as Psychology and Law.



The introduction of the use of "Doctor" in pre-service awards has increased. The Melbourne model in specific professions already appears to be having an impact beyond Melbourne and the JD in law is evident in a number of universities. A case will be/was made for four doctorate types for Australian universities: Profession specific awards (eg EdD, DPsych), robust PhDs, robust Professional Doctorates and niche Professional Doctorates and these can be illustrated from cases in Australia.

Drawing on the present research, and almost two decades of experience of Professional Doctorate work in Australia, some insights were/will be provided about (1) what makes a Professional Doctorate distinctly professional and (2) the role of Professional Doctorates in creating a surge of interest in doctoral education internationally.

Professor Maxwell's webpage can be found at: <http://www.une.edu.au/staff/tmaxwell.php>

Indigenous Night Patrols

Associate Professor John Scott, Acting Head, School of Arts



A/Prof Scott commenced two large projects in 2011. One is an ARC Discovery (with Minichiello) investigating the male sex industry in Australia while the other (with Sims and Barclay) is an evaluation of Indigenous night patrols throughout NSW. He is continuing work on an ARC Discovery (with Carrington and Hogg) on violence in rural communities and an ARC Linkage with Hine investigating woodsmoke pollution in rural communities. He is also involved in the development of further ARC Discovery and Linkage projects. Two major projects from 2010 have just been published, the first being a Special issue of the Health Sociology Review on Men's Health (with Minichiello and Dowsett) will be launched by Adam Bandt (Greens member for Melbourne in May, at La Trobe University. The second project a co-authored textbook, Think Sociology, will be available in April. A/Prof Scott also submitted three articles and a book chapter for review in early 2011.

A/Prof Scott's webpage can be found at: <http://www.une.edu.au/staff/jscott6.php>

RESEARCH NEWS

Expatriate Women Writers

Dr Anne Pender, Senior Lecturer in English and Theatre Studies



Dr Pender delivered a paper entitled 'English Lessons and other Unnatural Passions' at the Australians Abroad conference at the University of Queensland in February, on three Australian expatriate women writers and their contribution to literature in Britain and Australia over the last fifty years. The paper presented Anne's research on the work of Elizabeth Harrower, Jill Neville and Barbara Hanrahan. The three writers lived away from Australia in the 1950's and 1960's and their experiences as expatriates defined and transformed their careers. Dr Pender's research is part of a large project on Australian expatriate writers in Britain, from 1830 until the present, funded by the ARC Discovery program.

Dr Pender also presented a full-day workshop on writing biographies at the New England Writers Centre in March and a library talk on Barry Humphries and burlesque at the Armidale Public Library. Early in March Anne spoke to local ABC radio presenter Kelly Fuller on the Thursday Book Club about her research on biography and in February the ABC Radio National's Big Idea program broadcast Anne's Address to the Sydney Institute on biography, satire and the work of Barry Humphries.

Dr Pender's webpage can be found at: <http://www.une.edu.au/staff/jpender.php>

Australian Documentary: History, Practices and Genres

Associate Professor Dugald Williamson, School of Arts



In February 2011, Cambridge University Press published *Australian Documentary: History, Practices and Genres*, co-authored by Dugald Williamson of UNE and Trish FitzSimons and Pat Laughren of Griffith University Film School. This book is the first full-length study to cover the development of Australian documentary from its origins in the 1890s, through the days of cinema and television, to the digital era. It explores the role of documentary – equal in significance to that of fiction film and other arts – in shaping Australia's distinctive national culture, within changing international contexts. Launched at the Australian and International Documentary Conference in Adelaide, then in Sydney and Brisbane, it has been welcomed by scholars and filmmakers.

Following the book's release, the authors' research project has progressed to another stage, involving institutional collaborations to advance knowledge about documentary's vital contribution to Australia's creative industries. In particular, Dugald has led cooperation with the National Film and Sound Archive (NFSA) to develop a plan to create a web-based public resource. The plan, now starting to be implemented, is to publish on the web original materials including a range of interviews conducted by the book authors with documentary makers, broadcasters and other industry practitioners. These materials are to appear alongside existing films and data in 'Australian Screen Online', the NFSA's living archive of the nation's audiovisual heritage. Dugald's related recent research includes writing about the history of media and communications as a discipline and its international scholarship of teaching and learning.

A/Prof Williamson's webpage can be found at: <http://www.une.edu.au/staff/dwillia7.php>

Working with infants and toddlers

Professor Margaret Sims, School of Education



Professor Sims is currently working with John Scott and Elaine Barclay on a project for the Attorney General's Department which requires us to evaluate the impact of Indigenous Night patrols in NSW. There are two different approaches to Indigenous Juvenile Justice represented in the existing services (operating in 11 towns across NSW). One of these involves creating alternative activities for young people in the evenings. The other involves community workers patrolling key areas, working with juveniles to ensure they are safe, and taking them home as required. Our project will require us to visit each of the towns operating a service, talk with service providers and community members to gain an understanding of what works, and in what contexts.

