

ACADEMY OF THE SOCIAL SCIENCES IN AUSTRALIA

Dialogue

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About the Academy

The Academy of the Social Sciences in Australia was established in 1971. Previously, some of the functions were carried out through the Social Science Research Council of Australia, established in 1942. Elected to the Academy for distinguished contributions to the social sciences, the 343 Fellows of the Academy offer expertise in the fields of accounting, anthropology, demography, economics, economic history, education, geography, history, law, linguistics, philosophy, political science, psychology, social medicine, sociology and statistics.

The Academy's objectives are:

- to promote excellence in and encourage the advancement of the social sciences in Australia;
- to act as a coordinating group for the promotion of research and teaching in the social sciences;
- to foster excellence in research and to subsidise the publication of studies in the social sciences;
- to encourage and assist in the formation of other national associations or institutions for the promotion of the social sciences or any branch of them;
- to promote international scholarly cooperation and to act as an Australian national member of international organisations concerned with the social sciences;
- to act as consultant and adviser in regard to the social sciences; and.
- to comment where appropriate on national needs and priorities in the area of the social sciences.

These objectives are fulfilled through a program of activities, research projects, independent advice to government and the community, publication and cooperation with fellow institutions both within Australia and internationally.

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President's column

Fay Gale

Reconciliation and the Academy

This year, 1999, the last of the millennium, will be a very important year for the social sciences.

We closed last year, the penultimate year of this millennium, very appropriately with a symposium on reconciliation. Many social scientists, both indigenous and non-indigenous, participated.

It was a time to look back with shame on many of the attitudes and actions of Australians since Europeans first arrived and began to take the land, livelihood and lives of the original owners of this continent. But it was also a time to look forward with hope. Much has been achieved and many attitudes have been changed.

From the 1960s onwards there has been a steady recognition of indigenous people in this country and a realisation that they had rights and deserved fair and equal opportunities with other Australians.

The 1990s have seen an acceleration of acceptance by governments and people generally. *Bringing Them Home*, the report of the National Inquiry into the Separation of Aboriginal and Torres Strait Islander Children from their Families, known popularly as the stolen generation; the Mabo decision; the National Native Title Tribunal; the Wik legislation; and the initiation last year of Sorry Day all show substantial changes in the attitudes of non-indigenous Australians to the descendants of the original owners of this land.

We must ensure that the momentum gained in the last decade of this millennium is carried forward as we look to further changes and greater reconciliation in the early years of the new millennium.

The symposium took one aspect of the broad topic of reconciliation and dealt with the responsibility and role of social scientists in influencing tertiary education. Where do universities stand on these issues? What are social scientists in particular doing to ensure that greater intellectual content is added to the debate?

It cannot be left to the press or politicians or public servants to determine what are the key issues of reconciliation and how they should be addressed. In the Academy we represent a broad range of scholarship at a high level, bringing together the best brains of the country to deal with these issues. We need to be at the forefront of policy formulation based on accurate and empathic research. As the Academy led in the past through the Rowley years, I hope it will do so again in this time of considerable change and great challenge.

The issues today are very different from those discussed in the Rowley publications. Many of the issues which he highlighted have been dealt with. But there are now many more and in many ways they are more complex. They are truly related to the whole identity of Australia. No longer is the Australian population made up of just a dominant culture, primarily British, and the indigenous inhabitants. The complexity of today's multicultural Australia has very much influenced our identity as Australians and our interactions between different groups of Australians.

The symposium sought to draw out some of these complexities and to look particularly at the role of academics in dealing with them. I hope the Academy will be able to carry forward the momentum of that significant and timely symposium.

The Future of Social Science Research in Australia

Social scientists are dependent to a large degree upon the Australian Research Council to fund research beyond the small level of infrastructure support available in academic institutions in this country. It is therefore of great concern to us that the future of the ARC is in doubt. A draft paper circulated to only a select few at the end of last year suggested considerable changes, placing much more emphasis on direct funding to universities rather than through a body primarily using peer review.

High quality research of international standing requires top level assessment in the allocation of funds. Its funding must go to the most competent researchers and not be distributed on institutional equity or other such considerations.

The present complaints of the ARC are understandable. When I was first elected President of the Australian Vice-Chancellors Committee, I was given a valuable piece of advice. I was advised to 'never get between a Vice-Chancellor and a bag of money'. In many ways this is exactly

what the ARC does. Instead of all of the research money going direct to universities to be dispensed by Vice-Chancellors and their advisors, it is filtered through a well honed process of peer review and researcher accountability.

All comparable countries use some means of contestability to determine research funding. To ensure top quality research at international standards competition between researchers seems essential.

In July last year Professor David Penington released his review of the organisational structure of the Australian Research Council. In it he makes clear the importance of a national, independent system to fund research. In his report he refers to an earlier review of the Large Grants Scheme of the ARC which showed that 61 per cent of research funded through the scheme was at the leading edge of international research and a further 24 per cent was shown to be of high quality and likely to influence the field.

This level of performance must be maintained and there is considerable doubt if this will be possible when research monies are distributed directly to universities to be allocated by internal mechanism, which must take into account collegiality and other possibly less objective mechanisms for determining quality. Certainly it could be much more difficult for new researchers or new programs to be supported.

Already a number of mechanisms have been attempted in an effort to distribute funds made directly to universities whilst maintaining a competitive approach to quality assurance.

In his interim report, Professor Penington says:

There is good evidence that introduction of the number of publications as an indicator within the formula for distribution of both the Research Quantum and Research Infrastructure grants, has been followed by a significant increase in the number of publications. This has occurred without any indication of their value as shown by a parallel rise in overall frequency of citation of the publications by other research workers. Indeed, the change has occurred concurrently with an overall decline in frequency of international citation of Australian higher education research. . . Such a trend is damaging to the standing of Australian research in the international community.' (Penington, David: 1998 Review of the Organisational Structure of the Australian Research Council, p 10, forthcoming publication).

With this timely reminder of the problems associated with the recent attempts at directing research funds to universities on largely quantitative rather than qualitative grounds, we need to be well alerted to the present proposals. It is anticipated that a redrafted paper will be released more widely early in the year. All social scientists will need to examine it carefully and be aware of the possible long term dangers of diminishing the funding role of the Australian Research Council.

Dialogue is produced within the Secretariat of the Academy and published four times per year. The Editor is Peg Job. Readers are welcome to comment or enquire regarding matters mentioned in *Dialogue*. Letters to the Editor will be published. General enquiries may be posted, faxed or sent by email to ASSA.Secretariat@anu.edu.au. Editorial enquiries should be sent to:

The Editor, at pegs.books@braidwood.net.au

Deadline for the next issue is 1 May 1999

Vice President's note

Ian Castles

The United Nations Educational, Scientific and Cultural Organization (UNESCO) and the International Council of Science (ICSU) have convened a World Conference on Science, to be held from 26 June to 1 July 1999 in Budapest, Hungary. In a paper presented to UNESCO's Executive Board in March 1998, the goals, status and proposed outcome of the Conference were outlined as follows:

The Conference will address the main achievements of the natural sciences in the twentieth century, examine the main challenges ahead and consider the role of science in development. Special attention will be given to the ways and means by which scientific results can be better harnessed to improve the quality of life and promote socially and environmentally sustainable development in the next century. [The Conference] will aim at improving the public understanding of science, and the recognition it should be given as part of a wider culture, particularly through education and the popularization of science.

. . . . the culmination of [the Conference] will be the endorsement or approval of two important documents: first, a *Declaration on Science* which would underscore political commitment to the scientific endeavour and the solution of problems at the interface between science and society; and second, an innovative and pragmatic *Strategy for Action* which would be a long-term strategic framework for promoting co-operation and the coordination of the efforts of all partners and stakeholders in science, including the scientific research community, governmental bodies, intergovernmental organisations (IGOs), non-governmental organisations (NGOs) and the industrial sector.¹

Subsequently, it was announced by UNESCO and ICSU that the Conference would be entitled 'Science for the twenty-first century: a new commitment'. It would provide 'a unique forum' for debate about 'where the natural sciences stand today and where they are heading, what their social impact has been and what society expects of them'. As 'science itself is facing difficulties of confidence and investment', such a debate is

necessary in order to 'establish what efforts should be invested to make science advance in response to [society's] expectations and to the challenges posed by human development'.

This debate will undoubtedly reveal that increased efforts should be invested 'to make science advance'. In fact, the sponsoring organisations, in their 'first announcement' relating to the Conference, explicitly state that 'The Conference will be an event at which policy-makers, scientists and representatives of society in general can together . . . arrive at a means of increasing the commitment to, and from, science.' And the first paragraph of the announcement of the Conference foreshadows the tone and content of the Declaration on Science which will undoubtedly be endorsed at its culmination:

Science is a powerful means of understanding the world in which we live, and is also capable of yielding enormous returns that directly enhance socio-economic development and the quality of our lives. Scientific advances over the last fifty years have led to revolutionary changes in health, nutrition and communication; moreover, the role of science promises to be yet greater in the future because of ever-more-rapid scientific progress.²

The Natural Sciences, the Social Sciences and 'Science'

As the quoted extracts from the preliminary documentation make clear, the subject of the World Conference on Science will be the natural sciences. This is the sense in which the word 'science' is now generally used. Unfortunately, there is no single word which covers the disciplines of the social sciences, and no word which has replaced the word 'science' in its older meaning of 'organised inquiry'.

The change in the use of language has worked to the disadvantage of the social sciences. Thus, the body which was constituted as the Australian Academy of Science in 1954 excluded social scientists from its ranks, but did not need to add the adjective 'natural' to its title to explain the coverage of its membership. Similarly, the International Council of Scientific Unions, which was 'founded in 1931 to bring together **natural** scientists in international scientific endeavour', was able, without abuse of language, to change its name in 1998 to 'ICSU: The International Council for **Science**'. One of the principal objectives of ICSU is 'to

promote the public understanding of **science**'; the body affirms its 'unwavering commitment to the universality of **science**'; and it claims to be 'the oldest existing non-governmental body committed to international **scientific** cooperation for the benefit of humanity'³ (emphases added).

The International Statistical Institute (ISI), which is far older than ICSU, is equally committed to international scientific cooperation, including in the conduct of international research projects such as the World Fertility Survey (WFS). This Survey, conducted by the ISI in the 1970s and 1980s, was a 'collaborative . . . effort involv(ing) sixty-two . . . countries and several hundred scholars and experts from all over the world, . . . designed to provide vitally important scientific information on one of the most crucial issues of our times - human fertility'. The WFS was not, however, a 'scientific' survey in the narrow sense of that word. It is ironic that the commitment of ICSU to the universality of science extends to the study of every species except 'humanity': the species to whose benefit the Council is committed.

