Tenth Symposium of Australian Gastronomy

Beyond the Tuckerbox

Securing the Future

The Grampians, Victoria ~ 29 March – 1 April, 1998

Proceedings of the Tenth Symposium of Australian Gastronomy

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Committee

CONVENORS: Marieke Brugman, Sarah Stegley
PAPERS CO-ORDINATION: Marieke Brugman
ADMINISTRATION: Lillian Alden, Lois Butt
CAMP ORGANISATION: Helen Mackenzie, Judi Sanford, Sarah Stegley
CATERING COMMITTEE: Jeanette Fry, Jonathon Gianfreda, Phillippa Grogan, Rosario Scarpato, Andrew Wood
WINE MASTER: Andrew Wood
GUEST CHEFS: Cheong Liew, Phillip Searle
WEB SITE: Siu Ling Hui, Rosario Scarpato
AUDIO PRODUCTION: Dur-é Dara, Alan Saunders
FIELD TRIPS AND LOCAL EXPERTISE: Ellie Chambers, Caroline Pizzey
CAMP MANAGER: Dick Umbers and Croxton Special School Students
CAMP ASSISTANTS: Box Hill Institute, Goulburn-Ovens TAFE
CAMP BAKER: Rob Bakes

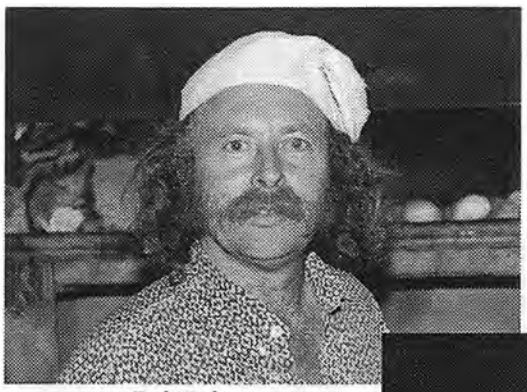
Lillian Alden

Siu Ling Hui

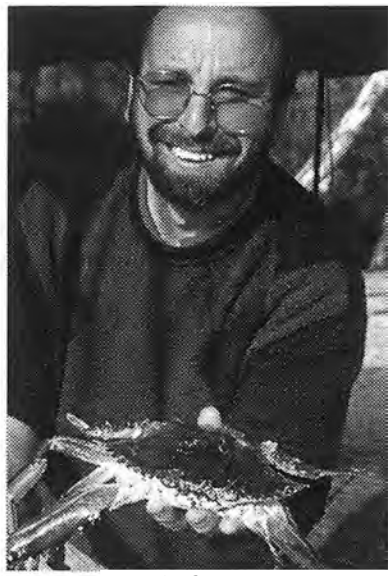
Lois Butt, Dur-é Dara, Marieke Brugman & Sarah Stegley

Dick Umbers & Jeanette Fry

Andrew Wood

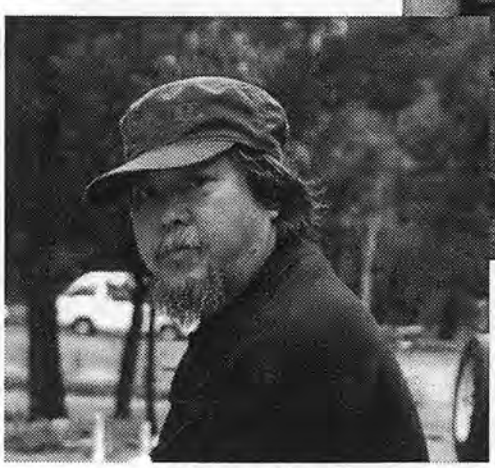


Rob Bakes



Rosario Scarpato

Phillip Searle & Ian Wigg



Cheong Liew

Caroline Pizzey

Box Hill Institute Students

Convener's Prologue

By the time the end of the Ninth Symposium of Gastronomy drew nigh, I was not alone in feeling bereft. The collegiate atmosphere had been preserved from Canberra and Adelaide. There had been some striking papers that deserved more discussion. The science, the politics and the planning of gastronomy had been stimulatingly counterpoised by presentations from, respectively, Tim Flannery, Tony Webb and Susan Parham. Fishery issues were highlighted in the mock debate between commercial and recreational interests.

The Poverty Lunch delivered the most remarkable meal by Sean Moran. Luscious 'dripping', earthy breads, seductive brussel sprouts and industrial size quantities of 'stew' midst colonial frolicking made one wonder that if pre–Federation cooking could have been this good with such humble ingredients, we might not throughout at least half of the 20th Century endured such abysmal fare. By contrast, the Future Dinner did not auger well for technology's intrusion into cuisine, and quite possibly reinforced the benefits of traditional cooking techniques. Film cameras gloating over the participants' rather bizarre late night repast of hot dogs and tequila shots, with its sensationalist sense of voyeurism seemed to dampen sense and sensibility. The Final Banquet, always anticipated with eagerness, a high spirit of curiosity and celebration and an expectation of surprise promised to be grand and glamorous with its Opera House setting. Perhaps irony or satire or humour had been intended, and think me prudish if you will, but it felt for some, as though we had been unwittingly transported to the middle of a Mardi Gras. This Banquet more than any before appeared completely divorced from the intellectual pursuits of the days before. There was no theoretical anchor but for its reflection on Sydney as the hedonistic party capital. Gestapo honchos corralling guests to drag queens thrusting mouths down onto conical desserts were debased notes in a not uplifting experience. Was this Power as degenerate urbanism? Was this the Symposium imploding on itself with nowhere else to go?

Little wonder then that a strong resolution about the next Symposium was unable to be reached at the Plenary Session. Despite some caucusing, and some propositions from Brisbane and possibly also Perth, Victoria remained resolutely silent. It was as though the vitality and nobility of the Symposium had ebbed and perhaps we inevitably had come to expect that it had gone as far as possible and was now at an end. Certainly the enormity of the task of organizing the IX Symposium left the Sydney Committee too exhausted to produce a publication of the Proceedings, and we still wait for them.

Despite some of these reservations, there was amongst us affection for some of the most cherished traditions of former gatherings, a reluctance to allow its passions, fervor, obsessions and convivial camaraderie to discontinue. Rather boldly, we identified a window of opportunity to bring some new life to the Symposium by rethinking some of the ways it could be done. To this end, it was decided to 'go bush'—perhaps a prosaic resolution, none the less an opportunity for people (largely alienated from the natural world) to experience at first hand the issues and wealth of the Australian landscape.

Moreover, there was our frustration that had been accumulating over a number of Symposiums that the enshrining view was nearly always so exclusively Western/Mediterranean/Old World. The time had to come to broaden our sense of inquiry and invite philosophers and scholars and practitioners to engage in both issues that will be critical in the millennium and take responsibility for our relationship to land and production and to Aboriginal rights. Thus we banished, at least for the moment, those former preoccupations with Epicurus and Brillat Savarin et al and challenged people to contemplate a new gastronomic philosophy that could give foundation to our current realities. Our aspiration then was to achieve a contemporary and thoroughly Australian focus—a return to fundamentals so to speak, with no escape from the elements. A true test of spirit and intent, and maybe a way of being democratically together. Also a way of throwing new light on the food–centredness of our endeavors.