Next month will see the publication of Professor Sims' book "The Early Years Learning Framework and Social Inclusion: a way of working with all children". The book is the result of years of experience in early intervention and research on the development and implementation of the planning approach, and is the new national curriculum framework for the early years in Australia. It was rolled out towards the end of 2009 and all early childhood services (child care, family day care, preschool, kindergarten, inclusion support, early intervention etc) are expected to be using it by now. It offers a way of thinking about planning how to meet the needs of children, particularly for those who work with young children with additional needs as there is a perception that issues around social inclusion are absent from the document. The book demonstrates a very practical way of planning and implementing those plans with children and families on a daily basis that honours both the principles and outcomes of the EYLF, and the principles in the UN Convention on the Rights of the Child.

Professor Sims' webpage can be found at: <http://www.une.edu.au/staff/msims7.php>

RESEARCH NEWS

Development of a highly effective nano-porous oxygen carrier for chemical looping combustion

Dr Trevor Brown, School of Science and Technology

The provision of a sequestration-ready supply of carbon dioxide is the major economic challenge faced by all of the currently favoured low-emission coal technologies (LECT). The retrofitting of commercially-available CO₂ absorption processes to existing coal-fired power stations is economically prohibitive due to high capital and operating costs and the loss of generation efficiency associated with the capture of CO₂ from the N₂-diluted flue gas. The most favoured alternative LCET options (Integrated Gasification Combined Cycle (IGCC) and Oxyfuel combustion) each aim to deal with this issue by excluding N₂ by the use of pure oxygen provided by a cryogenic air separation unit (ASU). While this approach may lead to substantial reductions in the cost of CO₂ capture, this effect is counteracted by the substantial capital and operating costs, and the parasitic energy losses, associated with operation of the ASU. Chemical Looping Combustion (CLC) is an innovative concept in which the oxygen required for fuel combustion is provided indirectly using a solid "oxygen carrier". This concept has shown promise for gaseous fuels, such as natural gas, but has not been widely investigated for coal or other solid fuels. A commercially-available solid fuel CLC technology would provide a high-CO₂ flue gas, as with IGCC and Oxyfuel combustion, but without the additional expense of an ASU. This technology only exists as a concept and many research barriers must be overcome. The most significant of these is to identify suitable materials as oxygen carriers for solid fuel CLC applications since those investigated for gaseous fuels are not suitable due to the very different fuel composition generated by coal gasification. Several different types of candidate solid oxygen carriers have been identified by the investigators, including mixed-metal oxides and polyoxometalate substrates supported on nano-porous materials.



This project will build on existing capability at the University of Adelaide and the University of New England to optimise the fabrication of solid oxygen carriers which exhibit rapid reductive/oxidative kinetics and oxygen diffusion, have high physical and chemical stability over repeated oxidation and reduction cycles, and high mechanical strength with resistance to chemical attack by coal ash and other impurities (e.g. sulphur). Additionally, the preferred carriers will have low cost and low environmental impact. These materials will be synthesised in the laboratory using techniques developed for other applications of functional nanostructured materials. Detailed kinetic experiments utilising specialised apparatus and approaches developed at UNE will be undertaken to develop kinetic models to predict the performance of these materials. The performance of the candidate materials will be assessed using an existing fluid-bed gasification reactor located at the UoA within the South Australian Coal Research Laboratory. These experiments will identify any adverse interactions between the solid oxygen carrier and ash under realistic small-scale conditions. The final stage of this project will investigate the feasibility of a full-scale solid fuel CLC process as justification for further demonstration work, which is beyond the scope of the current budget. A process model, based on existing knowledge of coal gasification, will be used to assess the economic performance of a full-scale solid fuel CLC process and to inform the development of a fully justified plan for the next phase in the successful commercialisation of such a process.

Dr Brown's webpage can be found at: <http://www.une.edu.au/staff/tbrown3.php>

Voluntary Action in Britain

Associate Professor Melanie Oppenheimer, School of Humanities



Melanie's latest book, co-edited with Nicholas Deakin, 'Beveridge and Voluntary Action in Britain and the wider British World', originated from an international symposium organized by Melanie in November 2008 in London to co-incide with the 60th anniversary of the publication of Beveridge's Voluntary Action. Beveridge became a household name across the world as the 'father of the welfare state' yet his third report on voluntary action is little known. Melanie has also completed the research project, Protection of Volunteers in the Workplace: A Pilot Study of GREAT Community Transport (GCT) Inc Blue Mountains and Penrith, NSW in March 2011. This research consultancy critically examined the repercussions of an accident in April 2008 between a volunteer driver and the death of a client. This partnership has resulted in another research grant being awarded by Transport NSW to examine the role of community based management and transport volunteers.

A/Prof Oppenheimer's webpage can be found at: <http://www.une.edu.au/staff/moppenhe.php>

Decision Modelling using Bags

Dr Kankana Chakrabarty, School of Science and Technology

Dr Kankana Chakrabarty's research in the first three months of this year has been associated with mathematical foundations for intelligent decision analysis under a bag-based framework, which takes care of semi-defined constraints associated with intuitive human behaviour. In February, Dr Chakrabarty delivered two invited research talks (in a series) in India entitled 'Decision Modeling using Bags' and 'Decision Analysis and IF-Bags'.



Dr Chakrabarty's webpage can be found at: <http://www.une.edu.au/staff/kankanac.php>

RESEARCH NEWS

Breast Cancer Research

Dr Pierre Moens, School of Science and Technology

As part of our current NHMRC project, my lab has continued to investigate the role of profilin (a small ubiquitously expressed protein) as a regulator of cancer aggressiveness and its potential role as a new therapeutic target. Profilin has been found to be expressed at lower levels in breast cancer cells compared to normal cells.