The concern of the ISI with 'science' in the broader sense was explained in the following terms by the Institute's President, Sir David Cox, FRS, in his opening address at the ISI session at Istanbul in August 1998:

... an ISI session has a quite exceptional breadth. Our subject spans so many different activities of science, technology, public affairs, business and everyday life. Thus our programme ranges from pure probability theory, ... applications in astrophysics and astronomy and physics ... through to the major issues of government and business statistics and public policy that stem from those that so interested our founders nearly 150 years ago. ... Science, in the broad sense of patient enquiry into the nature of the world we live in, unites us across differences of politics, religion and ethnicity (emphasis added).⁵

When UNESCO was conceived during World War II, at a conference of allied education ministers in London, it was not intended that science would be part of its mission. The 'S' was added to the organisation's title and its charter as a result of the diligent efforts of a scientific mission to the conference, but it was not envisaged that UNESCO's mandate in the 'scientific' area would be restricted to, or favour, the natural sciences. 6 As the organisation's first

Director General, Mr (later Sir) Julian Huxley, FRS, said in his book *UNESCO: Its Purpose and Philosophy* (1947):

Science in UNESCO's programme . . . must be taken to include all aspects of the pursuit and application of organised knowledge of phenomena. . . [It is] my firm belief that the application of the scientific method in appropriate forms to human affairs will yield results every whit as important and almost as revolutionary as those achieved by the natural sciences in the rest of the universe. . . [But in the social sciences] scientific method is no longer sufficient, since values are involved as well as . . . facts, and special methods must accordingly be devised for taking values into account. In addition, . . . controlled experiment is rarely, if ever, possible; and . . . the number of variables involved in a problem is almost always very large. . . [T]he social scientist is always confronted with multiple causation, and must work out methods of coping with this fact (emphasis added).

The planners of the forthcoming World Science Conference could have decided that the Conference would address the past, present and future of 'science' according to a comprehensive formulation of that concept, such as that of Sir Julian Huxley in 1947 or Sir David Cox in 1998. Debate on such an agenda, involving social scientists as well as natural scientists, might have helped to break down the barriers of communication which currently inhibit understanding between the two groups. Unfortunately, the promulgation of the proposed *Declaration on Science* will have the opposite effect: it will encourage the view, to which many natural scientists subscribe, that 'science and technology' can, of themselves, provide solutions to the world's socio-economic and environmental problems.

In fact, this appears to be the attitude of the present Director General of UNESCO, Mr Federico Mayor, whose introduction to the organisation's *Draft Programme and Budget 1998-99* included several examples of how 'science and technology' could solve problems 'at the interface of science and society':

... solutions do exist: for instance, the creation of continent-wide water supply systems and reservoirs, and the development of clean and rapid public transport systems like the electric monorail. Science and technology have solutions to offer which could easily be implemented: all we need - at the national and

international level alike - are different choices of investment and real political will.8

It is a fallacy to suppose that 'choices of investment' can be made solely on scientific and technological criteria. The appraisal of investments in specific construction projects (e.g., reservoirs in particular locations or electric monorail systems in specified cities) requires the careful analysis of costs and benefits, including social and environmental costs and benefits. Scientists and engineers may provide essential expertise and information in support of such assessments, but experience in many countries has demonstrated the potentially disastrous consequences of allocating resources in accordance with purely scientific and technical criteria.

Scientists - that is, persons who have expertise in one or more branches of the natural sciences - do not necessarily have a better understanding of the world than other scholars. It could be argued, in fact, that those who have expertise in one of more branches of the social sciences may be **better** equipped to address 'problems at the interface of science and society' than their natural science colleagues. Some evidence in favour of this proposition emerges from the discussion of the work of individual scholars in succeeding sections of this Note.

The need is for a holistic approach which recognises that many of the larger issues require contributions from many fields of knowledge. A *Declaration on Science* can only serve to perpetuate the illogical and anachronistic division between organised knowledge in the social and the natural spheres.

Understanding the World: JD Bernal, FRS (1901-71)

If science 'is a powerful means of understanding the world in which we live', the British physicist JD Bernal must have understood the world very well. He was described by CP Snow in 1964 as 'the most learned scientist of his time, perhaps the last of whom it will be said, with meaning, that he knew science'. John Kendrew, in the *Dictionary of National Biography*, wrote that Bernal 'had an extraordinarily wide knowledge of many branches of science', and that 'if anyone in this century deserved the name polymath, it was he'. 10

How well did Bernal understand the world? In his contribution to a collection of essays published in 1935 under the title *The Frustration of Science*, he argued that 'the human environment [should be] an organized productive and distributive organization', so that 'the necessities of life such

as food and clothing become ordinary services and cease to have value in the economic sense'. He believed that an 'organised world' would open up limitless possibilities:

There can be no doubt that it lies within the immediate capacity of physical science to solve completely the material problems of human existence. In an organised world it should be possible for every present need of man to be satisfied with something between one and three hours' work a day, and beyond that lie possibilities for extending the capacity of enjoyment and activity indefinitely.

Other elements of Professor Bernal's organised productive organisation included 'the universal and economic use of air conditioning', which in turn would require 'the substitution of the isolated small house by the town as a unit'. He envisaged that 'the city could come under one roof, . . . which could be transparent glass without visible support'. He thought that, 'with large enough rooms, hundreds of feet high and square miles in extent, the normal noise of human beings would be heard not more than in the open country'.

Following his election as a Fellow of the Royal Society in 1937, Bernal elaborated this economic agenda in *The Social* Function of Science, which was published in 1939. In this influential book, he claimed that 'An enormously increased extension of the [world's] cultivated area could be attained by fairly simple physical means through effective irrigation of desert lands and ultimately by the covering over of deserts and turning them into vast greenhouses'. Later, the world could multiply its primary food sources 'by deliberately growing plankton in the sea and harvesting it'. Then, as population increased, 'food products could be synthesised by bacteria or even by the enzymes of bacteria'. And, finally, 'if we used our reserves of coal, or even limestone, as basic food materials we should have enough for a population thousands or millions of times that which exists at present on our globe.'

Professor Bernal was concerned that the population of many countries would soon begin to decline. Again, however, he saw an easy solution:

It is fairly obvious from the development of nineteenth century England and modern Russia that it is only necessary to make the having of children desirable, and to provide for them a secure and hopeful future, to attain any degree of population growth required. It is ludicrous, however, that this process should be left to pure chance. The inducement to parenthood should be adjusted exactly to the optimal requirements of population growth. . . . There is in this world food enough and room enough for centuries of increase at the maximum biological rate . . . Of course, under the present economic system these possibilities cannot be used . . . ¹²

During the succeeding 25 years Bernal saw no reason to amend his views. In a contribution to a collection of essays published in 1964 to mark the 25th anniversary of the publication of his *magnum opus*, he wrote that: 'In *The Social Function* the scientific and technical revolution of our time was only forecast: now it is recognised by everyone'. Indeed, there was now 'the promise of still greater performance'. He gave several reasons for this, including

. . . the availability of energy in unlimited quantities, not only beginning with atomic fission but also with the realization that the sources of conventional fuels, particularly oil, in the world were many orders of ten times greater than they had been imagined to be. . . . It was evident that the world's progress would not fail for lack of energy; in other words, that energy would be there for the taking, and with it all the materials and processes that could be formed from the universal exchangeable character of energy. . . . This can be used . . . as the motive power for industry, but it can also be put to extracting metals from their ore, ... synthesising artificial materials such as fibres and plastics and . . . providing the basic requirements of agriculture in the form of fertilizers and water, in particular desalted sea water. Thus, indirectly, energy can be transformed into food, and this process will soon cease to be indirect and become a direct chemical synthesis.

Thanks to recent scientific progress, Bernal now believed that 'If we can survive the dangers of the immediate present we have every chance of realizing a world so different from anything we have had before that the transition is greater than any which has occurred since the first appearance of humanity'. The increase of 2 per cent per annum in the population of the developing world was not a problem, because 'the rate of increase of scientific potential . . . comes

to more like 20 per cent per annum'. Bernal did not see it as necessary to define 'scientific potential', or to offer any evidence in support of his estimate of its rate of increase, or to consider the implications of his projection for human welfare. He may not have been aware, or may not have thought it relevant, that the implication of his assertion was that 'scientific potential' would be multiplied, in per capita terms, by more than **15 million times** in the course of a century. And he was certain that growth was still accelerating:

What has happened is the realization not only by scientists, who have known it for many years, but also by peoples and governments, that here is a method [the scientific method] which in itself can be **counted on** to generate more and more of these great achievements and transformations. This is the deeper meaning of the research revolution. That revolution has begun, and it is going on faster and faster (emphasis in original).¹³

This view was supported by the editors of the collection, Maurice Goldsmith and Alan Mackay, who argued in their editorial introduction that 'The exponential acceleration [of science] means that each generation's life and problems differ more and more from those of its forebears'. Accordingly, in each generation, 'the answers to one's problems have to be worked out afresh by scientific methods'. Bernal had 'helped us . . . to recognise that human activities are capable of rational and quantitative analysis'. Now that science had discovered this possibility, the humanities and soft sciences were in retreat:

Today, 'hard science' is pushing on in all directions into what were the preserves of the humanities, forcing those earlier in possession either to adopt new and more rigorous scientific standards, or to retreat into their ivory towers. Linguistics, psychology, economics, history, archaeology and anthropology are examples of fields infiltrated by science. One may expect that many more fields will be changed by science. . . . The day is approaching when philosophers will no longer dare to lecture on 'time' while knowing nothing of relativity and quantum mechanics.

Unfortunately, the progress of the world was still being held back by political, social and psychological factors - in fact, by people:

A proposition of *The Social Function*, which was not seriously questioned after the lessons of the war, was that the material problems of the world could be solved by science and that the factors hindering development are political, social and psychological, and not technical in the material sense. It used to be said that politics was the art of attempting only what was possible; now, since almost anything is physically possible, politics is increasingly the art of finding reasons why it is not done.¹⁴

Other contributors competed with one another in praising Bernal for his discovery of the key to the understanding of the universe. CP Snow said that he 'did not doubt that [Bernal] was more imaginative than the rest of us, and more likely to be right':

I did not doubt it in the thirties, and I have not doubted it since. **That** was what he communicated to everyone round him: the realisation, backed up, illustrated, and proved by all the resources of that nonpareil intelligence, that we had the power, through the application of science, to take the animal miseries away from most of our fellow-men. That was the text of his great book, which we are now commemorating ... We accepted most of what we heard [from Bernal], and later read [in *The Social Function of Science*]. For myself - and this is true of other contributors to this volume - I accept it still (emphasis in original). ¹⁵

The last sentence of this extract was presumably confirmed with the other contributors to the collection, among whom were nine Fellows of the Royal Society. The book was highly successful. Published as *The Science of Science*, it was translated into many languages and issued as a Penguin paperback.