The Grampians area was chosen for its majestic beauty and evolutionary significance, its strong and continuous ties to Koori culture and managerial involvement, its regional abundance in terms of food, bushfood and wine production, its history with Landcare and the challenges of traditional versus innovative land use and practice. For the first time, there was also the potential to interact with striking local identities

who were shaping the issues and influencing changes. Also, to soften the blow of camping—amazingly, a first–time experience for many, we were able to arrange use of the marvelously designed Brambuk Centre for the first day. Being out of a built environment could lend reality, inspiration and pungent weight to our concerns as well as underpin through the sheer force of geography and circumstance the nature of our theme and concerns.

As is always the case with startlingly simple ideas, their execution is immensely complex.

An energetic and hard–working committee is of the first importance, and monthly meetings were held for the next year and a half to which we invited many new people who brought a wealth of talent. Working parties with clear responsibilities were established once we had set the philosophical and ideological parameters. Symposium stalwarts brought their past experience of attendance and organization. Lois Butt and Lillian Alden managed the secretarial and administration tasks with the keenest eye on detail. Elaine Chambers with her birthright in the Western district teamed up with Caroline Pizzey to uncover local expertise and reconnoiter the region's attributes for field trips, walks and produce. Siu Ling Hui and Rosario Scarpato brought both a whole new lexicon of gastronomy as well as the determination to put the Symposium on–line. Jeanette Fry provided our meeting space, nurtured us with delicious comestibles, designed the Yabby Boil and enlisted the folk from Croxton Special School to help with the Camp's practicalities. Helen Mackenzie and Judi Sanford nearly emptied Box Hill TAFE of all its equipment and brought along their star students who helped as tirelessly as Jeannie Hall with tables and dishes and assisting the chefs. Andrew Wood met his brief to provide exciting and excellent wines on a strict budget brilliantly. He has also undertaken the publication of these proceedings. Phillippa Grogan was the Caterer without parallel, and Dur–é Dara took it upon herself to make sure that audio and acoustic production would be as fine as an auditorium. Sarah Stegley liaised with the Department of Conservation and Natural resources, the Brambuk Centre, the outback touring company who had the infrastructure of tents and mobile kitchens, to pull the Tented Camp City together, and actually erected it all herself with Lisa Miller assisting before our arrival. A million other tasks were dealt with cheerfully and collectively.

There was a wonderful symmetry in having Cheong Liew and Phillip Searle agree to do the 10th Banquet, just as they had collaborated on the first. A devotee, Ian Wigg excited by the improvisational, unrehearsable and challenging outdoor notion of it all, arrived voluntarily from the Peninsula just as the chefs felt they needed extra hands. The energy of the visible kitchen invariably elicited assistance from all who passed by, whether it was to pluck baby emus, to scrub sublime oysters, to clean blue swimmer crabs, or run through a load of dishes. All available cooking equipment, but predominantly fire was used, including the wood–fired oven of the irrepressible baker from Kyneton, Rob Bakes, who was heaven sent. Not only did Rob prepare wonderful and different breads for each meal, his oven cooked the Murray Cod and roasted the breakfast peaches, and finished the steam pudding for dessert.

Much thought had gone into the referential nature of the meals and their connection to place and theme was largely achieved—from the supper meal based on lentils and other local ingredients, to the bushtucker lunch that genuinely demonstrated the culinary worth of an extended palate; from the lavish afternoon tea that spoke of a colonial past and homestead proclivities to the primitive nature of an earth oven feast. It was particularly pleasing to be in a situation of hospitality, given our location and the generous stretchability of meals, to be able to invite 'locals' such as Graham Pizzey, Viv Thomson and Richard Weatherly etc. Unlike other Symposiums, when it can get very political around the issue of non–participants joining in the dining experience, it reaped many rewards as the 'locals' celebrated their own backyard in a way they had never before appreciated.

As for the papers, this task finally fell to me. Breadth, relevance, professionalism were all necessary attributes. I deliberately invited papers from further afield. I took a pretty tough line in terms of deadlines, abstracts and final papers, and did not necessarily accept papers for presentation just because there was some tradition to do so with some familiar presenters. Some ideas never came to pass, no matter how vigorously pursued. It would have been very fitting to have the Koori community welcome us at the tented site and to render a performance out in their country. I very much hoped to bring together the disciplines and insights of Susan Parham (planner), Tony Webb (political activist) and Tim Flannery (scientist) around one critical subject they could

examine, but the timing disallowed their attendance. Another idea was to invite someone to do an analysis of all past Symposium and examine how they might have influenced discourse and debate amongst a wider audience: a way to look back reflectively and to suggest ways forward.

In the end we tried to strike a balance between the time it takes to listen to papers, and to give some time to discussion—hence the campfire discussions. We also wanted to give enough time for people to explore the environment and to learn something from the field trips. Whether it reached the cerebral highs and stimulation of past Symposium I can never know, but personally I was particularly excited by Terry White's paper, Drink the Farm! Eat the City!, by Rosario Scarpato's fabulous and controversial take on The New Global Cuisine, and others too. With hindsight, I think the immeasurable effort and energy of all the Committee—a Committee by the way that worked with harmony and fun—resulted in an exhilarating and refreshed event that revitalised the spirit of Symposia.

It was heartening to hear the discussion at the Plenary Symposium so lively and enthusiastic, and Tasmania so well organized with its proposal that it drew unanimous support. The vitality of the Symposium was again palpable and long may it live. I just hope that we will not be returned to the straightjacket of our very limiting and Western patterning.

Marieke Brugman

Symposium Program

SUNDAY 29 MARCH BRAMBUK CENTRE
2.00 – 3.00PM
Registration and Room Allocation —Lois Butt, Lillian Alden, Siu Ling Hui
Check into Accommodation and freshen up.

3.30 – 4.30PM
Time for refreshments and to view interpretative Displays of Koori Heritage at Brambuk Centre, and The Evolution of the Grampians at the National Parks Information Centre.

4.45PM
Return to Brambuk Centre for the evening's proceedings.

5.00PM
Welcome and Introduction —Marieke Brugman, Convenor

5.05PM
The Grampians—its History, Geography, Evolution Flora and Fauna—Natural Australia in Microcosm
(Graham Pizzey, OA, noted conservationist, writer and photographer.)

Graham Pizzey is a Melbourne–born naturalist who for nearly 30 years wrote widely read columns about wildlife and conservation in the Melbourne *Age* and, later, in the then Melbourne *Herald.* He has been a councillor of the Australian Conservation Foundation and a board member of the former Victorian National Parks Authority. He is an Honorary Ornithologist at the Museum of Victoria, a recipient of the Australian Natural History Medallion, and in 1977 was invested a member of the Order of Australia for services to conservation and ornithology.