In addition, our Collaborator at the University of Pittsburgh demonstrated that increasing the expression of profilin in cancer cells inhibits metastasis. In order to better understand how profilin affects cancer aggressiveness and cell motility, we are investigating how changes in profilin expression levels affect the expression of other proteins in the cells. We performed expression proteomic analyses, using 2-dimensional gel electrophoresis (2DE) and mass spectrometry (MS) in collaboration with the Analytical centre at UNSW and the University of Pittsburgh to identify profilin-dependent changes in proteomes of breast cancer cells.

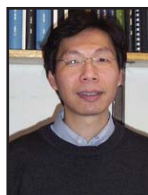
Our proteomics data so far indicates that the expression of at least 14 proteins is significantly modulated by the level of profilin. Interestingly, we found significant changes with both 2DE and MS techniques for a potent anti-apoptotic protein. The level of that protein is significantly decreased when profilin is overexpressed and significantly increased upon profilin silencing.

These experiments are providing us with a better understanding of the role of profilin in cancer as well as identifying potential new targets for cancer therapies.

Dr Moens' webpage can be found at: <http://www.une.edu.au/staff/pmoens.php>

Agent-based Modelling, Evolutionary Computation, Biometrics and Biomedical Imaging

Dr Paul Kwan, Discipline of Computer Science, School of Science and Technology



Dr Kwan's current research areas are in agent-based modelling, evolutionary computation, biometrics and biomedical imaging. His on-going projects include a massive agent-based modelling platform for simulation of animal disease outbreak in Australia and an agent-based model and decision support tool for studying Old World Screwworm Fly invasion in Australia.

Current projects in evolutionary computation are: features selection using co-evolving memetic genetic algorithms; solving large-scale multi-objective optimization problems using particle swarm optimization algorithms; and data mining attributes interaction by memetic particle swarm optimization, as well as continuing projects in biometrics and biomedical imaging including: fingerprint matching using hybrid shape and orientation descriptors, framework for self-adaptation in automatic fingerprint identification system, and automated segmentation and classification of masses in digital mammograms for early detection of breast cancers.

Dr Kwan's webpage can be found at: <http://www.une.edu.au/staff/kwan.php>

Impact of a Carbon Tax on the Australian Economy

Professor Mahinda Siriwardana, School of Business, Economics and Public Policy, and Dr Judith McNeill, Institute for Rural Futures (both pictured at right)



Professor Mahinda Siriwardana and Dr Judy McNeill have been working on an ARC Discovery Grant project to develop an economic model to analyse the impact of a carbon tax on the Australian economy. Disna Sajeewani (PhD student) is also working on this project to complete her PhD thesis, and Sam Meng is helping as a research assistant. The model design is based on the ORANI general equilibrium model of the Australian economy and has incorporated many new features to deal with the issue of CO₂ emissions.

The national electricity market has been modelled to identify five specific electricity generating sectors based on their use of particular energy sources such as black coal or brown coal in generating electricity. The model allows for substitution between different energy commodities. To facilitate the analysis of distributional effects, nine employment groups and ten household categories based on income deciles are identified.

A preliminary analysis undertaken by simulating the impact of a carbon tax of \$30 a tonne using this new model reveals some interesting outcomes. For example, Australia's real GDP may decline by 0.74%, the consumer prices (CPI) may rise by 0.71%, and the price of electricity may increase by about 26% as a result of adopting a \$30 carbon tax. The good news is that a carbon tax of this magnitude may allow Australia to make a substantial cut in its CO₂ emissions. The simulation results imply an emission reduction of about 15% of the 2005 based emissions.

Professor Siriwardana's webpage can be found at: <http://www.une.edu.au/staff/asiriwar.php>

Dr Judith McNeill's webpage can be found at: <http://www.ruralfutures.une.edu.au/staff/>

RESEARCH NEWS

Indigenous Recording of Early Exploration Party Documented

Dr June Ross, School of Humanities

Picturing Change: 21st Century perspectives on recent Australian rock art, especially that from the European contact period. ARC Discovery DP0877463 - Adjunct Assoc. Professor June Ross SHUMS - with Prof Paul Taçon (Griffith) Dr Alistair Paterson (UWA), Dr Sally May (ANU).

As part of the Picturing Change research project, which is aimed at documenting the ways in which rock art was used to record and mediate interaction between Aboriginal people and Europeans across Australia over the past two hundred years, Dr June Ross and Dr Mike Smith (NMA) recently completed a field trip to Tjunkupu, about 100 kms west of Haasts Bluff (NT). They were accompanied by the Papunya Aboriginal Rangers, Traditional Owner, Douglas Multa, historian Dr Dick Kimber and Central Land Council personnel. The trip formed part of a training program for Indigenous rangers aimed at developing skills in site conservation and management.

The rock art at Tjunkupu is highly significant as it provides the earliest record of Indigenous art in Central Australia. The explorer, Ernest Giles recorded what he labelled 'curious drawings' when he stumbled upon a painted rockshelter adjacent to a waterhole he named poetically, the Tarn of Auber (Tjunkupu) in 1872 on his first failed attempt to cross to the Western Australian coast. Some of the painted rock art described by Giles has since eroded away leaving no trace at all demonstrating the ephemeral nature of some parts of the Central Australian assemblage while other parts of the rock art remain sharp and clear and retain their significance for Traditional Owners today. Charcoal drawings added by Giles' second-in-command, Carmichael and described by Giles as 'a few choice specimens of white man's art' are still clearly evident. They include an image of a man, complete with hat with his hands on his hips, a stance typically used to suggest authority. More recent Indigenous drawings of a truck have been added to the same panel and are thought to depict the Ford supply vehicle that brought provisions to the mission station at Haasts Bluff at the turn of the last century.