Understanding the World: Colin Clark, FASSA (1905-89)

At the time of the appearance of *The Social Function of Science* with its message that physical science offered an immediate and complete solution to the material problems of human existence, an Australian economist, Colin Clark, was completing a research project that reached the opposite conclusion. In *The Conditions of Economic Progress*, published in 1940 and dedicated to 'W Forgan Smith . . . Premier of Queensland, a far-seeing patron of economic

science', Clark insisted that 'the age of plenty will still be a long while in coming' because the world

is found to be a wretchedly poor place. . . . Oft-repeated phrases about poverty in the midst of plenty, and the problems of production having already been solved if only we understood the problems of distribution, turn out to be the most untruthful of modern clichés. ¹⁶

This conclusion, unlike Bernal's contrary view, was based on rigorous scientific investigation. For example, comparison of the level of agricultural productivity in about 20 countries required the assembly of masses of statistical data on the size of each country's agricultural labour force, the quantity of output of all major commodities and of the material inputs (including, for example, of six types of fertiliser) which were absorbed in the processes of production. The information was drawn together to produce measures of net output per farm worker, using sophisticated techniques of aggregation which Clark was obliged to develop himself. His conclusion that output per worker varied enormously between countries - it was, for example, 50 times greater in New Zealand than in China - prompted Clark to comment that 'Were it not that the detailed figures can be examined and checked, many would refuse to believe that agricultural productivity can show such an astonishing range of variation. ...'17 In an office in Brisbane, Colin Clark had discovered 'the gap'. Few research projects in laboratories had yielded such a notable contribution towards 'understanding the world in which we live'.

As well as representing a major advance in knowledge, *The Conditions of Economic Progress* had a profound influence in changing attitudes and behaviour. Heinz Arndt has pointed out that the book, 'by supplying the first substantial statistical evidence of the gulf in living standards between rich and poor countries, helped awaken Western opinion to the problems of underdevelopment'; and that 'Well into the postwar years, until United Nations data became available, almost every writer on development economics quoted [Clark's] estimates'. In a tribute published in *The Economic Record* in 1990, JON Perkins and Alan Powell said that 'The care and energy which he devoted to this stone-by-stone knowledge-building endeavour is ultimately what made Clark a great, rather than just a good, economist'; and that 'His success is witnessed by the way in which all practical economic analysis is conducted today.' And in the Kuznets Lecture 'Pioneers of

Empirical Macromeasurement 1665-1995', delivered at Yale in November 1998, Angus Maddison, one of the world's leading empirical macromeasurers, said that

At the time that [*The Conditions of Economic Progress*] appeared it was quite sensational in its breadth of perspective, and it demonstrated clearly the usefulness of a quantitative approach in clarifying the dimensions of economic performance and potential and the wide divergence between countries.²⁰

Unfortunately, many natural scientists did not (and do not) understand the concepts of economic performance and potential, and therefore failed to appreciate the significance of Clark's achievement in 'clarifying [their] dimensions'. This was evident in many of *The Science of Science* essays. For example, Bernal concluded in his 1964 essay that 'to a very large extent [*The Social Function of Science*] has fulfilled its original object: to make people aware of the new function that science was acquiring then and would increasingly acquire in the future, in determining the conditions of human life'.²¹

But Clark's finding of the wide divergence in economic performance between countries showed that science was not just then acquiring a new function. If country X had achieved ten times the productivity of country Y by 1940, science must have been 'determining the conditions of human life' in country X for a long time; and if country Y subsequently achieved a rapid growth in productivity, this outcome would not have been 'determined by science' but by the satisfaction of the entire complex of conditions for economic progress. Clark had played a seminal role in articulating this central insight of development economics.

On 17 August 1949, Colin Clark presented the key paper at the first plenary session of the first great scientific conference under United Nations auspices: the United Nations Scientific Conference on the Conservation and Utilisation of Resources (UNSCCUR). The purpose of this Conference was to allow scientists to 'hear each other's views on the great overall problem - the problem of man's fight against depletion and poverty and his struggle to find new ways of improving the use and conservation of the wealth of the earth'. Scientists from about 50 countries discussed more than 600 papers during the three weeks of the Conference in New York. The meeting disbanded without passing any resolutions, recommendations, decrees or declarations: as the chairman of the preparatory committee had made clear before the

meeting, 'The experts will come to teach and learn and not to vote'. 23

In introducing Dr Clark, the secretary to the Indian Department of Scientific Research referred to Clark's fame as the author of *The Conditions of Economic Progress* and *Economics of 1960*, and suggested that 'the secret of his success as an economist lies in the fact that he had his training as a chemist at the great University of Oxford'. ²⁴

Clark's paper 'World resources and world population' was a remarkable tour de force. Dividing the world into 35 countries or regions, he estimated the current population of each country or region, and projected the estimates forward to 1960 and 1970 using forecasts of age-specific fertility and mortality rates. For each country or region, he then developed estimates and/or forecasts of the working age population, the labour force in agriculture, the level of real income or product per man-hour in total and in agriculture, the area of 'standard farm land' and the production and consumption of farm products. In preparing these latter estimates, which were expressed in the 'international units' which he devised to facilitate comparisons of economic quantities, Clark drew upon his encyclopaedic knowledge of agricultural science and of the results of empirical studies of the quantity of food consumption and nutrients and of the expenditures on foodstuffs by different socio-economic groups in different countries.²⁵

Although it was inevitable that many of the forecasts and even the estimates would be shown to have been very much astray, Clark's internally consistent estimates demonstrated the power of his conception. Colin Clark, rather than JD Bernal, deserves the credit for producing the first 'rational and quantitative analysis' of the future of human activity at the global level.

The abstract of Clark's paper began with the statement that 'While man has proved himself capable of the most appalling misuse of natural resources in certain circumstances, he has also shown himself capable of scientific improvement of agricultural technique capable of raising product per manyear at the rate of 1.5 per cent per annum.' And the paper itself began with a quotation from the recently-published best-seller *Road to Survival*, by the ornithologist William Vogt:

The curves of population and the means of survival have long since crossed. Ever more rapidly they are

drawing apart. . . . All possible conservation measures are futile unless human breeding is checked. It is obvious that fifty years hence the world cannot support three billion people at any but coolie standards for most of them.

It is now 'fifty years hence', and the world is supporting six billion people, at far above the 'coolie standards' of the 1940s for most of them. Clark's view that Vogt was wrong was not a lucky guess, but a measured scientific assessment:

The conservation of soil, forests, stream flows and natural biological equilibria is certainly one of the most important and urgent tasks which faces us today. In this respect Mr Vogt is undoubtedly right. But the available evidence controverts his contention that the world will never be able to feed 3000 million (or even a larger) population. He has neglected or played down the possibilities of improvements in the technique of agriculture.²⁶

Understanding the World: Sir David Rivett FRS (1885-1961)

Clark's paper at UNSCCUR received little coverage in the Australian media, by comparison with that of a paper presented by Sir David Rivett, FRS to a contemporaneous meeting of the British Association of the Advancement of Science at Newcastle-on-Tyne.

Sir David, former chief executive of Australia's CSIR, said that 'Australia's contribution towards feeding the world was disappointing'. The thrust of his argument was summarised in the *Sydney Morning Herald*, from which the following extract is drawn:

Sir David said Australia's cause for anxiety was not doubt of capacity to grow more food, but doubt in the ability to do it in the time available 'before disaster overtook the world.' 'It is to scientific men, working with all the aid available, that we must look for the needed help. They must be given the utmost freedom to determine and follow their own tracks.' He said that Australia would fail to pull its full potential weight in the next crucial 20 years unless there was more team spirit than was being displayed at present.²⁷

Rivett's view that disaster would overtake the world within 20 years was directly contrary to the detailed scientific

assessment which his compatriot had presented to UNSCCUR only a fortnight earlier; and his assumption that Australia's failure to 'pull its full potential weight' would have a significant influence on the global food balance did not sit easily with Clark's estimate that this country produced only about 2 per cent of world food supplies. But Sir David's opinion made headlines in Australia, while Clark's documented assessment was ignored. The reason for the difference is clear. Colin Clark was only an economist, while Sir David Rivett was a distinguished scientist: in fact, a Fellow of the Royal Society.

Some two years later, Sir David Rivett and Professor (later Sir Marcus) Oliphant met with Prime Minister Menzies to discuss the possible establishment of an Australian Academy of Science (AAS). In their biography of Oliphant, Stewart Cockburn and David Ellyard told the story of the meeting:

[Menzies] concurred with the idea that it would be unwise to include the social sciences in the new body. He agreed that the Royal Society, which had adopted a similar policy, should be the model. So there were to be no economists, sociologists or demographers in the proposed Academy - a turn of events which did not please Copland, among others. The aroma of elitism hung with a heavy fragrance in the Prime Minister's office and competed with the smoke of the statesman's cigar as talk proceeded.²⁸

Noting that 'Menzies not only guaranteed [the Academy's] future but was also influential in obtaining a royal charter for the new Academy', James Davenport pointed out that the Prime Minister's support for the exclusion of social scientists would have reflected his view that 'the social sciences [were] a hot bed of trendy, if not downright socialist, ideas'.²⁹

It was (and is) the popular opinion in Australia, as in most countries, that a person who has achieved excellence in a branch of the natural sciences is thereby, *ipso facto*, a person who has a superior 'understanding of the world in which we live'. Governments in most countries are of the same view, and establish 'science policy' arrangements in order to ensure that the natural sciences get preferential treatment *vis-àvis* the social sciences. Now governments will be asked to support, and undoubtedly will support, a *Declaration on Science*. And they will agree that they should 'aim at improving the public understanding of science, and the recognition it should be given as part of a wider culture'.

Social scientists must continue to urge that the only concept of 'science' which deserves recognition as part of a wider culture is the holistic concept which has been articulated by two distinguished Fellows of the Royal Society - Sir Julian Huxley in 1947 ('all aspects of the pursuit and application of organised knowledge of phenomena'); and Sir David Cox in 1998 ('patient enquiry into the nature of the world we live in').

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Internationalising Social Science: a New Architecture

Craig J Reynolds

Over the past three years or so the American Social Science Research Council (SSRC) has reorganised its international program in response to changes taking place in the way social science research is conceived, funded and pursued. The international research and training activities of the SSRC, which have included the study of languages and literatures, are planned and implemented jointly with the American Council of Learned Societies (ACLS).

Since its establishment in the USA in 1923, the SSRC has been dedicated to improving the methods for understanding human relations and developing skills for contending with social forces. The use of social data for the cure of social ills, such as through the formulation of public policy, remains part of the Council's mission. The international program is possibly the most ecumenical of the Council's programs in terms of interaction with scholars internationally, even more so now that the programs have been restructured.

Although the name of the Council suggests a vast funding agency located in a swank New York City office with millions of dollars to spend, in fact the Council survives on a modest budget that meets the needs of a small secretariat and the scholarly activities it serves. It is not a foundation as such but a broker, matching projects with organisations willing to fund them, such as the Ford, Mellon, and Rockefeller Foundations.

'Projects' have included fieldwork for doctoral dissertations as well as academic conferences that lead to publications. A dissertation fellowship from the Social Science Research Council is one of the most generous and prestigious awarded in the American system, and although American scholars have constituted the majority of recipients, many foreign nationals studying for postgraduate degrees in American universities have also received a fellowship. Under the old structure applications for fieldwork and proposals for conferences were conceived and submitted through seven 'area' committees. These committees had some international representation (estimated in mid-1996 at 30 per cent), but

most of the members were USA-based scholars, most of whom were American nationals.

Pressure for change and the new architecture

American-style area studies were launched after World War II to help one society (the USA) understand the 'foreign other.' The rationale, indeed, the imperative for this understanding, was the perceived danger from international communism. Thus area studies (American style) was a child of the Cold War, the first area studies committees having been established in the late 1950s. Both the economic dynamism in East Asia since the 1970s and events in Eastern Europe since 1989 weakened the rationale for area studies. As a result, the challenge to the presumed cultural universality of Western ideas and methodologies became more and more formidable.