His *Field Guide to the Birds of Australia,* first published in 1980, has been reprinted 15 times. A wholly new

version, illustrated by Frank Knight, was published by HarperCollins in June 1997. Reaching the best–seller lists, it is now in its third printing and has been widely acclaimed. Graham and his wife, Sue, live among 40 hectares of bush beside the Grampians National Park near Dunkeld. Here they write and keep a watching brief on the 150+ bird species that also live here or pass through, seeking to understand the complementary foraging roles each fills in the vegetation on the property. In particular, they try to grapple with the time–scale represented here, below mountains whose bedrock was laid down 400 million years ago, and amid songbirds and marsupials whose ancestors got aboard the Australian ark before it rafted off Gondwana 50 million years ago. As the continent drifted north to its present position on the doorstep of Asia, these animals and birds radiated into many species, giving Australia a higher percentage of endemic wildlife than any other continent.

The Region's Wines

(Vivian Thomson, Managing Director, Best's Wines Pty Ltd.)

Viv Thomson is a fourth generation vigneron born in Swan Hill. The family moved to 'Concongella' Great Western, where they still reside. He and wife Chris have four children. After his education at Roseworthy College, S.A., Viv spent time in East Africa, UK and Europe. 1960 was his first 'downy mildew year' and Great Western Football Best & Fairest—'a very mixed year'.

1972 saw Viv commence his judging career, which has taken him to Melbourne, Adelaide, Brisbane, Hobart, as well as many rural Wine Shows. Viv has been chairman of the following organisations: Ararat Apex Club, Great Western Primary School, Stawell Secondary College, Victorian Wine Industry Association.

Of the industry, Viv says, "my respect and love of the industry has grown, largely due to the people whom I have associated with. The general attitude of cooperation and mutual assistance that is prevalent in the Australian wine industry is very unique".

Western District Cheeses

(Will Studd, Director, Calendar Cheese Co.)

French Master of Cheese and THE person most instrumental in inspiring and advising the development of small artisanal cheese manufacturers.

The Grampians Olive Oil Industry, its Relationship to the National Industry and the Scope for Biodynamic Farming

(Neil Seymour, Director, Mt Zero Olive Oil.)

Neil Seymour and his wife, Jane, established Mt Zero Olives in 1993 following the purchase of a neglected olive grove in the northern Grampians. Neil has a background in forestry and land management and is redeveloping the olive grove using biodynamic farming methods. Neil and Jane aim to produce the highest quality extra virgin olive oils and are keenly interested in working with the food industry to achieve this.

Landcare and Whole Farm Planning—a History in the Grampians Region

(Richard Weatherly, Merino sheep farmer, Chairman of Watershed 2000 and Central Hopkins Land Protection Association, Director of a revegetation company, Consultant in tree–seeding and ecosystem management.)

Richard Weatherly grew up on a property near Mortlake in southwest Victoria. He read History at Cambridge University, followed by six years in Europe and Africa. During this period he commenced a career as an artist, exhibiting sculptures and paintings in London. On returning to Australia he has held several solo exhibitions. His artwork has been widely published. His illustrations for *The Fairy Wrens* won a Whitley Award and his painting *Edge of Dunes* won a Gold Medal at the National Print Awards. He has exhibited in the US, Japan, Britain and China and was Guest Artist for the Australia Duck Stamp Art and Wildlife Expo in Washington DC in 1990.

A noted biologist, naturalist and conservationist he has worked in Australasia, Europe, Africa, America and Antarctica and was awarded the first BHP Steel Environment Award for tree–seeding machinery that he developed. Richard continues an active involvement in agricultural, conservation and community development

projects.

Land for Wildlife and its Involvement in the Food Industry

(Barry Clugston, Land for Wildlife Officer, Stawell Department of Natural Resources and Environment.)

Barry is also a farmer who produces wool and grows bush tucker and cut flowers. He is a former member of the Wimmera Catchment Board and former chair of the State Landcare committee. Barry has conducted a regular wildlife and natural history segment on ABC radio for the last ten years.

New Ventures in an Old Land—the Face of the Future

(Tom and Sarah Guthrie.)

The Guthries run 'Thermopylae', a 1300ha property bordering the Grampians National Park. Situated in the historic Mafeking Valley, the farm runs 6000 Corriedale and Merino sheep, a 3.6 ha vineyard and a tourism operation in two cottages.

Sarah trained in Special Education and taught for 12 years, including five at Royal Children's Hospital. Tom has a Bachelor of Engineering (Agriculture). They are both active Landcare members, and Tom is Convenor of the National Parks Advisory Council (Vic) and a member of the Grampians National Park Advisory Council. Sarah is a council member of Mittagundi Outdoor Education and also a member of Women in Agriculture.

6.30PM

Tumbukka Welcoming Ceremony

(Mark Matthews on behalf of community of Brambuk Centre)

7.30PM

Keynote Address

(Dr. Pamela Parker, Executive Australian Landscape Trust and Bookmark Biosphere Reserve in Renmark, S.A.)

Dr Pamela Parker was born and educated in the US and has degrees in Zoology, Wildlife Ecology, Evolution and Ecology. Pamela has combined a distinguished academic and publishing career with senior positions in conservation and zoology, namely with the Chicago Zoological Park. Her extensive field experience includes the Mallee in SE Australia, South and Central America, Marshall Islands, East Africa, American east and west coast. Her review of the UNESCO Biosphere Reserves in Australia in conjunction with the Australian Conservation Agency and the Department of Foreign Affairs and Trade for the Australian National Commission for UNESCO has led to the development of a public/private partnership model program. This has culminated in the purchase of Calperum Pastoral Lease in order to implement a community driven program of ecologically sustainable development and land management integrated with conservation programs.

8.30 PM

The Pulse Dinner

Designed by Phillippa Grogan and prepared by Mrs Jarwal.

10.30 – 11.00 PM

Return to Accommodation.

A coach is available if people do not want to walk.

MONDAY 30 MARCH BRAMBUK CENTRE

8.00 AM

Self–help breakfast in Cabins before walking back to Brambuk Centre.

9.30 AM

Introduction and housekeeping—Marieke Brugman.

9.40AM – 12 NOON
Beyond the Tuckerbox
Moderator: Dur–é Dara

The Role of Indigenous Environmental Knowledge in Securing the Future—Ethical and Political Dimensions
(Dr. Nancy Williams, Adjunct Professor, Centre for Indigenous Natural and Cultural Resource Management, Northern Territory University.)

Dr Nancy Williams was born in the US and educated at Stanford and California Universities. As an Anthropologist, she came to Australia in 1969 to work with Aboriginal communities in the North (including Arnhem Land, and Yirrkala in the Northern Territory, Townsville and Darwin regions). Nancy has combined a distinguished academic and publishing career with significant research on Aboriginal land and law. Nancy has also extensive experience working with traditional land owners around land rights and Native Title issues, as well as consulting on a significant range of development, land management, heritage and environmental projects.