A side trip to nearby Gill Creek in the Cleland Hills provided an opportunity to document a cluster of small depictions of horses painted in a shallow overhang. These motifs may document the local inhabitants' first sighting of European interlopers and the strange new beasts on which they rode. It is likely that they depict Ernest Giles and his small exploration party. While all the horses are painted in profile, several have their hooves shown as tracks in the same manner used in traditional depictions of native animals. Analyses of art assemblages from both sites have been included in a paper submitted to Rock Art Research and in a chapter for *A Companion to Rock Art* published by Wiley-Blackwell and edited by Jo McDonald and Peter Veth.

Contact Dr Ross via email: jross4@une.edu.au



Dr June Ross with traditional owner Douglas Multa

Transmitting the value of Folk cultures in Bhutan

Dr Thinley Dorji, recent PhD Graduate

Globalization can promote cultural understanding and empathy among nations and spread the values of democracy and diversity. It also homogenizes cultures and causes the loss and disappearance of lesser known languages and their cultures, especially those that exist in the oral form. Bhutanese society has been a largely oral society, and their languages embody rich and diverse folk traditions in prose and verse, which continue to thrive. Fortunately, the government of Bhutan recognizes and emphasizes the need to ensure their intergenerational continuity through the education of children and the catalytic role of teachers in transmitting the values these folk literatures contain. In the absence of classroom based studies it is not known how real these roles are in terms of the part folk literature plays in the school's formal and informal curricula and pedagogical practice.

Using a constructivist-interpretive design, this study investigated secondary English teachers' and students' knowledge and perceptions of these issues. Data were gathered from both teachers and students through questionnaires and interviews. There were a number of significant findings. First, while teachers and students recognize the cultural and aesthetic value of folk literature, their knowledge of the genres was generally low. Second, while the need to translate the oral literatures into English and revitalise them through the English curriculum is generally acknowledged, such an option also has cultural and pedagogical implications. Third, while Bhutanese folk literatures can be used as pedagogical catalysts in the English curriculum, how effectively they are used depends on a number of factors within and outside the context of curriculum.

The Lexis and Versification of early French Mediaeval Drama

Adjunct Lecturer Jim Nicholls, French, School of Arts

Adjunct Lecturer Jim Nicholls has been working on the lexis and versification of early French mediaeval drama, focusing particularly, at the moment, on textual problems in the sole, defective, manuscript of the *Mystère d'Adam*, and on the complex *Jeu de Saint Nicholas*. He is continuing his investigation into geographical references in the late 11th century *Voyage de Charlemagne*. Part of this investigation has been published and has been cited; but there is a further section of the text that has been critically neglected or dismissed, and on which he has (biblical) clues. His work on 16th-century French navigational literature has also made progress.

RESEARCH NEWS

The School of Arts - Department of French

<http://www.une.edu.au/study/french/>

Technology, Tradition and Flexibility in the Teaching of 2nd year *ab initio* French

Dr Jennifer Hatte, French, School of Arts



Dr Hatte has completed a paper “Technology, Tradition and Flexibility in the Teaching of 2nd year *ab initio* French to Distance University Students in the Australian Context”, that investigates the history of distance language education at UNE, including methodologies and technologies developed for teaching languages and their literatures, particularly French. The paper also examines some differences in perception and approach between UNE and institutions newly adopting online/distance language-teaching, and focuses on the UNE second year French core units and the mission to integrate the best of both current practice and technology and what has long been recognized worldwide as the ‘New England Model’ of external study.

A second article from the paper, “Jean Cocteau : la vie en jeu”, is about the major and prolific French poet who worked in a number of genres. Dr Hatte’s central area of research is the exploration in his works of the multiple textual and intertextual relationships which hold the key to a deeper understanding of the œuvre as a whole and of the world-view and philosophy behind it. This article relates Cocteau’s concept of life as a cosmic game to the centrality of play, to his life and works. Dr Hatte is also currently researching online for a chapter on Jean Cocteau, who although he never came to Australia, his influence here has been considerable and this has never before been coherently documented.

Dr Hatte’s webpage can be found at: <http://www.une.edu.au/staff/jhatte.php>

d’Aubignac

Dr Bernard Bourque, French, School of Arts

Dr Bernard Bourque’s article “Les Formes de l’acte et de la scène: théorie et pratique chez d’Aubignac” was published in the journal *Papers on French Seventeenth Century Literature*, 38 (2011), pp. 173-184. The article demonstrates that abbé d’Aubignac does not succeed in establishing a coherent doctrine on the concepts of acts and scenes. Moreover, the theories that the author puts forward are not applied rigorously in his own tragedies. Dr Bourque is currently working on a study of the tragedy *Le Martyre de Ste Catherine*, published in Caen in 1649. The article will refute the generally accepted belief that abbé d’Aubignac is the author of the play.