New information technologies and market forces have forced big changes. The 'areas' and the nation-states that comprise them are now less bounded and more porous. Social conditions in particular place are increasingly а understandable only through their cultural, economical, political, strategic and ecological links with other parts of the region and the world. It is no longer possible, if it ever was, to study 'the local' without seeing these global interconnections. In the emerging political and economic configurations thematic networks are not as developed in comparison to same-region scholarly communities. It should also be emphasised that globalisation produces winners and losers and that the globalising process results in multiple 'globals' as well as multiple 'locals.'

In response to these challenges the SSRC submitted itself and its scholar-members to a period of self-criticism. What emerged by the second half of 1997 was a new architecture. There had been huge resistance to the idea of disbanding or even merging the area committees, with many members anxious that the study of languages and cultures around the world would be neglected. So regional advisory panels (RAPs), whose task is to encourage networking of scholars in various regions of the world, were established in their place, with the responsibility of the region-specific committees for research and training being shifted to other parts of the new structure. For example, the Southeast Asian RAP that I am involved in now has the majority of members from Southeast Asia and has organised a series of workshops on the

changing role of public intellectuals in the wake of the 1997 economic turmoil.

The research planning responsibility under the old committee structure has been transferred to Collaborative Research Networks (CRNs), whose life expectancies will vary according to the tasks they set for themselves. Flexibility is the order of the day, rather than a permanent committee structure that outgrows its usefulness. An example of a research topic in the new structure is the CRN established in 1998 to study 'globalisation from below' – international crime syndicates, transnational black and grey markets, and drug trafficking. A human capital committee will oversee and coordinate fellowship and training programs operated by the SSRC and ACLS. As always, funding opportunities (translation: 'what the foundations like') will help determine the proposals and ideas that succeed as CRNs.

Some aspects of the new structure are still in the development phase, and some tasks have been delegated to temporary working groups that will propose programs and activities and then self-destruct. One such group is the Interregional Working Group on Collaboration; another is the Dissemination Working Group which aims to suggest ways of overcoming the technological, linguistic, and economic obstacles to dissemination of new social science research.

Implications for Australia

Neither the Academy of the Social Sciences in Australia (ASSA) nor the Australia Research Council corresponds very closely to the American SSRC, although there are similarities. In 1971 ASSA took over the functions of the Australian Social Science Research Council, which had been established in 1942. But the institutional settings of these organisations are quite unalike, and the educational cultures of the USA and Australia are very different. The fact that Australian higher education is still largely funded by public monies makes comparisons with American social science difficult.

Nevertheless, looking at social science research through the lens of the SSRC's new international program may be illuminating for Australian social scientists. Aided by such documents as *Open the Social Sciences*, prepared by the Gulbenkian Commission on the Restructuring of the Social Sciences, the thinking behind the American SSRC restructuring relativises research. The social sciences do not derive from theories and methodologies uninflected by local

culture. Nor can local cultures, such as Australia's, be fully studied in isolation from global cultural and technological forces

The implications for Australian social science research as reflected in the two-volume review, which was funded by the Australia Research Council and completed last year, are sobering. Readers of the review might find the international dimension of social science research conspicuously missing. Do the social sciences in Australia recognise the historical contingency of their own formation. especially in light of the global changes over the past decade or so? Do the social sciences in their corporate form, such as ASSA, take advantage of the cross-cultural collaboration that the new conditions require of them? Is the global-local dichotomy grasped as a serious problematic that could be productive for research?

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Re-Framing Higher Education: Mind the Market

Millicent Poole

Together we teachers represent some thousands of years of experience at every level and in every sector in education. While we may work in different sectors of education, our similarities are much greater than our differences. First, we share a long term and consuming interest in, and commitment to, education. Secondly, we work in a sector which is subject to more intense scrutiny, public criticism and conflicting demands than any other in Australian society. Thirdly, there is the 'tie that binds' - schools and universities have a mutual investment in each other's well being and effectiveness. For the university, schools are the market from which we draw students. For the schools, the university is the destination sought by a substantial number of students.

Allow me to briefly sketch the current state of higher education, identify the major forces impacting upon it, and describe the sorts of responses I believe that higher education needs to adopt in order to survive and prosper into the next century. Underpinning my address is a single central theme - the need for universities to forge alliances and partnerships with schools, industry, the vocational training sector and other educational providers not only for their own competitive sustainability, (nationally and internationally), but also for enhancing the employability of their graduates. The time when universities could regard themselves as somehow aloof from other sectors in society has gone. The future will see universities actively pursuing interdependent and mutually supportive relationships with both educational and non-educational organisations.

Evolution and Change

Higher education is increasingly market driven. 'The world-wide demand for accessible and affordable higher education continues to grow. Changes in technology, continued population growth, a desire to improve the quality of life in developing countries, the human resource needs of a complex global marketplace, and an almost universal belief in the importance of lifelong learning are some of the more prominent dynamics and elements driving worldwide demand.

One estimate projects a potential pool of approximately a hundred million students seeking access to education and training by the year 2000'1.

This market-orientation is not a phenomenon of the economic rationalism of the late twentieth century. History informs us that the first students of Bologna University hired their own teachers to instruct them in fields which would ensure their employability in the professions — as ecclesiastics and civil servants. This medieval version of the contemporary user pays philosophy, euphemistically referred to as a student centred approach to funding, was a market driven approach.

From their beginnings universities have been market-driven. The university was a medieval creation of the 10th and 11th centuries². It evolved as a response to the professional, ecclesiastical and government requirements of society. Initially the medieval university provided the professional training for priests, but later expanded to include law, medicine and theology. The study of the humanities developed very slowly and the universities maintained for many centuries their medieval role of serving the practical requirements of their society. The pursuit of knowledge for its own sake did not become a major force in European scholarship until well into the 17th and 18th centuries. Until this time all scholarly activity tended to be devoted to religion, vocational and other perceived needs of society.

The scientific revolution began a fundamental transformation of society and its institutions in the 19th and 20th centuries. The Prussian reformer Wilhelm von Humboldt envisioned a university in which the unity of teaching and research, along with the freedom of teaching and learning would produce a scholarly and scientific elite equal to the challenges of the modern world.

The Idea of an Australian University

Australian universities are modern universities, the first of them established in 1851. They drew from both the British version of the liberal arts as conceived of by Cardinal Newman³ and the model of the modern research university which evolved out of von Humboldt's reforms of German higher education. Coaldrake and Stedman (1998) argue that the most influential models adopted for Australian universities were those of the secular and scientific institutions that arose from nineteenth century utilitarian reforms. They go on to insist that since their inception Australian universities have

been viewed as primarily professional training institutions⁴. This view is challenged by Reid (1996) who argues that the Australian university more closely followed the American land grant model than the Oxford and Cambridge models⁵. Evidence to support Reid's argument may be found in the commitment to community service which is prominent in the mission of nearly every Australian university. However, for the purposes of my argument, the distinction between the two views is largely irrelevant, because both imply that, inherent in the idea of the Australian university, is the notion that it should serve the public, either through the training of professionals or some form of outreach to its host community.

My purpose in offering this brief history of the evolution of the university is to argue that individuals, the State and its institutions have always been focussed on graduate employability and serving the needs of society through training professionals. However the policy framework through which these aims are realised has changed dramatically in the last couple of decades.

Expectations of Government and Public: Shifting Policy Frameworks

There have been major policy shifts in recent decades. Some will remember the 1960s and 1970s when the sector was growing – when universities, colleges of advanced education and institutes of technology were associated with a discourse of opportunity, abundant resources, state planning, social intervention, and equality of provision. In the 1980s and 1990s the discourse shifted to 'efficiency and effectiveness' and to greater accountability. In more recent times, there is a new philosophy underpinning the public sector generally, *viz* financial stringency as a discipline to be applied to the sector; a user-pays philosophy (based on the premise that education is both a private and public benefit); diversification of the funding base to shift the cost from the public to the private purse; and deregulation of the sector.

More than ever before in history, the current expectation of government is that universities will play a key role in contributing to the wealth of the nation. Indeed, many of the Dawkins' reforms of higher education were built on that premise. Yet increasingly there has been an inability or perhaps a refusal by governments to accept that university education brings other public benefits which are impossible to quantify in the manner so loved by economic rationalists. I want to suggest that universities serve a broad cultural and

social function. They are a site in which conflicting ideas and values can be articulated and explored without threat to social cohesion. This function is fundamental to democracy and yet it is in danger of being lost in the attempt to make universities serve only the immediate economic needs of the nation. I will return to this point later, but for now I want to stress that I do not believe a concern for the wealth of the nation must necessarily exclude a concern for the health of the nation.

Currently, higher education is viewed by the the community (whether it be the Australian public or the government) with some disfavour. This dissatisfaction exhibits itself in a number of ways. Sectoral reviews are one indicator that the public is not convinced that they are getting a return on their investment. In the last decade the university sector has been subjected to numerous reviews. We have seen the Efficiency and Effectiveness Review in 1986 6, a Green Paper in 1987 a White Paper in 19888, Research Infrastructure in 19939 Research in 1994 and 1995, by two separate bodies¹⁰, University Management in 1995¹¹, Quality of Teaching, Research and Community Service (1993, 1994, and 1995)¹ and the West Review of Higher Education Financing and Policy in 1997-98¹³. Government intrusion, public suspicion and employer scepticism are not limited to Australia. The US State legislatures have been expressing dissatisfaction and suspicion towards higher education: UK and European moods have been no different.

Another indicator of public dissatisfaction is the resounding silence with which the public has greeted the cuts to government expenditure on higher education. Where once the Government provided about 90 per cent of university funding in 1983, it now provides about 57 per cent¹⁴. At the 1994 election the employer body, the academic staff unions and the student unions were in accord, probably for the first time in history, in demanding that one or other major political party commit itself to improving funding for higher education. Neither party took any notice.

Public dissatisfaction coupled with funding cuts has prompted some analysts to describe the current state of higher education as being at crisis point¹⁵. The factors creating the crisis for universities will be well known to you; most of them are impacting equally upon the schools sector. They are:

 Increased competition for the public dollar from other public sector areas such as health, transport, law enforcement and welfare.

- Increased costs. Universities like schools are labour intensive industries and sustained economic development has pushed up salary costs.
- Increased competition between Australian universities, and between universities and other educational providers for local students. There is growing fear too of the potential competition from overseas universities delivering degrees to Australian students via distance delivery.
- The loss of overseas markets. In response to government insistence that universities wean themselves off public funding, Australian universities have successfully entered the fee paying international student market. The current economic crises in Asia have adversely affected this market, and it is probable that the worst is yet to come.
- Rapid and far reaching changes in market expectations.
 The rapid growth of knowledge based industries, the
 demand for retraining, coupled with flexible delivery
 options, and high student expectations, are making
 unprecedented demands on universities' resources and
 the capabilities of their staff.