Tales of Tropical Tucker: Sustainable use of Native Wildlife in the Top End
(Gordon Duff, Deputy Director of the Centre for Indigenous Natural and Cultural Resource Management.)

Gordon holds a science degree from the University of Tasmania, and a PhD in tropical ecology from James Cook University. He has worked in a variety of teaching positions at Australian universities, and more recently has been engaged in research development and management at the NT University, prior to his current role.

Gordon is also the leader of the education and training project in the Cooperative Research Centre for the Sustainable Development of Tropical Savannas, and a member of the Board of Directors of the CRC for Sustainable Tourism.

From Gathering Culture to Commercial Culture
(Andrew Beal, Managing Director Australian Native Produce Industries Pty Ltd [in association with Tony Sharley and Roger Fielke], a fully–integrated company which specialises in the propagation, cultivation, processing and marketing Australian native foods.)

Andrew holds a Bachelor of Agriculture Science from Adelaide University and has 22 years of private and public sector experience in horticulture, agriculture, natural resources, and business management.

During his career he has maintained a consistent thread of working with Australian native plants and animals in Australia, the USA, Latin America, the Middle East and Africa.

He became interested in traditional aboriginal foods and their cultivation while living in the arid north of South Australia where he was working as an environmental scientist with a large mining and power generation corporation.

He has held senior policy positions in Canberra with the Commonwealth Environment Protection Agency where he held responsibilities for national water quality policy, and with the Murray–Darling Basin Commission where he was responsible for Basin–wide vegetation management policy.

In 1993, he became a founding member of the Australian Quandong Industry Association, and was a founding member of the Australian Native Bushfoods Industry Council in 1995.

Andrew has held numerous honorary positions on advisory bodies including the Commonwealth Land and Water Resources Research and Development Corporation, the South Australian River Murray Water Resources Council, and the Native Fauna Consultative Committee.

In 1997, he worked closely with a Joint Parliamentary committee in amending the South Australian National Parks and Wildlife Act to enable the farming of protected native plant and animal species for human consumption.

Drink the Farm! Eat the City!
(Terry White)

Terry edited and produced the *International Permaculture Journal* from his kitchen table in Maryborough, Central Victoria, from 1978 – 87. At the same time, Terry was deeply involved in Project Branchout, a large–scale community tree–planting scheme in the Loddon–Campaspe catchments.

As a result of this work, Terry took up a position in 1987 as Education Officer for the Victorian Salinity control program. For almost a decade since, he has been involved in the establishment of community environmental monitoring programs—Saltwatch VIC in 1987, Ribbons of Blue WA in 1989, and the national Waterwatch and Community Streamwatch Melbourne, in 1994. From 1994 to 1996 Terry co–authored *Listening to the Land*, Australia's first Directory of Community–based Environmental Monitoring Groups.

Now living in Melbourne, Terry is coordinating a multi–disciplinary research program for the City of Port Phillip that is investigating the practicality of 'Rooftop Greening' in the urban environment. Rooftop greening (vertical and horizontal gardening) is attracting increasing interest as a way of gaining access to valuable open space while making the urban environment a healthier place to live and work.

Landcare: Looking to the Future
(Richard Weatherly—Richard also presents a Paper on Sunday.)

Panel Discussion
Speakers will be joined by: Pam Gillespie, Winemaker, Demondrille Vineyards; Dr Marion Maddox, Political Scientist (Marion Maddox holds a PhD in Theology, Flinders University and is completing a PhD in Political Philosophy. She lectures in Australian Politics at the University of Adelaide and was previously senior lecturer in Religion Studies at University SA. Her current research is in the area of religion and politics); David Thompson, Dip App Chem (CIT) Southern Bushfood Association (David, with his wife Judith operates a bushfood business 'Dinkum Fare', which pioneered the primary production of southern species of bushfood for contemporary use. For 12 months Dinkum Fare operated the Wartook Cafe that presented customers with a menu incorporating bushfoods.He is a founding member and Vice President of the Southern Bushfood Association and a contributor to publications on the industry. David has extensively promoted the use of bushfoods and acted as a consultant to regional Development and Agricultural industry groups. He chairs a committee investigating the use of native species for salinity abatement in the Goulburn Valley. With a background in farming, Koori and outdoor education, David has a special interest in the environment, cultural and ethical aspects of bushfood. His work with TAFE on Tourism and Cottage Industries is complimented by his presidency of 'Friends of the Grampians/Gariwerd').

12.00 NOON
Bush Tucker Lunch
Juleigh Robins, Owner of Robins Bush Foods established with her husband Ian, in Melbourne in 1987. Author of *Wild Lime—Cooking from the Bushfood Garden.* Chef, former restaurateur, member of Australian Native Bushfood Industry committee's steering committee. (See Juleigh's Paper *Marketing Bushfood in Australia and Beyond*, presented to an Agribusiness Seminar in Benalla, July 1996). Juleigh will introduce today's lunch.

1.45PM
New Ventures in an Old Environment
Group A Visits:
Ngamidjidj art site at Mt Zero and Winfield Roads, north of Hall's Gap. David Thompson from the Southern Bushfood Association and an Aboriginal Guide from Brambuk will visit the art site and explore bushfood in the natural environment.

3.30PM
Depart for Mt Zero olive plantation to meet with Neil Seymour who will conduct a tasting.

4.30PM
Return to Camp.

Group B Visits:
Wartook Native Fish Hatchery via Roses Gap Rd NW of Hall's Gap to meet with owner Bruce McInnes.

3.20PM
Depart for Ngamidjidj art site at Mt Zero and Winfield Roads, north of Hall's Gap. David Thompson from the Southern Bushfood Association and an Aboriginal Guide from Brambuk will visit the art site and explore bushfood in the natural environment.

4.30PM
Return to Camp.

5.15PM PLANTATION CAMP
Arrive at Plantations Camp approx 12km north–east of Hall's Gap. Set in the State forest, abutting the Grampians National Park.

6.15 – 7.15PM
Campfire Conversations
Moderators: Colin Sheringham (Colin Sheringham is a lecturer at the University of Western Sydney); Eric Rolls; Alan Saunders; Cath Kerry (Cath Kerry is a chef, restaurateur and caterer in Adelaide and is also a food writer).

7.30 PM
BBQ Dinner
Designed by Rosario Scarpato, Andrew Wood and Phillippa Grogan.

TUESDAY 31 MARCH – PLANTATION CAMP
8.00 AM
Camp breakfast

9.00 AM
Securing the Future: History + Food Policy Session
Moderator: Rosemary Stanton

9.10 AM – 11.00 AM
Transport Logistics, Trade Cycles and the Political Economy of Food in Southeast Australia, 1850's – 1920's.
(John Fitzpatrick, Senior Lecturer in International relations, School of Political and International Studies, Flinders University, South Australia.)