Dr Bourque’s webpage can be found at: <http://www.une.edu.au/staff/bbourque.php>

17th-century French dramatist Thomas Corneille

Emeritus Professor Chris Gossip, French, School of Arts



Professor Gossip was invited to establish and then lead a team of scholars to prepare a full critical edition of the forty or so plays of the 17th-century French dramatist Thomas Corneille. This will be the first complete scholarly edition, indeed the first-ever edition of all his acknowledged dramatic works, which exerted a considerable influence in what was the Golden Age of French drama under Louis XIV. The team consists of twelve senior specialists from France, Spain, England, Ireland and the United States;

Professor Gossip is the only representative from the southern hemisphere. The works will appear over the next few years in nine volumes, published by Éditions Classiques Garnier in Paris.

Emeritus Professor Gossip can be contacted by email: cgossip@une.edu.au

Complete Works of Voltaire

Dr Paul Gibbard, French, School of Arts

Dr Gibbard has been working on a critical edition of a pamphlet by Voltaire which will be published by the Voltaire Foundation as part of its new edition of the Complete Works of Voltaire. Entitled *Lettres sur la Nouvelle Héloïse* (1761), the pamphlet satirises Jean-Jacques Rousseau’s sentimental novel *Julie ou la nouvelle Héloïse*, and contains a personal attack on Rousseau himself. This piece of research has involved examining the original manuscript of the pamphlet, and comparing it to subsequent printed versions authorised by Voltaire, in order to establish the way in which Voltaire altered the text over time.

The critical edition also contains footnotes explaining obscure references in the text, and an introduction outlining the composition and publication history of the text, and its reception among contemporary readers.

Dr Gibbard can be contacted by email at: pgibbard@une.edu.au

RESEARCH NEWS

Twentieth-century French writer Marguerite Yourcenar

Dr Jane Southwood, French, School of Arts

Dr Southwood is currently on study leave, researching material in France, the United Kingdom and North America for a monograph, on the twentieth-century French writer Marguerite Yourcenar (1903-1987), who earned distinction as the first woman to enter the French Academy since its inception in 1635. A fluent Latinist and Hellenist, well versed in English, as in Romance languages, Marguerite Yourcenar's writing includes novels, essays, theatre, poetry and translations into French from English and from modern and ancient Greek. The focus of Dr Southwood's monograph is the rhetoric of understatement and restraint in Marguerite Yourcenar's work.



Surrealism and the 19th century French avant-garde

Dr Klem James, French, School of Arts

Dr James has been working on projects related to his principal research interest, Surrealism and the 19th century French avant-garde. The projects include an article on the parodic nature of Salvador Dalí's Classicism and a book, which reconsiders Surrealism's legacy within definitive accounts of twentieth century art and culture (in which the movement is frequently, and somewhat unjustly, presented as conservative and idealist in its theoretical orientation).

High Country Urban Biodiversity Project

Professor Don Hine, School of Behavioural, Cognitive and Social Sciences



Professor Hine is currently collaborating with Robyn Bartel, Darren Ryder, and Methuen Morgan to monitor and evaluate the social and ecological outcomes associated with the High Country Urban Biodiversity project, as well as working with members of UNE's Agriculture and Law centre to formulate behaviourally effective rules for natural resource management.

Don and his colleagues John Scott, Carol Davies and Navjot Bhullar are continuing their work on their ARC Linkage Grant focusing on reducing wood smoke pollution in Armidale. Over the course of the project data have been collected from over 500 household to assess awareness of a community based social marketing campaign and whether the campaign was effective in changing attitudes, knowledge, and behaviours relevant to wood smoke mitigation.

The data are being analysed and results are expected to be available by July. He is currently working with Carol Davies to prepare an expression of interest for a DECCW education grant to further progress this program of research.

Prof Hine's webpage can be found at: <http://www.une.edu.au/staff/dhine.php>

Grammar and praxis: investigating a grammatics for 21st century school English

Associate Professor Mary Macken-Horarik & Professor Len Unsworth, School of Education - (pictured below)

In a complex communicational environment and at the dawn of an Australian National Curriculum, English teachers and students need new kinds of knowledge about language (KAL). This project will develop the knowledge base of teachers and students through what we are calling 'grammatics'. A grammatics is a metalanguage for talking about language informed by grammar but taken in new directions.

New ways of thinking and talking about language are needed if teachers are to 'develop students' understanding about how the English language works' and then progress this in a 'coherent and cumulative' way up the years from Kindergarten to Year 12. The grammatics that will be developed during this project will emerge from classroom practice and systematic reflection on what works with teachers and students over a three-year period.

The project will run until 2013 and will involve a series of workshops and classroom trials of the grammatics, with the hope that teacher 'hubs' will be formed in each region, with teachers having access to on-line materials and opportunities to work with buddies and with the researchers in their own classrooms. In 2013, the final year of the project, the project will begin work on a new genre - text response, and teachers will learn about the grammatics of text response and will teach their student to write improved responses to narrative and other literary texts.

The final event for 2013 will be a national forum which brings all participants together to report on what kinds of KAL work best for teachers and students in teaching narrative, argument, text response.