If the current state of education is in crisis, what might the future look like? Predicting the future is always a risky business but Hans van Ginkel (1995) attempted it in a challenging account called 'University 2050: The Organization of Creativity and Innovation'. To van Ginkel, what matters is 'the form and framework in which we allow creativity and innovative power to reach their full potential' He acknowledges that what a university will look like in 2050 'will depend to a large extent on how society looks then, both at an economic level and in socio-political terms' 17.

He presents four scenarios for the next twenty-five years:

- balanced growth (an optimistic scenario of sustainable development of 3 per cent)
- global crisis where everything goes wrong (financial, economic, geo-political)
- global shift (eg to Asia Pacific rim)
- European renaissance, reflecting regional resurgence.

Regardless of the scenario which evolves, van Ginkel argues that science and scholarship will survive and globalisation will bring greater unity to higher education. His argument is that:

Universities will become increasingly interlinked and bound to one another . . . The network one belongs to will become increasingly important. It will contribute directly to the awareness of a university and its international position. It is possible that international networks may form the bases of the university of the future'. ¹⁸

Indeed, he predicts that 'The university will become an international business' 19.

I have quoted from his work at some length because it resonates with my own views about the need for universities to forge links, strategic alliances with other universities, with businesses, professions, and commercial organisations. Through such alliances universities will reassert their role as an integral element of society, enmeshed in an array of linkages with other strong institutions. The model of the aloof ivory tower or isolated monastery devoted to contemplative scholarship is not appropriate in the digital age where networking is both a strength and a necessity. The Business/Higher Education Round Table Policy statement also argues for greater interaction across the sectors. 'To gain the greatest possible economic and cultural advantage for the nation, we need stronger interaction and co-operation between universities and business and industry and, as appropriate, national and state government organisations. This applies to graduate preparation, research and staff interaction'20.

An alternative response

What are the responses universities should be making to the challenges they face? I mentioned earlier that educational policy analysts refer to a crisis in higher education. Some years ago, one of my international students explained to me that the Chinese ideogram for crisis combines the signs for 'danger' and 'opportunity'. In universities we have considered the dangers from every angle, but I do not think that we have yet explored all the opportunities.

A primary task in the coming years will be one common to schools and universities. Both must face the challenge of teaching students how to learn. In fact, I predict that 'learning how to learn' will become the major formal function of education regardless of level in the knowledge society²¹. It is a concept that has been revitalised in the service of life long education, which in turn is increasingly being viewed as the

pre-condition for individual and societal survival in an economy characterised by rapid technological change, continual market restructuring, knowledge obsolescence. and multiple careers. The European Commission's White Papers, the OECD report on Lifelong Learning for All, and the West Report, Learning for Life²², show the importance and high expectations placed on the concept worldwide.

Indeed, graduates of the future will need to be self-starters, self-confident risk-takers, and leaders who can exhibit foresight and vision. They will need to be creators and innovators²³, capable of change over the life course²⁴.

All of us will need to become knowledge navigators. In the next century, the 'knowledge-intensive economy'²⁵ or 'digital economy'²⁶ will replace the labour intensive and capital-intensive economy of the twentieth century. This revolution is already well advanced and the pace will increase and present major opportunities for universities in 'managing knowledge' and in becoming knowledge-navigation institutions or knowledge-brokers: 'The knowledge intensity at world economic level is enormous. Universities might be compared to the various stock exchanges, where traders deal with the whole world'²⁷.

This scenario provides multiple opportunities for universities to re-think what they teach, the way they teach, and the way they assess. It gives us the opportunity to build and re-shape the best of what we offered in the past, while creating new curricula and new modes of delivery, and flexible integration of work and study, ie we are re-framing to allow creativity and innovative power to reach their full potential in the digital age and the knowledge-intensive economy.

A likely consequence will be the development of more high quality professional schools, which will need to engage with the real world problems of the organisations for which they seek to train graduates, and therefore must seek to involve in partnerships external organisations and practitioners in their curriculum design and delivery. For the university, the professional schools will be their most important link to the market, a public demonstration of their willingness and ability to respond to what the market needs. Higher education will be seen as a driver of economic competitiveness, initially in terms of national development and capability building, and then in terms of sustainable competitive advantage.

The 'crisis for universities' to which I referred earlier has had at least one positive and, I think, exciting outcome. Universities are rapidly and fundamentally changing their relationships with schools and the vocational education sector.

The public demand that universities 'mind their markets' is forcing universities to reconceptualise schools and the VET sector as partners in the educational enterprise. One of my priorities in my first year as Vice-Chancellor of Edith Cowan University has been to forge a new and radically different relationship with the local TAFE colleges and schools. We are trialing alternative entry mechanisms which privilege school based selection of students for university entry. Underpinning this approach is our belief that teachers are better judges of both a student's performance and potential than a public examinations system or interviews by university staff.

We are pulling down the invisible boundaries between our colocated institutions which divided secondary, further and higher education, to build an educational precinct in which facilities and expertise can be shared, seamless course pathways developed and overheads for marketing, maintenance and security lowered. These directions are clearly consistent with those contained in the recent Report by the House of Representatives Standing Committee on Employment, Education and Training²⁸. The strategic partnerships from co-location can offer market advantage of distinctiveness and spin-off synergies.

The most powerful strategic alliances, however, will be global. They will involve collaborative agreements designed to transfer skills, but within a framework of multiplying and protecting intellectual property. Speed will become important in knowledge transfer across markets: 'To remain competitive companies will have to absorb this new knowledge and reconfigure their businesses accordingly'²⁹. Globalisation will mean, for university as well as business, a capacity for: multiple technologies (hard and soft); collective learning (multilevel, multifunctional); sharing (across businesses and geographical boundaries); team formation from multiple cultures (to contextualise products); collaboration and knowledge transfer (across multiple business units and geographical locations); and networking³⁰.

One of the most innovative approaches to higher education re-framing is the Western Governors University. Its goals are access, cost reduction, technology based learning, and the award of competency based degrees: 'WGU do not employ faculty in the traditional way. WGU faculty do not develop content, nor do they teach courses. We contract with third-party providers to develop course content. We also broker courses and programs from existing institutions and providers. We establish a network'31. Other new forms of alliances are between consortia of universities, various multinational companies representing the convergence of computing, communications, consumer electronics and entertainment, together with state and federal government agencies. The goal is market share and distinctiveness and high quality products³².

Like it or not, Australian universities are entering an environment in which markets for educational services are increasingly contestable. Harman (1998), however, sees competition and competition policy as an opportunity for universities, despite increased competition from new providers, foreign suppliers using internet-based distance delivery, and foreign entrants taking advantage of partnerships with local suppliers³³. She argues that competition can be used as a constructive force that can benefit society as a whole, even protecting vulnerable areas in higher education if this can be demonstrated to be in the public interest.

The challenge for universities is to move into innovative and creative partnerships with other providers to maintain their competitiveness.

Research

A prime function of a university is research, and here too partnerships and alliances between university, industry and the professions will become increasingly important. The future of publicly funded research has already been signalled. It is marked by the establishment of national priorities. increased concentration and selectivity in the allocation of funds, an emphasis on the commercial returns of research, and rewards for collaborative research³⁴. It is the last aspect, co-operative research, which brings as yet largely untapped opportunities for universities. I predict that there will be a growth both in the scale and importance of collaborative research both across international borders and across the different sectors of our economy. While international coauthorship and citation have been a feature of university research for generations, industry-university partnerships are a relatively recent addition to the research role of universities.

An OECD study³⁵ has found that industry-university cooperation is on an upward trajectory in major university systems worldwide.

Cross-sectoral collaborative research has the potential to bring major benefits to universities. First, apart from cost benefits, it aligns the research effort of universities with the needs of the market. Furthermore it keeps universities in the market. There is a very real possibility that with the growth of the knowledge economy, the knowledge businesses will move into the niche markets which could be or have been occupied by universities. There is evidence that such a shift is imminent in Britain. On 11 March 1997 *The Financial Times* ran a story on British Aerospace's announcement of its intention to establish its own university.

The value of intersectoral cooperation in research and development becomes even clearer when we look at the growing dominance of complex technologies in the global markets. In 1970, 60 per cent of the world's top exports were essentially simple products that could be manufactured through simple processes. Today that same percentage of the world's top exports is complex products that require complex manufacturing systems³⁶. University research is critical to the nation's ability to innovate in this area:

'The innovation of complex technologies is distinguished by synthesis, the ability to integrate diverse knowledge located in many different organisations to produce previously non-existent capacities. Diversity is integral to complexity. The innovation of complex technologies is normally accomplished by accessing or creating new knowledge, and/or reconfiguring knowledge³⁷.

In research into the innovation of complex technologies, and the creative transformation of existing knowledge, there are opportunities for the social sciences to reassert their importance and value. It is only through the integration of research in engineering, science and the social sciences that we can answer such questions as: How do organisations come to understand the need for innovation and change? How can new products and processes be most effectively designed to meet customer needs? How does technological change affect organisational change?

I predict that international and particularly cross sectoral cooperation in research will continue to grow at an accelerated pace to the benefit of us all. The challenge for

universities is to recognise and seize the opportunities. Secondly I believe that research across the science and social science disciplines will become better integrated and more co-dependent with science and technology for the betterment of both.

If this does not occur there may well be real dangers for universities. Van Ginkel (1995), for example, predicts that universities may lose their pre-eminence in research. He argues that the diminished importance of research is a much older phenomenon than might appear: 'Scientific discoveries and research have often come to fruition beyond the bounds of the university . . . It was not until the last century that von Humboldt's philosophy led to attempts to bring research within the bounds of the university,38 The key role of universities will be to train scientists and scholars 'to make breakthroughs in research within, but often outside, the universities, ie the external market will absorb and be the key driver for R&D. Indeed, Clark Kerr of the University of California, Berkeley, has posed the question 'Will the University be swallowed up by business and government? Will company training and company laboratories simply take over the role of the university?⁴⁰. Gould (1998) goes further and suggests that universities will need to use cyberspace to redefine their marketplace as virtual learning and research environments are developed to meet the demands of a global society, no longer defined by temporal and geographical bounds.41

Community Service

I want to return now to a point I made earlier about the university's role in maintaining and improving the quality of the society it serves. In recent years the University's role in community service has become mainly one of raising revenue through the provision of short courses. While such activities are necessary it is not the most effective way to demonstrate to the society that universities contribute to the public good. May I suggest that this is one area in which we might usefully return to the lofty ideals of Newman and von Humboldt and argue for the return of the 'public intellectual'. Within the universities we have highly competent, knowledgeable and relevant staff yet they remain relatively silent on some of the most pressing social problems faced by our community at this time. Academics need to re-establish their position as social critics, as people who help to re-frame the creativity and

innovation of the communities which they serve. Some, of course, do so. But the numbers are few.