John Fitzpatrick was educated at University of Queensland (BA 1st Class Honours in History) and Australian National University (PhD in International Relations). John has had an extensive academic career at a number of Australian universities. His main food–related research interest is 'Food and the political economy of Empires'.

Ensuring we Have a Future.
(Eric Rolls,Historian/Environment/Writer/Author/ Poet.)

Eric Rolls was born in Western New South Wales and served in New Guinea in WW11. After the war he married Joan Stephenson, had three children, and farmed until 1986.

Between 1986 and 1991 he authored eight award–winning books, including Celebration of the Senses. Since marriage to Elaine van Kempen he has published another six books, including *Sojourners, and Citizens* (the basis for the SBS documentary Flowers and the Wilde Sea), and *Celebration of Food and Wine* (three volumes—published as a single volume edition in March 1998).

In 1991 he was awarded a 3 year Australian Creative Fellowship to research and write (assisted by Elaine van Kempen) *The Growth of Australias: the shaping of a Country.* In 1992 he was made a member of the Order of Australia (AM) for services to literature and environmental awareness.

In 1995 he was made a Doctor of the University by the University of Canberra, with the citation that "Eric Rolls... has managed in a series of books and articles that span forty years, to set the human experience of living in Australia in the context of the history of the land itself as well as its people... he writes in order to learn, and he learns in order to write, and he does both with distinction... he is without peer in our country".

Of living in the country and now on the NSW mid–north coast, he says, "the land is an excellent background for a writer: it gives solid support yet maintains a sense of vulnerability, it produces marvels and disasters; it promises and retracts. It keeps life in balance and preserves a proper sense of the ridiculous, essential in a writer. The sea, the river and the lakes provide the bonus of fishing as a reward for a good day's writing. Technology makes it possible for us to work anywhere".

Nuts to You: International and National Regulations and Consumer Issues.

(Gae Pincus, BA, LLB, is an international consultant in public policy and regulatory issues, including food regulation, Chairperson of the Council of the newly established Energy Industry Ombudsman Scheme in NSW.)

Gae Pincus has a wide range of legal, public policy and administration experience. She was the inaugural Chairperson and CEO of the National Food Authority from 1991 – 1995. Her responsibility at the Authority was for it's establishment and early national and international recognition as a professional body making timely recommendations on food standards matters, based soundly on science and on open and transparent public consultation processes. This initial policy approach and development saw New Zealand enter the Australian food standards setting scheme with the expansion of the Authority into the ANZFA in 1995.

Gae has also undertaken: A number of assignments for the UN FAO in Rome on the Codex Alimentarius, including the impact of Codex of the World Trade Organization and the new GATT trade disciplines; Assignments for FAO in Indonesia and Sri Lanka advising those governments on food control administration and assisting with the drafting of new food laws consultancy on telecommunications policy and regulation.

Food Policy for the 21st Century

(Dr. Barbara Santich, writer, researcher, food historian and one of the founders of the Australian Symposium.)

Barbara is one of a few who has attended all Symposia to date and also attended and presented papers at many of the Oxford Symposia.

Barbara completed her doctoral studies at Flinders University, South Australia. Her thesis *Two Languages, Two Cultures, Two Cuisines* investigated medieval culture and cuisine and involved research into agriculture, medicine and dietetics, social structure, religion, economics and trade. Subsequently, as a PHRDC Research Fellow at the Department of Community Medicine at University of Adelaide, she completed a research project titled *Barriers to the implementation of Dietary Guidelines.* She has also prepared a report on 'junk food' and its consumption.

Her work is widely published in Australian and international newspapers and magazines. She has written: *The Original Mediterranean Cuisine,* 1995; *What the Doctors Ordered: 150 years of Dietary Advice in Australia,* 1995; *Looking for Flavour,* 1996; *McLaren Vale: Sea and Vine,* 1998.

Panel Discussion

The speakers will be joined by: Jennifer Hillier, who is currently undertaking a PhD at Flinders University on cookery books entitled *Recipes for Life: A study of the values promoted by selected Australian cookery books* (Jennifer Hillier was educated at Flinders University [BA 1st class Honours in English], and established the Uraidla

Aristologist Restaurant in 1981. She has attended all past symposia and presented papers on *Markets and Market Gardens, Theatre and Dining, The Carnivalesque,* and *Authenticity and Sustainability*); Sylvia Roughan, who is currently undertaking a Masters by Research at the Institute of Land and Forest Resources, University of Melbourne. Her Paper *Food Choice and the Quest for Variety —Modeling the Food Preferences of Contemporary Australia* is printed as part of the Symposium Proceedings.

11.10 AM

Bushwalking Sundial Peak Picnic Ground.

Options: A guided tour of no more than 20 people to walk to Sundial Park. Easy walking 1 – 1/2 hours. The Park Ranger will discuss the evolution of the Grampians. For the less energetic: a Ranger will stay in the picnic ground, leading short birdwatching walks out to Lakeview (1km). For the more determined: an unguided walk to the well marked Pinnacle (4.2km). Fairly fast 1 – 1/2 hour walk over medium terrain with some rock hopping.

1.10 PM

Yabby Boil Lunch

Designed and prepared by Jeanette Fry.

2.10 PM

Coach departs Sundial to return to the Camp.

2.30 PM

Securing the Future: Values + Philosophical Issues

Moderator: Barbara Santich

2.40 PM

The Money or the Tuckerbox? Securing an Economic Future.

(Michael Symons, PhD in Sociology of Cuisine from Flinders University, 1991.)

For fifteen years Michael was a partner in the Uraidla Aristologist Restaurant and instigated the Symposium of Australian Gastronomy in 1984. Michael Symons is the author of: *One Continuous Picnic: A History of Eating in Australia,* 1982; *The Shared Table: Ideas for Australian Cuisine,* 1993; *The Pudding that Took a Thousand Cooks,* 1998.

New Global Cuisine. Australian Gastronomy at the End of History.

(Rosario Scarpato, Italian–born, but living in Melbourne since 1989. Cook/Food Consultant/Food Writer.)

Rosario studied Sociology and Cultural Anthropology at the University of Naples before working as a journalist, radio broadcaster and publisher. Among his other activities in Italy, Rosario worked closely with Salvatore Di Meo, one of the most prominent Italian Chefs, to edit a book on the Neapolitan aristocratic cuisine. He founded the magazine *Mangiare & Bere* (Eat & Drink). In Australia he has published: *The New Mediterranean Cuisine, The Italian Cuisine of La Dolce Vita, Italian Cuisine of Love.*

During 1990 – 1994 he managed the Italian Cuisine Expo and was publisher/manager/co–ordinator of *My Cuisine.* In 1994 – 1995 he owned and was head chef at Cucina Italiana. Since 1993 Rosario has been studying new trends in contemporary World Cuisine, particularly in Australia, and is writing a book on New Global Cuisine (see *Divine #14*).