A/Prof Macken-Horarik's webpage can be found at: <http://www.une.edu.au/staff/mmackenh.php>

Professor Unsworth's webpage can be found at: <http://www.une.edu.au/staff/lunsworth.php>



RESEARCH NEWS

Visiting Professor to Beijing language and Culture University

Associate Professor Drew Khlentzos, Psychology



A/Prof Drew Khlentzos (Psychology) has been appointed Visiting Professor to Beijing Language and Culture University where he will present a series of lectures on logic and language acquisition in April this year. So far this year he has been conducting research on the semantics of conditionals in collaboration with Prof. Stephen Crain, Director of the ARC Centre of Excellence for Cognition and its Disorders (COECD) and is continuing his research into cognition and the psychology of reasoning with UNE Psychology colleague Dr Bruce Stevenson. A/Prof Khlentzos's research on conditionals and cognition has been recognised with invitations to present keynote addresses at 3 conferences this year: The Harvard/Australasian Universities Language, Logic and Learning conference; Agent Tracking and its Disorders conference; and ANU Colloquium on Conditionals.

Collaborative research with fellow Chief Investigators Prof. Crain and Co-Director of COECD Dr Blake Johnson on ARC Discovery Project The Emergence of Logic in Child Language continues into the second year of its five-year duration. The brain-imaging techniques and cross-linguistic studies being deployed in this project in the light of ongoing foundational studies on the semantics of logical expressions are revealing facts about the way young children understand logical expressions in English and Mandarin-Chinese that are quite unexpected and intriguing. The project has already led to fundamental changes in the way researchers think about language acquisition and logic.

Dr Khlentzos' webpage can be found at: <http://www.une.edu.au/staff/dkhlentz.php>

Phonology of Reawakened Aboriginal Languages

Dr Nick Reid, Linguistics

Dr Nicholas Reid (Linguistics) has been working with various groups seeking to revive Aboriginal languages in NSW, who are dealing with how to best pronounce languages in the absence of a native speaker community. He has drawn on this work to present a paper entitled 'The phonology of reawakened Aboriginal languages: issues in pronunciation and authenticity in language revival in Australia' at the Conference on Phonology and Endangered Languages at City University New York in late January. Nick is also working with Ngan'gi speakers in the Daly River region of the NT, who are keen to initiate a new phase of multi-modal language documentation using video recordings and archiving software protocols like ELAN and IMDI.



In March Nick completed a chapter on 'Classificatory verbs in Ngan'gi' for a book on 'Event Categorisation in typological perspective' to be published by Benjamins in 2011 (eds. W. McGregor, T. Wiebush and E. Schulz-Berndt). The phenomenon of 'noun class' (think 'masculine' and 'feminine' nouns in French, say), has received a lot of attention in the linguistics' literature. However the corresponding phenomenon of verb classification is much less widely acknowledged and has received only patchy treatment in the literature. Nick has carried out research on verb classification in Australian languages which have small 'closed classes' of verbs, exploring how the semantics of such systems work to divide the domain associated with verbs into a limited number of categories.

Also in March, Nick gave a seminar at UNE titled 'Australia's Indigenous languages in the public domain' which looked at reactions to movies like *Ten Canoes*, TV skits like *The Chasers Life at the Top*, and events like Welcome to Country ceremonies and Dual Place Naming practices, to explore attitudes towards Australian Indigenous languages.

Dr Reid's webpage can be found at: <http://www.une.edu.au/staff/nreid.php>

Constructing a sense of self

Dr Sally Hunter, Senior Lecturer in Health, School of Health



Dr Sally Hunter, Author of 'Childhood sexual experiences: narratives of resilience', Shane Merritt and Dianne Roberts have begun a qualitative research study to examine how Aboriginal and/or Torres Strait Islander peoples construct a sense of self following childhood sexual experiences. Interviews will be conducted with men and women who had a sexual experience under the age of sixteen with someone over the age of eighteen.

The results of the study will increase knowledge about the resilience of Aboriginal people in overcoming childhood adversity and will help to inform Indigenous and non-Indigenous health workers who work with adults who have been sexually abused as children.

The research team consists of Sally Hunter who is a non-Indigenous woman, Shane Merritt who is a Kamilaroi man, and Dianne Roberts who is a local Aboriginal Elder and the Founder and Former principal of Minimbah Pre-School and Primary School.

Dr Hunter's webpage can be found at: <http://www.une.edu.au/staff/shunter2.php>

RESEARCH NEWS

'Water Law: Through the Lens of Conflict'

Professor Paul Martin and Dr Amanda Kennedy, AgLaw Research Centre

Led by Professor Paul Martin and Dr Amanda Kennedy (*pictured at right*) from the Australian Centre for Agriculture and Law, the School of Law held an important colloquium at UNE on 5 and 6 January 2011, titled 'Water Law: Through the Lens of Conflict'. The colloquium generated favourable media interest and was a highly successful research event for the School. Several of the world's leading experts in the field of water law were present, both in person and via video link.



The aim of the colloquium was to explore the role of law in addressing conflicts over water around the world, bringing a 'human perspective' to a debate that has been dominated by scientific and economic considerations. Given recent issues with the Murray Darling Basin, and the search for a better way to deal with this continuing conflict, the event was timely. Delegates attended from Brazil, Canada, China, Egypt, Iceland, South Africa and the United States, as well as from within Australia.

Following the colloquium, presenters have been invited to submit their papers to the inaugural edition of the 'International Journal of Rural Law and Policy', a new journal to be produced by the School of Law at UNE.