Eva Cox⁴², for example, has argued that there has been a weakening of the 'social fabric' of Australian societies, the breakdown of a 'civil society' and increased fragmentation, separation and alienation. One great tradition of universities has been to be 'socially critical' and to contribute to cultural and social knowledge, practice, and expertise. There has been a lessening of this in recent times. Indeed Marginson (1998) talks of the 'end of universities' and 'nation-building'. He saw post-war Australian universities as 'a product of economic, cultural and social investment by government'. There was 'consensus on the importance of their scientific and economic contribution and on provision of opportunities to the population'. This consensus has broken down and he talks of a deepening crisis. The lessening of government commitment to nation-building is part of a philosophical commitment to small government and to corporatising and privatising public social, intellectual, physical and other infrastructure assets:

Perversely, the purpose of 'good government' now seems to be to undo the nation-building projects and institutions of the previous period; semi-universal health care, low-cost university education, industrial arbitration, national broadcasting and nationally managed telecommunications.⁴³

He goes on to argue that economic orthodoxy demands this, so that Australia can play an effective role in the global economy. Yet as he shows in his various analyses, other nation states with a commitment to deregulation, marketisation and fiscal restraint, are not dismantling their nation-building institutions (eg French, Japanese, Singaporean, the Malays). Indeed these countries are committing heavily to higher education research and development, for global economic competitiveness.

A recent Glion declaration, drawn up after heads of US and European research universities met earlier this year to discuss challenges facing higher education as it enters the new millennium, reaffirmed: 'universities as "learning communities" and calls on academics to recognise their unique responsibilities towards their communities, regions and global society. It affirms that teaching is a moral vocation, involving development of the whole person, that scholarship is a public trust . . . because it contributes to general human

understanding, and that alliances within universities and between universities and the outside world are crucial for the well-being of society^{,44}.

Conclusion

In Australia, market messages are being transmitted concerning the goals and directions of higher education and its relationship to graduate employability and to national economic competitiveness. Equality and equity (issues of the 1960s and 1970s) have been overtaken by a concern with economic survival and global competition. New terms have entered the discourse, foreign to Humboldt or Newman viz 'knowledge workers', 'knowledge navigators', 'student as customer'. There is little discourse concerning the pursuit of knowledge for its own sake, the transmission of the most valuable cultural knowledge, or the transmission of caring and humane social values. Nor is there much evidence of the 'public intellectual' or the social critic. The national vision has shifted from the construction of a socially just and equitable society to a vision of an economically competitive and restructured society in which imperatives increasingly drive higher education. Such trends are exacerbated by the pace at which the digital economy is transforming all that we do.

One of my concerns is that in the current agendas, the intrinsic value of universities as part of the social fabric or national intellectual and cultural infrastructure is being lost. This is particularly true for the humanities and social sciences which are being marginalised by funding policies. The same is true of the visual and performing arts, which are dependent on state and federal government support. They are being squeezed at a time when, with the convergence of the new technologies, and the education and entertainment industries. they are poised to make both cultural and economic contributions to society, while producing graduates who are 'practising thinkers and thinking practitioners'. Higher education is a social, cultural, and technological enterprise which underpins Australia's future as the recent AVCC media lobbying campaign stated so graphically - 'Poor Funding, Poor Future'. Higher education, indeed education generally, must be defended by all of us. It is a valuable human activity in its own right, whether in association with business and industry, or with science and technology. It is also a valuable social enterprise contributing to both the wealth and the health of the nation.

As educators it is our collective responsibility to develop a vision for the future which extends beyond the mind as market. True, we have an obligation to be responsive to current economic uncertainties and global competition. But, we need to take the longer-term view, and to look beyond present preoccupations of government and business. We need to respond to social change. Indeed we should be leading it as public intellectuals and professionals. All of us as educators should be seeking new opportunities to re-frame creativity and innovation in a networked, global and digital economy. However, we must also struggle to maintain the value of what has gone before in terms of the best values of university education. Collectively, as educators and citizens, we must constantly re-vitalise the social fabric of our society, valuing the civil, the creative, the innovative, and the enlightening. Above all, we must ensure that the nationbuilding role of education, its contribution to the cultural and intellectual infrastructure of society, is never diminished by the market.

My advocacy for all of us in education is fairly well encapsulated in the following quotation: 'Let us not replace one ideology with another, but accept the many-faceted nature of the educational enterprise and the important role it plays in society. It has merit in its own right and it is dangerous to regard it primarily as a vehicle for economic recovery, or social regeneration, or patriotism, or any of the other causes that come to the fore at specific moments in history, and whose proponents seek to capture the educational system. Education is more than any or all of these things, for it is the means by which we transmit and advance our cultural heritage'⁴⁵.

This heritage will change as it has from medieval times, to post-industrial, to digital. But the enduring continuities are the framing of environments to facilitate individual creativity and innovation across the life-span. The contribution of graduates to the professions and to our society then will continue to be within an ethos of community service and responsible professional practice. 'If Australia is to be positioned . . . in the cultural knowledge markets of the twenty-first century, it is vital to conserve and develop our intellectual resources at both the generative and distributive levels'

Let all of us in education collaborate, network and forge strategic alliances and networks to build both the cultural and economic infrastructure of our nation so that we are strongly and competitively positioned to realise the diverse opportunities for creativity and innovation awaiting us in the next millennium.

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Professor Millicent Poole is Vice-Chancellor of Edith Cowan University.

This is a slightly edited version of the Buntine Lecture 1998. The full text of Professor Poole's oration, including an extensive list of cited works, is published electronically on the Australian College of Education's website: http://www.austcolled.com.au.

Academy News

Twenty-one new Fellows have been elected to the Academy of the Social Sciences in Australia. They have been so honoured for having achieved distinction, in the opinion of their peers, in one or more of the social sciences.

They are:

Associate Professor Margaret Allars,
University of Sydney. Dr Allars is the pre-eminent administrative law scholar in Australia and her research has been highly influential in judicial thinking. Her analysis of legal, ethical and medical issues in her report on the national inquiry into the use of pituitary derived hormones in Australia and Creutzfeld-Jakob disease has become an icon for illustrating the genesis and aftermath of regulatory failure in the field of public health.

Associate Professor Sally Andrews, School of Psychology, University of New South Wales. Professor Andrews is one of Australia's leading researchers in the area of cognitive psychology. She is internationally recognised for her research on visual word recognition. Her major research focus has been on visual word

focus has been on visual word recognition, reading, and cognitive dysfunctions in schizophrenia.

Dr Neal Blewett, who was Australian High Commissioner to the United Kingdom from 1994 to 1998. As a minister in the Federal Government from 1983 to 1993, he is best known as the author of Medibank, and in his still earlier career as an academic political scientist, he was the author of the definitive study of the 1910 constitutional crisis in Britain and of a number of papers in learned journals.

Dr Judith Brett, Reader in Politics, School of Sociology, Politics and Anthropology, La Trobe University. Dr Brett is one of Australia's leading commentators on contemporary politics. She has recently taken up a two-year appointment to the Keith Cameron Chair of Australian History, University College, Dublin.

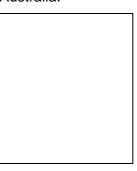
Emeritus Professor Lois Bryson,
Department of Sociology and
Anthropology, University of Newcastle,
is an eminent Australian sociologist
with an international reputation. Her
research and publications over the last
three decades cover topics of major
social significance, including poverty,
housing, community development,

women's employment, leisure, work, health and family life.

Professor Kenneth Clements, Professor of Economics, University of Western Australia has made significant contributions to economics in a number of areas: consumer demand and index numbers: international economics; and mineral economics. He was the initiator of the annual PhD Conference in Economics

and Business, which has been a major innovation in the education and training of PhD students in Australia.

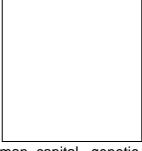
Professor Brian Galligan, Director, Centre for Public Policy, University of Melbourne. Professor Galligan is a leading authority on Australian constitutional politics, federalism, and citizenship and human rights. His more recent work is on Australian citizenship and human rights, and he is also eminent in the field of Australian political economy.



Dr Adam Graycar, Director, Australian Institute of Criminology has made a significant contribution in a range of areas of social policy, including the elderly, crime and justice, health, family law, education and social welfare more generally. He has been especially productive in the development and refinement of concepts and frameworks for the analy social policy.	sis of key issues of
Professor Frank Jackson, Director of the Institute of Advanced Studies, and Professor of Philosophy, Research School of Social Sciences, Australian National University. He is one of the world's leading philosophers. Among other marks of distinction, he has been a Visiting Professor at Harvard, has given the 'three lecture series' in Philosophy at Princeton and has been Lecturer at Oxford.	en the John Locke
Mr Ian MacFarlane, Governor, Reserve Bank of Australia. Mr MacFarlane is an outstanding policy economist who is particularly notable for his involvement in, and support of, academic research. His published contributions to the academic economics literature have continued throughout his public career, and his research leadership within the Reserve significant feature of Australia's economic	
Professor Graham Maddox, Dean of Arts, University of New England, works in the History of Political Thought. His major study Australian Democracy in Theory and Practice has come to be accepted as one of the prime interpretations of Australian politics. He has also written numerous articles and chapters on Australian federalism, party politics, labour history, the corepublican debate.	

Professor Peter McDonald, Professor of Demography, and Coordinator Demography Program, Research School of Social Sciences, Australian National University. Professor McDonald is an internationally-respected demographer whose main research interests include: the changing family and work decisions of Australians; the economic and social factors behind low fertility; and poverty and social inequality.

Professor Charles Mulvey, Professor of Labour Economics, Department of Organisational and Labour Studies, University of Western Australia. Professor Mulvey has a distinguished academic record and has made major contributions to the areas of: labour market aspects of inflation; the economics of trade unions; and



estimating returns to investment in human capital, genetic inheritance and family environment from twins data.

Professor Richard Pomfret, Professor and Head of the Department of Economics, The University of Melbourne. Professor Pomfret is an outstanding development economist and trade economist and the author of the standard works on the trade and development of Israel, on Canadian economic development, and on the economics of preferential trading arrangements.



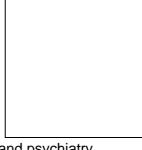
economics of preferential trading arrangements.

Professor Doreen Rosenthal, Centre for the Study of Sexually Transmissable Diseases, School of Health Sciences, La Trobe University. Professor Rosenthal is regarded both nationally and internationally as an expert in adolescent sexuality and is involved in collaborative research with colleagues at Stanford and University of California, San Francisco.



Dr Sheila Shaver, Deputy Director, Social Policy Research Centre, University of New South Wales is widely admired for her extensive and original research in social policy, social inequality and gender. Her work has contributed to social policy development across a range of complex problems dealing with income, welfare, ageing, need, pove sickness and family.	erty, unemployment,
Dr Michael Smithson, Senior Lecturer, Division of Psychology, School of Life Science, Australian National University. Dr Smithson has been a pioneering researcher in two fields: the application of fuzzy set theory and logic to the psychological sciences; and the interdisciplinary analysis of human perceptions and responses to uncertainty.	
Professor Margaret Thornton, Professor of Law and Legal Studies, La Trobe University has made a distinguished contribution to legal research, education and law reform. She is one of Australia's leading scholars in the field of feminist legal theory and is known internationally for her work in this area.	
Professor Ken Trotman, Professor of Accounting and Head of School of Accounting, University of New South Wales has established an international reputation in auditing and has been instrumental in pioneering research into auditor behaviour and the judgements auditors make. Professor Trotman is a member of the Editorial Board of the American Accounting Revie	w.