In 1997 he contributed to the realisation of a comprehensive book on Ancient Roman and Greek Cuisines and currently writes for the Italian magazine *Gambero Rosso.* Rosario is Director of Australian Personal Chef, and has established Monzu, an exclusive service for fine home dining where he cooks New Global Cuisine.

Cuisine Nostalgie?: Tourism's Romance with 'The Rural'.

(Dr. Jean Duruz, Senior Lecturer in Cultural Studies, University of South Australia 1977, Research Fellow,

University of Technology, Sydney.)

Her publishing has focussed on women's memories of 'the suburban dream' in the 1950's and 1960's in Australia and on the operation of cultures of nostalgia (kitchens, gardens, farmhouses, food) and in the 1990's popular imaginary. Currently she is completing a book on consumption, memory and femininity. She is also conducting research on food, place and identity in contrasting inner–city suburbs of Adelaide and Sydney, and her work is published in a number of Australian books and journals. She is often interviewed for radio and has participated in several documentary videos.

3.50 – 4.30 PM
Discussion Session

4.30 PM
Afternoon Tea
Prepared by women from Cavendish Community Service.

5.00 PM
What Progress the Banquet?
An opportunity to engage with Cheong Liew and Phillip Searle during preparations, or even lend a hand.

6.00 – 7.00 PM
Camp Fire Conversations
Moderators: Barbara Santich; Gay Bilson (Gay Bilson is a writer and restaurateur and food performance artist); Elaine van Kempen (Elaine van Kempen is an Historian and Heritage Consultant); Nancy Williams.

8.00 PM
The Banquet: Beyond the Tucker Box
Prepared by Cheong Liew, Phillip Searle and assistants.

WEDNESDAY 1 APRIL PLANTATION CAMP
8.30 AM
Camp Breakfast

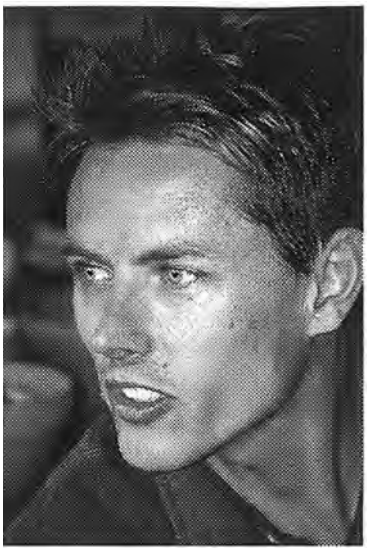
10.00 AM
Gather in Meeting Tent
Moderator: Alan Saunders (Alan Saunders is well known to the Symposium and always achieves the amazing task of recording the proceedings. He is an award–winning food journalist, renowned presenter on ABC Radio National and author of *A is for Apple.*

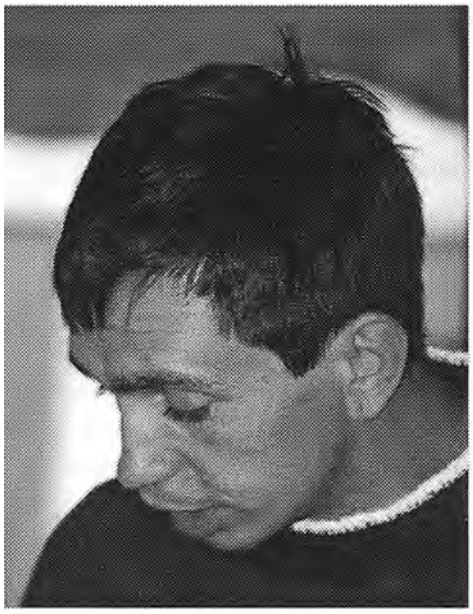
Reports from Camp Fire Conversations.

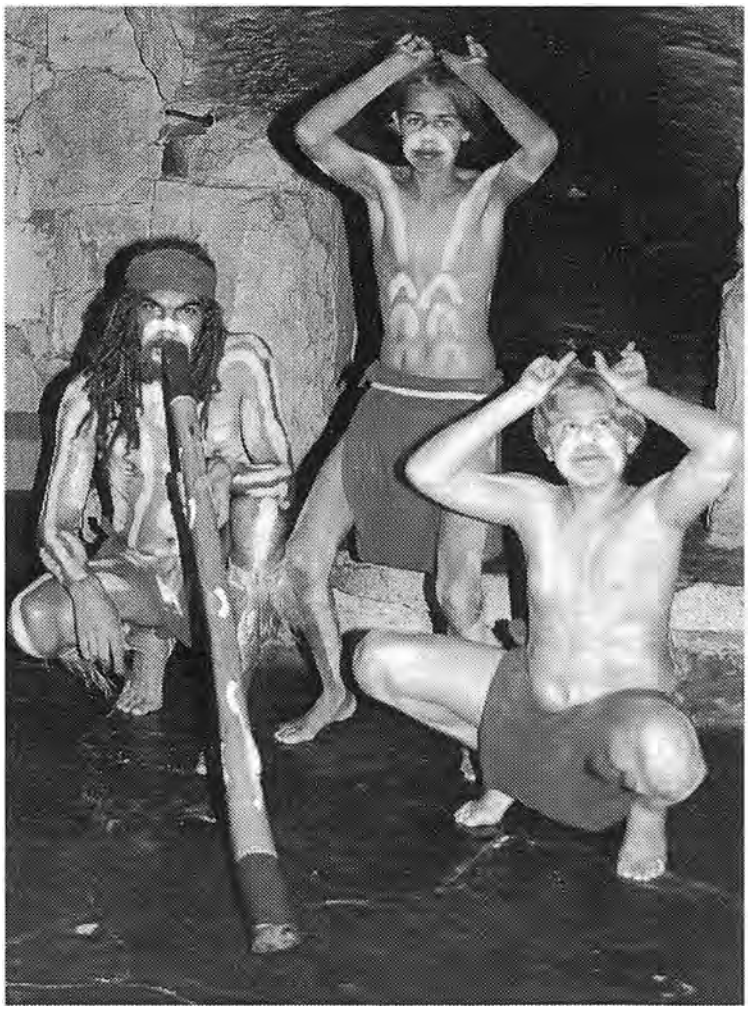
10.40 AM
The Future: So What?
Dur–é Dara

Summary Session
Prepared by Alan Saunders followed by Plenary Session

12.00 NOON







1enth Symposium of Australian Gastronomy

Day 1

Beyond the Tuckerbox

Securing the Future

Welcome

Marieke Brugman: Ladies and Gentlemen—Good evening. My name is Marieke Brugman and I welcome you all very warmly to the Tenth Australian Symposium of Gastronomy. It seems extraordinary to be celebrating a tenth anniversary of such a notable event. Welcome to friends, new and old. We are fortunate enough to have quite a number of the original founding members of the first Symposium, which was in 1984. Amongst them are Cath Kerry, Michael Symons, Jennifer Hillier, Dur-é Dara, Barbara Santich, Lois Butt, Gay Bilson. There is also a special symmetry, I think, in having the two original Banquet chefs from that Symposium, Phillip Searle and Cheong Liew. They're here to produce the Tenth Banquet—out in the bush.