<http://blog.une.edu.au/news/2011/01/06/murray-darling-water-a-focus-of-international-legal-interest/>

Research Projects in DeHub

DEHub webpage can be found at: <http://www.dehub.edu.au/>

Professor Belinda Tynan, Director DEHub and Academic Director, Faculty of The Professions

Professor Tynan is the lead researcher on the ALTC project 'E-teaching leadership: Planning and implementing a benefits-oriented costs model for technology'. In collaboration with Professor Yoni Ryan, ACU, Dr Leone Hinton, CQUniversity and Associate Professor Andrea Lamont (USQ) the project aims to develop metrics that would enable objective definitive costs and benefits for universities as they developed business plans and learning designs for fully online and blended learning projects.



Professor Tynan is also involved with the International Council for Open and Distance Education (ICDE) Regulatory Frameworks for Distance Education project in collaboration with the International Network for Quality Assurance Agencies in Higher Education (INQAAHE), Australasian Council on Open, Distance and ELearning (ACODE), DEHub, and the Australian Universities Quality Agency (AUQA). The project is designed to develop a literature review, case studies, creation of a data base, and analysis of regulatory frameworks in the Southwest Pacific/South East Asia Region.

Prof Tynan is also working with Dr Sue Gregory, UNE and Mark J.W. Lee, UNE and CSU in a project involving a scoping study comprising a formal and systematic review of current and planned applications of 3D immersive virtual worlds at higher education institutions across Australia, which developed an understanding of how these new online platforms are being used for learning and teaching across universities and disciplines.

Dr. Julie Willems – DEHub and the Faculty of the Professions



Dr. Julie Willems' work centres around better understanding the impact of multiple disadvantage in education: how to get the 'right' education and training needs to the 'right' people at the 'right' time and in ways and through means that these learners can best manage. As a social justice issue, she believes that multiple disadvantage is the lens through which key stakeholders in education need to consider and interpret the provision of learning and teaching to a diverse student body. This includes considerations on the technologies for learning, the learning design, and assessment practices. Yet social justice issues are not the sole domain of students, and the research also tangentially looks at issues of disadvantage for educators.

In the first quarter of 2011 Dr. Willems' research focus has been in the preparatory phases for some larger scale empirical research on multiple equity overlap in higher education, and on exploring context-related learning environments and applications to potentially overcome pre-existing aspects of educational disadvantage such as access, isolation, learning preferences, and remoteness. A research wiki has been developed for this purpose and can be located at <http://multipleequityissuesineducation.wikispaces.com/>

Dr Rosalind James – DEHub and the Faculty of the Professions

In a consortium of DEHub, AUQA, ACODE and INQAAHE, Dr James has been leading an ICDE-sponsored project investigating the impact of regulatory frameworks on distance education in the Southwest Pacific/South East Asia region. The project will provide an overview of distance education institutions in the study area and comparative analysis of the regulatory frameworks, illustrating differences in policy and practice across the region. Rosalind has also been investigating Web 2.0 technologies and their impact on distance education and providers of distance education. With Professor Belinda Tynan, Dr James has been researching the role of online teachers and reviewing the evidence for the time involved in online teaching and how this compares with face-to-face teaching. Preliminary findings are being prepared for publication.

RESEARCH NEWS

Myths of War and Thinking about Peace

Professor Michael Allen Fox



Two projects are currently underway. The first is a book on peace, which discusses the topic under three major headings: 'Beyond the War Mentality', 'Human Nature and Human Possibility', and 'Ways to Peace, and Peace as the Way'. In Part I, an attempt is made to overcome myths of war and resistances to thinking about peace, and two general moral arguments against war are also framed. Part II considers how nonviolence and human cooperative tendencies have been neglected in our understanding of our species' history. Part III explores the meaning of peace and nonviolence, and reflects on problems of creating a peaceful culture. Professor Fox is under no illusion that philosophy alone can change the world or make humans into more peaceful beings. But recurring armed conflict and the prospects for its getting out of control constitute a key survival issues now facing our species, so any approach that might help shift people's motivations in the right direction (toward peace-building) should be welcomed.

The second project is an article in philosophy/literary criticism (co-authored with Elizabeth Hale, English, UNE) on Antoine de Saint-Exupéry's famous story for children of all ages, *The Little Prince*. The writers believe they have something new to add to the large corpus of commentary on this much-loved work, and accordingly, they are examining the book's environmental themes and concept of knowledge that comes to us via the unspoken and the invisible elements of existence.

C4-D: Spatio-temporal Analysis Support Unit

Report by Dr Greg Falzon, School of Science and Technology

The first three months of operation for the unit have been incredibly busy with a number of projects being initiated with our partners and collaborators including the Precision Agriculture Research Group, the School of Environmental and Rural Science, the School of Science and Technology, the Department of Agriculture, Fisheries and Forestry and the Australian National University. Several major projects are in progress including: the Dynamic Aerial Survey algorithm - a project which is capable of providing real-time predictions for variable rate fertilizer applications on low-flying aircraft; X-ray image data analysis is the development of custom-designed software for use in both micro-CT and agronomy studies; animal movement studies use methodology and applications for the tracking of livestock and analysis of the foraging behaviour of the endangered Northern Bettong; spatio-temporal modeling of paddock biomass is part of a wider study to quantify methane emissions from rural properties; diagnostic biomedical algorithms - in particular those designed to diagnose cancer; and high-performance computing - the development of methodology and algorithms to be used on parallel computers and graphical processing unit clusters.