Professor Charles Williams, Sir John Barry Chair of Law, Monash University achieved an outstanding reputation in Australia and overseas as a legal scholar and has published a number of definitive articles in his main fields of research and scholarship, ie criminal law and evidence. In the past 10 years, Professor Williams has pursued a further special interest in law and psychiatry.



Ecological Mr Michael Young, Economist, CSIRO Land and Water has specialised in building bridges between economics and ecology. Mr Young was amongst the first to show the adverse impacts that price support policies have on the environment. He is noted, amongst other things, for his design of tradeable property right



systems and for his contribution to the development of guidelines for sustainable resource use and investment.

Tribute to Patrick Troy, Fellow of the Academy.

For two days in December colleagues and friends of Patrick Troy met at the Humanities Research Centre of the ANU to celebrate his outstanding contribution to urban studies and public life. The conference was organised by Mark Peel of Monash University and Tim Bonyhady of the Urban Research Program. It was aptly entitled 'The Public Good'. Scholars from around the country and overseas offered papers on subjects related to Pat's interests to a large and appreciative audience that sweltered in the early summer heat. The Conference Dinner in the Great Hall of University House attracted politicians, past and present, administrators, vicechancellors, Academicians, academics, family and other associates. Seldom can so many trouble-makers have gathered in one place.

Pat Troy trained as an engineer and worked as a planner before taking up a fellowship in the Research School of Social Sciences at the Australian National University late in 1966. With Max Neutze he established the Urban Research Unit as the powerhouse of urban reform during the 1970s. He worked closely with Tom Uren as deputy secretary of the Department of Urban and Regional Development from 1972 to 1975, and subsequently returned to the RSSS to sustain urban research and pioneer new projects on social justice and administration, compliance and governability. Stuart Macintyre opened the conference with a sketch of his life and career, emphasising the formative influence of his family background as the son of Paddy Troy, the communist secretary of a Western Australian maritime union.

Susan Smith of the University of Edinburgh, Sophie Watson of the University of East London, and Margaret Levi of the University of Washington, all of whom have worked in the Research Program, presented contemporary issues in welfare, urban studies and public sector unionism. Frank Stilwell and Ruth Fincher of the Universities of Sydney and Melbourne discussed urban equity and sustainability, and new patterns of disadvantage. Kurt Iveson of the ANU explored issues of public space and Graeme Davison evoked the world of the freeway planner in Melbourne during the 1960s which Pat Troy himself had inhabited. Jill Roe of Macquarie University used Norman Lindsay's The Magic Pudding to cut some slices of distinctly Australian flavour in the history of public policy. Tim Rowse showed the the emergence of the urban indigenous presence and illustrated it with recent Aboriginal art. Peter Read, with assistance from thespians in the audience, related his discovery that his special childhood country in northern Sydney were themselves the special country of Aboriginal contemporaries.

For thirty years Pat Troy has been an exemplary public intellectual. He has forged networks, enriched research with practice and practice with critical reflection. His own record of publication is outstanding. His capacity to chart new directions, sustain major projects and assemble talented young scholars to pursue them is exemplary. Whenever the Research School conducts a review, the Urban Research Program shines. Whenever the merits of a Research School is canvassed, he stands out as a vindication of its proper purpose.

The 1998 Directory of Fellows is now available on the Academy's website. The Directory has been designed to provide easy access to specialists in the wide range of fields of the social sciences. Additional information and Fellows' contact details can be obtained from the Academy.

Other Academy information, including the most recent edition of *Dialogue*, is also available on the website. The address is http://coombs.anu.edu.au/~assa/.

Emeritus Professor Reginald Appleyard, City Beach, Western Australia, has been made a Member (AM) in the General Division of the Order of Australia in the Australia Day Honours List. Professor Appleyard was honoured for his service to education through the research and teaching of economic history, migration and population studies and economics.

Professor Wilfred Prest is currently a Fellow of the Class of 1998-1999 at the National Humanities Center, Research Triangle Park in North Carolina.

Academy Projects

'Creating Unequal Futures?'

As reported in the last issue of *Dialogue*, a second workshop for the Academy Project 'Creating Unequal Futures?' was held on Thursday 10 December 1998 to discuss research and writing progress for this ARC - funded enterprise.

The purpose of the workshop was to obtain feedback from participants on chapter drafts, to ensure that the project was on target for the established theme and producing material which was distinctive and potentially publishable. This is particularly the case for providing a description of the kind of events happening today that would lead to Unequal Futures and the corollary theme of 'building capabilities', referring to community as well as individual capabilities.

It is anticipated that final papers will be submitted to the ASSA Secretariat by mid-April in time for a teleconference with all participants before completing the editorial process.

Challenges for the Social Sciences and Australia

Recommendations arising from the Review of the Social Sciences were considered at the Academy's Executive Meeting on Sunday 8 November 1998 and at the Annual General Meeting on Tuesday November 1998. Issues arising from the recommendations were considered by all of the Discipline Panels and opinions aired at the AGM.

The ASSA Executive and Secretariat are examining an appropriate implementation strategy for those recommendations which come directly within ASSA's core areas of responsibility. Additional copies of the Review are available through the ASSA Secretariat.

International News

Australia-China Exchange Scheme

The next Chinese scholar to arrive in Australia in the Academy's exchange program with the Chinese Academy of Social Sciences is *Professor Chen Zhengping*. Professor Chen is to study the foreign trade of China and the history of overseas Chinese. Professor Chen will visit Perth, Brisbane and Sydney from 17 October to 7 November 1998. Details of his visit will appear in the next issue of *Dialogue*.

Australia-Netherlands Exchange Scheme The Royal Netherlands Academy of Arts and Sciences has agreed to host two Australian scholars in 1999 as part of its Exchange Agreement with our Academy and the Australian Academy of the Humanities. They are:

Dr Maureen Dollard, Psychology, The University of South Australia, Whyralla. Collaborative work with researchers in the Department of Work and Organisational Psychology at the University of Nijmegen, and visits to Utrecht and Groningen Universitities.

Dr Ralph Shlomowitz, Economic History, Flinders University. Collaborative work with researchers at both the Institute for the History of European Expansion, and The International Institute of Asian Studies at the University of Leiden.

Associate Professor Christopher Lloyd, Department of Economic History, University of New England, has reported on his visit in March 1998.

My visit to The Netherlands was very successful. Attendance at The European Social Science History Conference was the central aspect of my visit. The ESSH Conferences, organised by the International Institute of Social History, involve about 1000 people discussing a wide range of topics in the use of theories of various kinds in historical explanation. As such, this conference and its counterpart in the United States, is the most important meeting place for the presentation and discussion of these themes. I was able to listen to many interesting papers and engage in several interesting discussions regarding historical methodology and theory and the history of modem economic and social change. All these areas are ones in which I work. I was also able, which is perhaps the most valuable aspect of such a conference, to meet many of the leading contributors to these debates.

I presented the two papers at the Conference: 'The Meta-Narratives of Modernisation: From Teleologies to Evolutionary Science' and 'Commentay on papers on Globalization by Hanagan and Wilterdink'. Both were presented to large,

interested audiences. The first, more substantive paper provoked a very useful debate with the audience, which continued outside the formal meeting.

At the conference and beforehand I was able to renew my ongoing discussions with certain Dutch colleagues, discussions that I have been engaged in at conferences, particularly, for several years. These colleagues include Dr Don Kalb (Utrecht University), Professor Chris Lorenz (Free University of Amsterdam), and Dr Ton Nijhuis (Maastricht University).

I was pleased to be able to visit the International Institute for Social History and to (briefly) acquaint myself with the scope of the collections.

As a consequence of the conference I not only renewed my discussions with Dutch colleagues and met new ones but became acquainted with a group of professors from several other countries as well. As a consequence of the visit I have become one of the panel organisers for the next conference in 2000. In conjunction with Professor Chris Lorenz of the The Free University of Amsterdam and Professor Joern Rusen of Essen University, I am beginning to organise a session on matters that have developed from my paper at the conference on 'Meta-narratives of Modernization', a panel that I expect will involve contributors from several countries. Thus I fully anticipate attending and taking an active and collaborative part in the next ESSH conference in 2000 in Amsterdam as a consequence of my attendance this year.

The social science history conference is an excellent interdisciplinary meeting place for all the social sciences and I have encouraged participation by Australian scholars. Furthermore, The Netherlands has much to offer in its universities and other institutions, such as the IISH and the Institute for Advanced Study, to visiting Australian scholars. Furthermore, in my capacity as President of the Economic History Society of Australia and New Zealand I am investigating the possibility of organising a social science history conference in Australia in 1999 or 2000. I have attended the American 'parent' conference and association and now the European conference. I think there is much potential for organising a similar event here and am seeking views from various possible collaborating organisations.

Please accept my sincere thanks for the travel grant. This exchange scheme is an excellent program and I have benefited greatly from the experience.

Professor Cora V Baldock has reported on her visit to The Netherlands.

The visit for which I received a grant from the Australia-The Netherlands Exchange Scheme was part of a sabbatical of twelve months duration (July 97-July 98) to conduct a comparative study of policies regarding the aged in the United States, The Netherlands and Australia.

The grant was used for the purpose of interviewing professionals in The Netherlands engaged in research and/ or policy making and implementation regarding the aged; for the collection of policy documents and research documents on the same subject; and for attendance at the Congres Ouder Worden 98, Annual Congress of the Dutch Gerontological Society (Rotterdam, 2 days, 12-13 March 1998) where I was an invited speaker.

The three main issues in aged policy which I addressed during my sabbatical were: policies to prevent the onset of osteoporosis in the healthy aged; policies for the development of volunteer programs for the healthy aged; and policies regarding the institutionalisation of physically and mentally frail aged.

The project gained a specific focus in The Netherlands, due to the fact that after email communication with the conference organiser, I was invited to speak at the Annual Conference of the Dutch Gerontological Society on the subject of volunteer programs for healthy seniors. My research in Australia and the United States had shown that in these countries older people are encouraged to participate in volunteer projects, specifically designed for seniors (the so-called RSVP- Retired and Senior Volunteer Program being the major example), I had gained considerable information about the extent of government commitment, especially in the United States, to funding and administering such program. However, I found that there were hardly any senior-specific volunteer programs in The Netherlands. An attempt to understand the reasons for this became an important focus in my interviews with Dutch policy makers and researchers. Teasing out the reasons led to a more comprehensive understanding of Dutch aged policies in general, as it became apparent that treatment of seniors as a special category was discouraged within The

Netherlands, notwithstanding government rhetoric about the importance of social participation of the aged in community life.

In my conference paper for the Dutch Gerontological Society, which was published in the Conference Proceedings, I discussed the differences between the volunteer policies of Australia, the United States and The Netherlands, and specifically addressed the advantages and disadvantages of categorical treatment of the aged. There was considerable interest in my paper and the Secretary of the Dutch Gerontological Society suggested that its contents would be valuable in setting future Dutch policies. I should note that the fact I am bilingual in Dutch and English was of considerable value.