A survey of Australians recently told us that, when asked to define their 'Australianess', most people expressed this feeling through their relationship to landscape. Not through culture, or heritage or tradition. It seemed rather irresistible to offer our largely urbanised, coastal dwelling symposiasts an opportunity to explore one of Australia's most ancient, significant and majestic landscapes, and to spend the next few days in serious contemplation of how it forms that essential core to our identity; how we manipulate it, how it teaches us, how to share it's resources across cultural barriers, how to nurture it —so indeed we live with it in mutuality and so it's capacity to sustain us is ensured for the future.

The degree to which the urbanised experience is now de-natured is reflected widely in our politics, our economics, and our social organisation. We hope in someway that this, the Tenth Symposium, will repair the rift between urban, rural and wilderness communities and create new bridges of understanding across the crisis.

The notion of regionalism in Australia has always seemed to me somewhat spurious, yet each region throws up it's own peculiarities, modes of production and ways of interacting. Our first bracket of speakers tonight, most of them are locals, are terribly concerned with the facets of landscapes, and how to work in it and with it, and they have been asked to speak from their own areas of expertise to illuminate the multiple facets which make The Grampians so special. I'm just going to ask Sarah Stegly to welcome you also—she co-convened this Symposium.

Sarah Stegley: Thanks Marieke. Welcome everybody, it's great to have you here. I've just spent the last few days out in the bush out there building a little city for us all to go and move to, so you're on the road to Damascus Those of you who aren't converted to caring and loving the nature that is out there soon will be, because you're going to be living out there with us, and it's much more comfortable than you might suspect. Some of the campers who've been out there have been coming up to us and saying, "What is this?" "Who is coming", so I described some of you to them, and they all left!

It's particularly, and personally, a very lovely experience to welcome my great friend Nancy Williams here to the Symposium. Nancy was kind enough a few years now, probably six or seven, to take me out into Purnululu —which is now known as The Bungle Bungles. She took me out there with the Purnululu people, and it was a part of Western Australia that not too many whites had seen. It's now of course a highlight of the tourist route.

We were told by the Department of Everything—I think they called themselves CALM, which stands for Conservation and Land Management, they told us there had been no aboriginal involvement in Purnululu, but when we were out there with the aborigines they showed us grave sites and amazing cave paintings. So there's been a lot of nonsense around for a long time, and there are some people here today and over the next few days who will help us decode some of that nonsense. Thanks all for coming. It's taken a leap of faith to leave the city and come out to the bush, but you've made it. Thanks very much.

The Grampians

Marieke Brugman: It gives me great pleasure to ask Graham Pizzey to be our first speaker. Those who come from Melbourne I think will remember, with huge affection, Graham's regular columns through our various newspapers. My favourite piece he ever wrote was when he actually re-located to The Grampians and had to create a new garden. Could I ask Graham up please? Basically we've provided through the notes everyone's c.v. And for the speakers following Graham I'll simply ask them to come up. Thank you

The Grampians—its History, Geography, Evolution Flora and Fauna—Natural Australia in Microcosm
Graham Pizzey: I feel rather daunted kicking the show off, but most appreciative to be asked, and I'm going to reveal my age immediately by saying that I remember cartoons from London Punch. Years ago there was a particular cartoon in Punch, which had two tweedy Western farmers leaning over a farm gate watching a flying saucer which had just landed in a field. Two little green men with the usual antennae poking from their heads were walking from the craft towards the farmers. One farmer watched this for a minute and then he turned to his companion and said quite calmly "London folk I expect". Perhaps that story is more likely to amuse local Grampianites—who see a weekend influx from the city, than others.

In Australia today there's an even greater gulf in understanding, sense of time, and emphasis, between busy everyday urban—and particularly political—life, and the immense time scale and geophysical events which have shaped places like this great Grampians National Park. I don't think too many of us realise just how great it is. It's got 400,000 acres, in the old scale, of mountains and escarpments, streams, heaths, woodlands, bush; and together these hold something like a thousand of Australia's fifteen thousand plants; two hundred out of our eight hundred birds, thirty of our two hundred and fifty mammals, to name only the major groups. And incidentally they attract about twice or three times as many human visitors each year than Kakadu does, so it's some place.

Since coming to live near the Grampians some twelve years I've been trying to make the mental adjustment to begin to understand the background of this place. Trying to understand some of the innumerable fine-tuned interactions and complexities which have shaped Grampians plants and wildlife working together as we know them today.

Much of The Grampians are thought to have been laid down as sedimentary sands as much as six kilometres deep, in a vast freshwater lake, perhaps 400 million years ago. Compressed and heated by their own weight, those sands eventually became the flint hard sandstone we know today. And much later they were uplifted and buckled unmercifully by earth movements, which was followed by massive erosion which left gentle slopes of deep fine sand and the countless up-thrust precipes and ledges which give The Grampians their visual character today.

Steep escarpments arose through this uplift along what are now mostly the eastern faces, backed by long gentle westerly slopes, giving the characteristic saw-tooth roof effect you see as you approach across the plains. After living here for twelve years, it's quite extraordinary how nostalgic you can feel as you approach across and you see these suddenly starting to loom up ahead of you.

Now much of this activity took place while Australia was far from the present position and was part of the landmass that later became Gondwana. Now let's come forward to a mere fifty million years before the present. Australia is just about to separate from Gondwana and begin it's long drift north, like South America and Antarctica which now are all that remain of Gondwana; the continent is partly clothed in temperate rainforests which contain many of the new flowering plants which began to evolve some millions of years before. Equally important, those forests are already populated by the ancestors of many of our present birds, emus, parrots like the Crimson Rosella, birds of prey, waterfowl, even primitive songbirds—and that was quite a step of learning for many ornithologists to realise that there were songbirds back fifty million years ago. We thought they were probably about twenty million, and suddenly we have to rethink the whole business. It's much longer than we think. And of course they were joined by the ancestors of echidnas, platypuses and the great marsupials, fauna which grew up.

Now after the combined continent of Australia and New Guinea finally separated and began the long drift north, those ancestral birds, mammals and others, embarked upon what is going to be regarded as one of the greatest evolutionary explosions the world has ever seen—an orgy of evolution if you like—undisturbed by interlopers for well over twenty million years and driven by dynamic changes in climate, latitude and vegetation, they were able to radiate into new species to their hearts, and I guess their loins, desire. With all respect to Noah's rather amateurish effort some time later there never was an ark like ancient Australia.

As the continent sailed north, the ocean circulation, which had been driven round Gondwana by the Roaring Forties, and helped maintain a moist climate, fell behind. Australia became drier, and as its northern parts approached the Equator, the once widespread rainforest retreated. Soil fertility which had always been low, declined further, and over some twenty million years a tough, thrifty, totally new vegetation dominated by eucalypts, acacias, casuarinas, banksias and so on became dominant.