The PARG Group webpage can be found at: <http://www.une.edu.au/parg/>

High spatial, high spectral and LIDAR remote sensing data

Hanieh Saremi, PhD Candidate

Despite the importance of biomass assessment, there is surprisingly little reliable and detailed information on the consumption and supply of biomass. Estimation of aboveground biomass is an important key for identifying the amount of carbon in vegetation species. Since conventional field-based biomass assessment is tedious and time consuming, especially at broad scales, remote sensing techniques combined with limited ground truth data (fieldwork) have the ability to efficiently monitor terrestrial ecosystems at various temporal and spatial scales. This research combines different remote sensing methods with field observations to quantitatively estimate aboveground biomass and to indicate the estimation accuracy. Hyperspectral, high spatial (such as Quickbird) and LIDAR data will be used to estimate leaf area index (LAI) dynamics, tree height and above ground biomass. Integrating hyperspectral remote sensing with LIDAR can provide more detailed and accurate forest inventory information and the ability to provide specialized products such as above-ground carbon maps. For predicting above ground biomass and carbon storage, diameter distribution models based on the Weibull distribution function or NCAS algorithms will be used. Biomass estimation will be based on the ratio of absolute dry weight to fresh weight. The relationship between the biomass and carbon storage will be determined by allometric equations.

Supervisors: Dr Lalit Kumar & Associate Professor Brian Wilson

Montessori Curriculum Project

Dr Susan Feez, School of Education

With the new national curriculum being implemented in Australia, Dr Susan Feez has been commissioned by the Montessori Australia Foundation (MAF) to research and compile the complete Montessori curriculum, from early childhood to the secondary years, in preparation for its submission to ACARA. In 2010 Susan completed the first phase of the curriculum project covering the preschool and primary school years. At the beginning of 2011 Susan is embarking on the second phase of the project, which includes alignment of the Montessori curriculum with an online record-keeping system to be made available to all Montessori schools in Australia.

RESEARCH NEWS

Economic Accountability: Decentralised, Collaborative Approaches to Environmental Decisions

Dr Graham Marshall, Institute for Rural Futures

Dr Graham Marshall from the Institute for Rural Futures has recently submitted the final report for the three-year project entitled 'Improving Economic Accountability when using Decentralised, Collaborative Approaches to Environmental Decisions' to the Australian Government's Commonwealth Environmental Research Facilities (CERF) program. The project involved developing and trialling methods for strengthening economic accountability of investment decisions by community-based natural resource management bodies. Three Catchment Management Authorities (CMAs) in NSW - Border Rivers – Gwydir, Namoi and Northern Rivers CMAs – participated in the trials. A key message from the project is that, regardless of the elegance of the techniques that are developed to strengthen economic accountability in this area, substantive advances in this direction are unlikely without significant changes to the institutional and governance system within which community-based NRM bodies operate. Another output of the project is a chapter by Dr Marshall entitled 'What 'community' means for farmer adoption of conservation practices' which was recently published in the book *Changing Land Management: Adoption of New Practices by Rural Landholders*.



Dr Marshall's webpage can be found at: <http://www.ruralfutures.une.edu.au/staff/>

Crosslinguistic effect of salience and syntactic function assignment in sentence planning

Dr Ines Anton-Mendez, Linguistics

In collaboration with Chip Gerfen, Pennsylvania State University (U.S.A.), Dr Anton-Mendez is studying whether certain preferences in how to organize information in order to build a sentence are fixed according to the native language or depend on an on-line implementation of ranked constraints which is applied anew for every sentence to be uttered. For example, the "target" of an action tends to be encoded as the direct object in a sentence (e.g., 'the girl' in 'the dog licked the girl') but, if that same entity is salient, speakers prefer to put it early in the sentence. In order to do this, English speakers need forgo one of the preferences and end up conveying the message by means of a passive ('the girl was licked by the dog'). Other languages, however, allow speakers to respect both preferences by changing the word order. The question is whether the choice of passives for these kinds of situations has been automatized or whether English speakers are still trying to accommodate all individual preferences but giving up on one when that proves not feasible. To answer that question, we are looking at what native English speakers do when they speak in a language that does allow them a choice: Spanish.

Policies and Practices around Open Educational Resources (OERs)

Dr Carina Bossu, Research Fellow with DEHub and the Faculty of the Professions

Carina's current research is focused mostly on investigating national and institutional policies and practices around Open Educational Resources (OERs), to enable the adoption, use and management of these resources for learning and teaching within higher education institutions in Australia. This research has been supported by the Australian Learning and Teaching Council (ALTC), and undertaken in partnership with Associate Professor Mark Brown from Massey University in New Zealand, Mr David Bull from the University of Southern Queensland and Associate Professor Brian Simpson from UNE. In the first three months of 2011, this research team, under Carina's leadership, has worked solidly on strategies for data collection and analysis of a large survey that will be shortly sent to Australian institutions across the higher education sector.



More information on this research project at: http://wikiresearcher.org/OER_in_Australia

Guidelines for submissions to the Research@UNE newsletter

Written article submissions will be accepted from all UNE Staff, including honorary staff, and staff in joint ventures, for inclusion in the newsletter.

Photos are also welcome, especially if it is an event.

However if the photographs have not been taken by the UNE Photographer, please obtain and supply permissions and acknowledgements.

Some photos, logos and news items are sourced directly from UNE webpages.

For feedback and other enquiries with regards to the newsletter please contact the editor:
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