I am currently in the process of transcribing and coding all interviews, and analysing the range of policy documents collected in the United States and The Netherlands. Once this is completed, I will begin a writing programme of brief papers, some focused on one country, other on comparative analysis. Priorities amongst these papers to be written are: an English translation and rewrite of my Dutch conference paper for publication in an international gerontology journal; a more extensive treatise on the rationale behind categorical treatment of the aged (this would include a review of debates on the politics of difference), possibly for publication in an international feminist journal; and an article on age & gender discrimination within Dutch gerontological research for publication in the Dutch Journal of Gerontology.

I expect ongoing communication with Dr Trudi Koek and colleagues at the Rijksuniversiteit Leiden; with Professor Jan Baars, social gerontologist at the Katholieke Universiteit Brabant; with Dr Pearl Dijkstra at NIDI; with Professor Knipscheer and social gerontology colleagues at the Vrije Universiteit; and with Dr Pieter Huijbers at the Dutch Gerontological Institute.

I am grateful for the cooperation received from interviewees and colleagues in The Netherlands and for the opportunity provided by the Exchange Scheme.

Reports on Workshops

Two publications arising from Academy Workshops have recently appeared:

Contesting the Australian Way: States, Markets and Civil Society, edited by Paul Smyth and Bettina Cass, Cambridge University Press, 1998: 288pp (1995 workshop: Contract State, Social Charter or Social Compromise. Towards a New Australian Settlement); and

The ESD Process: Evaluating a Policy Experiment, edited by Clive Hamilton and David Throsby, Academy of the Social Sciences in Australia and Graduate Program in Public Policy, Canberra, 1998: 128pp (1997 workshop of the same title).

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Books

A Books section now forms an integral part of *Dialogue*. Publishers and individuals are invited to contact the Editor with suggestions for books which might be considered for review in these pages.

Governing Australia, Studies in Contemporary Rationalities of Government, edited by Mitchell Dean and Barry Hindess. Cambridge, Cambridge University Press, 1998. 264pp. + index, \$34.95.

This book puts Foucault's concept of 'governmentality' to work in the analysis of contemporary policy. Edited by two leading Australian scholars, the collection offers a chance to see what this paradigm means in practical application.

Including the editors' introduction, the book has 14 chapters. One, by Ian Hunter, presents a sustained critique of Foucault's original statement of this perspective. The rest engage with the theory in application. Diverse and of high quality, they cover a broad spectrum of policy areas, programs and practices. There are too many to discuss individually here, and I shall simply mention my personal favourites. Jeffery Minson presents a probing examination of the ethical contradictions raised by the injection of 'new managerialism' into Australian civil services. Mitchell Dean continues his dissection of recent policy frameworks for the management of unemployed people, exploring continuities and disruptions in the passage of government from Labor to the Coalition. John Ballard offers an elegant and incisive account of the development of AIDS/HIV policy. This is followed by Gary Dowsett's witty and passionate essay on the regulatory struggles over desire, here male homosexual sociality. I was wholly convinced by Barry Hindess' critique of the left critique of economic rationalism, in which he argues that the rise of neo-liberal modes of governance has less to do with the influence of particular kinds of economic advice than with a fundamental transformation of economic governance itself. Anna Yeatman contributes an extended version of her well known account of the 'new contractualism', which she sees as a new form of liberalism with potential for liberation as well as exploitation.

The papers focus on different facets of the governmentality paradigm. Some emphasise governmentality as 'the conduct of conduct', and the peculiar capacity of liberalism to construct government so that it works 'at a distance' and with the appearance of freedom. Others emphasise the problematisations, rationalities and technologies which shape the 'government of conduct and the conduct of government'. Together, they show the ability of this paradigm to trace connections between the public power of state institutions and the diffuse modes of regulation effected through the mentalities or rationalities of governance which shape social life.

To me, the collection also raises questions about how satisfactory this perspective is. Governmentality is a theory of social order rather than social action. It is much better at tracing the construction and evolution of policy frameworks than at identifying the sources of opposition to them, or the reason for their demise. On this account, it is better at explaining policy success than policy failure.

In actuality, the perspective seems to offer little or no ground from which to evaluate policy outcomes, including in the conduct of conduct. The book's 14 chapters focus universally on the policy side, drawing their empirical content from policy statements, policy histories, and the knowledge and practices of policy institutions. In none of the 14 papers is the paradigm confronted with evidence drawn from the viewpoint or experience of the subjects of governmentality. In this sense, contentions about what policies do remain uncontested, and because uncontested also undefended.

Sheila Shaver

Letters to the Editor

December 1998

Ethics and Aboriginal Studies

Graeme Ward's article on 'Ethical Australian Archaeology' (Newsletter 3/1998) gives an admirably clear review of the commitments nowadays required of investigators proposing to carry out research among Australian Aborigines. In some degree they represent formalisations of enlightened practice developed within the discipline over the last quarter of a century. But they also show signs of a partisan appropriation of research that is indifferent, if not inimical, to the central values of academic social science.

In commending the contents of the *Newsletter* to Fellows, Professor Gale spoke of the Academy's fearlessness in speaking out on social issues. By this I presume she meant a willingness to state the facts regardless of offence they might give to interested parties. Yet the pervasive and overriding concern of Dr Ward's manifesto is to prevent any investigation whose outcome might be offensive to indigenous peoples, and to sanction research only insofar as it seems likely to serve their interests.

The contractual conditions imposed by the Pitjantjatjara Women's Council are offered as an example. In return for a permit, the researcher agrees *inter alia* to promote the interests of the Pitjantjatjara and the Women's Council, to observe restrictions on divulging information that might adversely affect the Pitjantjatjara, and to submit a thesis only with the prior written consent of the Women's Council.

Libraries, as Dr Ward says, are being filled with the results of such collaborative projects. No doubt they contain much of value. Yet, if in the above paragraph we replace 'Pitjantjatjara Women's Council' with 'Northern Territory Cattlemen's Association', and 'Pitjantjatjara' with 'the cattle industry', who in that case would be prepared to say they were worth more than the paper they were written on?

Anthropology in Australia is faced with a crisis of credibility. The position has been succinctly stated by Kenneth Maddock (a Fellow of this Academy) in *Anthropology Today* (October 1998). While it is natural that anthropologists should support the Aboriginal cause, the profession would be blind if it failed

to see the scepticism now widely felt in regard to its role as a source of expert evidence in courts.

There is nothing dishonourable in being an advocate. But, as Maddock puts it, 'neither the judicial process nor the process of scientific inquiry can be driven by advocacy alone; there must also be impartiality, which requires at least some participants in the process to distance themselves from those who have stakes in the outcome'.

According to guidelines drafted recently by the Federal Court, the 'paramount duty' of expert witnesses is to the court. The 'paramount duty' of Fellows of the Academy, one presumes, is to uphold the values and objectives of science. These include a commitment to determining the facts of a case without fear or favour.

It is possible (though perhaps unlikely) that the overriding loyalty of our institution to detachment may be seen as qualifying it for a special role in dealing with the massive body of Aboriginal litigation facing Australian courts now and well into the twenty-first century. In that event the Academy would be well positioned to contribute not only to the preservation of elements crucial for the proper functioning of the judicial process but to the recovery of the integrity of anthropological science within Australia.

Les Hiatt

November 1998

The MAI

Dialogue readers – especially those who also subscribe to Australian Rationalist – may have been puzzled by the strange rant published as the 'Conclusion' to my article about the Multilateral Agreement on Investment that appeared in the latest issue. For the record, my 'Conclusion' actually was:

'There has been frequent mention of the concept of sovereignty, but one aspect of it still needs to be explained, viz. how in democracy's name could a key international treaty like the MAI remain free from parliamentary scrutiny for so long? Likewise, how could something so bizarre as a treaty which can never expire (the FSIA) slip through the system? The answer seems to lie in the ancient and mysterious 'royal prerogatives' of the sovereign, which are known to include the powers to declare war and to make treaties with foreign nations. In Australia, these powers presumably are exercised by the Governor-General in Council, which effectively means

the Cabinet. Hence, the approval of parliament is not required for the conclusion of any treaty! The only time our legislators officially can scrutinise a treaty is after it has been signed. There is a biannual tabling in parliament of the texts of treaties signed, acceded to or ratified by the government in the preceding six months, but by then it's too late. Hopefully, one outcome of the MAI debate will be a review of Australia's anachronistic treaty-making system.'

This is the text that appeared in *Australian Rationalist* and is the conclusion I actually wrote and stand by.

So, where did the other stuff come from? I suspect it must be a piece of digital detritus (cut and pasted from the Web during the research phase) and unaccountably still clinging to the file supplied for editing.

Colin Richardson

(Ed's note: The text published was approved by the contributor before publication.)

PUBLICATIONS

Occasional Paper Series

Confusion Worse Confounded: Australian Education in the 1990s

Edited by Brian Crittenden Occasional Paper 1/1995

Global Transformation and Social Development

GJR Linge & DJ Walmsley Occasional Paper 2/1995

Australia in its Asian Context

Edited by Gavin Jones Occasional Paper 1/1996

Minding Their Business: The Proper Role of Universities and Some Suggested Reforms

Brian Crittenden Occasional Paper 2/1996

Cunningham Lecture, 1996: Discipline Boundaries in the Social

Sciences

Paul Bourke Occasional Paper 1/1997

Wealth, Work, Well-Being

Cunningham Lecture and Symposium 1997

Occasional Paper 1/1998

Arising from Academy workshops

The Paradox of Parties. Australian Political Parties in the 1990s Edited by Marian Simms (Allen & Unwin) 1996

'Communication Futures in Australia' *Prometheus* 14. 1. June 1996

No Place for Borders. The HIV/AIDS epidemic and development in Asia and the Pacific

Edited by GJR Linge & DJ Porter (Allen & Unwin), 1997

The Politics of Retribution

Edited by C Bean, S Bennett, M Simms & J Warhurst (Allen & Unwin) 1997

China's New Spatial Economy. Heading Towards 2000

Edited by GJR Linge (Oxford University Press) 1997.

Contesting the Australian Way: States, Markets and Civil Society

Edited by Paul Smyth & Bettina Cass, (Cambridge University Press), 1998

The ESD Process: Evaluating a Policy Experiment

Edited by Clive Hamilton & David Thrsoby (Academy of the Social Sciences in Australia and Graduate Program in Public Policy), Canberra. 1998.

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Panels:

A Anthropology, demography, geography, linguistics, sociology.

Chair: Professor RG Ward

B Accounting, economics, economic history, statistics.

Chair: Associate Professor Sue Richardson C History, law, philosophy, political science.

Chair: Professor Jill Roe

D Education, psychology, social medicine.

Chair: Professor Graeme Halford

1999 Calendar

19	March	Meeting of Workshop Committee
15	April	Meeting of Executive Committee
28	July	Meeting of Executive Committee
29	July	Meeting of Membership Committee
30	July	Meeting of Workshop Committee
31	July	Closing date Australia-Vietnam Exchange Scheme applications
15	August	Closing date Australia-The Netherlands Exchange Scheme applications
22	October	Meeting of Workshop Committee
7	November	Meeting of Executive Committee
7-9	November	Annual General Meeting

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