Not only did those new woodlands provide endless niches for the whole slew of newly emerging birds and mammals, but many of their plants—like the, I must admit, cultivated, red-flowered Yellow Gum; their blossoms pollinated by birds as well. In their habits and their very plumage, many of the birds took on the understated tones of the new untidy Australian bush. Now, one outcome of these processes which I find particularly interesting, is that today we have some three hundred—I think a few more—species of so-called old endemic songbirds; songbirds of the higher group of the birds, the passerines, which are reckoned to have evolved later than the rest. We have about three hundred of these, out of a total list of some eight hundred species, which began to fill specialised roles in the new vegetation. We haven't realised this for very long. It's only in the last decade perhaps that DNA tests have shown fairly conclusively, that all these creatures are more closely related to each other, than they are to songbirds overseas; and it seems fairly plain that most of them arose from a tiny group of ancestors that just got onto the Ark before it set off from Gondwana.

Ironically—there are all sorts of interesting contradictions in Australian zoology—these old endemics include most of the species to which our early settlers very quickly gave English names. Wrens, robins, thrushes, magpies and so on. None of them were remotely connected with those species, but it didn't stop our homesick settlers and convicts from giving them those names, and we've been struggling with the identity of these creatures ever since, and it's only since DNA started to unravel the whole thing, that we're starting to see the true picture. The Grampians have got a substantial share of these songbirds and I want to come back to them in a moment.

Now for reasons still not clear, and I've never met a botanist who can really clarify this, poor sandstone soils often produce a teeming diversity of flowering plants. You see this on the West Australian sandplains and you see it in the Sydney sandstone. As mentioned, the Grampians have their share with about a thousand species of plants and because these small mountains rise abruptly from the plains, within about a hundred kilometres of the Southern Ocean, they are—or used to be—well watered, and their blossoms consequently, abundant. On a winter or spring morning after rain, they can look like the morning and the garden of the world.

Now most of the blossoms of these plants are bird pollinated, and consequently you get a very heavy blossoming in winter when birds are most active. These bird pollinated blossoms tend to be bell-shaped, like this correa; to have fine attenuated little corolla tubes like flame-heath; or spider-like flowers like grevillias.

These winter flowering shrubs, which are bird pollinated, mostly have red or yellow flowers; because they're the colours that excite birds most—that attract them. As spring moves into late spring and early summer, and insects become more abundant, there is a distinct shift from red and yellow blossoms to blue and white blossoms; because blue and white blossoms attract insects best. Now this of course, not surprisingly, with the diversity of blossoms and the insects that attend them, helps increase the diversity of woodland birds.

The collection of birds in The Grampians and of course most other Australian woodlands, is not just a random collection, but in fact a fine tuned system of complementary physiques and talents of quite Olympian standards that have expertise hammered out to the point where, if you compare several species that share the same tree, you can see quite minute differences of leg length, or of the length of wing and so on—fine differences that make all the difference in earning a living.

Now as a result of this fine tuning, today you can look at a Grampians woodland tree like a big River Redgum, and predict with some certainty, what birds are likely to be foraging in its many compartments from the canopy down. In the high foliage, Striated Pardalotes that evolved to clip lerps and lerp insects off the leaves; and they've got little notched sturdy bills to do the job. White–eared honeyeaters who have given up mostly eating nectar, but they probe for the sweet substances released by sap–sucking insects, and many of these hide under the bark. If you want to find a White–eared honeyeater, you listen to where the bark is being ripped and rustled and that's where you'll find them usually. New Holland honeyeaters are still conventional nectar eaters, and they seek nectar in the blossoms; flying in groups from tree to tree.

Lower down Thornbills climb through the branches, probing for moths and larvae in the gaps between the fine branches. Sittellas settle on the high branches and work down, and they've got a little up–tilted bill that enables them to lever off flakes of bark as they go—that's their speciality. In contrast to them, both Brown treecreepers and White–throated treecreepers glide through the base of trees and spiral upwards, and as they go up they take many ants; now whether they take mostly sugar laden workers coming down, or empty ants and ballast going up the tree, I can't say.

Male Golden Whistlers methodically search the foliage with their eyes and look for large caterpillars, and while they forage they sing, and their mates which are grey, feed down out of sight below them seeking a different range of insects, so the two sexes can get double value out of one foraging territory. It's a technique that quite a number of our birds use. Crested Shrike–tits use their whacking great powerful bill to tear away bark which covers large insects and Huntsman spiders. Grey Fantails hunt small flying insects. Scarlet Robins use perches around the open woodland as a base to dive on moths and larvae on the ground below. Yellow Robins do the same, but only back in dense dim parts of the habitat. Shrike–thrushes work over the lower trunks for larger creatures, including small mammals sometimes. Blue wrens shelter and nest down near the ground in stands of bracken under these trees.

Now if current DNA determinations are right, each of these species goes back to a handful of corvine ancestors that got on board The Ark at the beginning of the Great Australian adventure. They are just as Australian as the Red–neck Wallabies of our more famous marsupial radiation, which took place at the same time, and which have mostly ended up on our lawn.

Now beyond the fact that the early settlers usually ate some of the native birds and mammals I've been talking about, you may feel that the story I've tried to touch on has comparatively little relevance to this Symposium. These days it's a bit hard to eat many of those birds; but perhaps there's more than a passing connection. If we can come to appreciate and understand some of the complexities of a splendid natural entity like The Grampians we are, to that extent, closer to the whole natural world that, almost as an afterthought, produced us, and all our contradictory talents at brilliant creation and mindless destruction.

Urban humanity may have perfected ways to insulate itself physically from the natural world, but it can't seriously cut itself free emotionally and aesthetically. As Wordsworth put it "We come into this world trailing clouds of glory"; and we deny our natural heritage at our own peril, I believe. One of the tragic concerns of this era is that, even in a country like this, so many urban kids are growing up with absolutely no emotional bonding with the natural world at all. No idea of where their roots lie; no natural sense of place.

There are many paths toward a glimmer of understanding of the natural world—bird watching is only one of hundreds. No doubt a proper appreciation of good food, and of the soils and climates and subtleties of selection and preparation that enhance it, is another. Clearly a Symposium like this, by, so to speak, getting to the grass roots of food can bring us an appreciation of, and an emotional bonding with, the surrounding natural world, which nourishes every part of us. There's a huge potential here for improving both our sense of palate and of place; and if I may say so, I wish it every success and I thank you for listening to me.

Marieke Brugman: I'd like to invite Viv Thompson up please. Viv is the Managing Director of Best's Winery and has generously contributed some of his wines to the Symposium. Thanks Viv.

The Region's Wines

The Region's Wines

Viv Thompson: Major Mitchell passed this way in 1836.

Gold was first discovered at Pleasant Creek in 1853. At Great Western the first find was in 1858 and four months later there was a police camp already established.

With the demise of the gold rush, miners and suppliers turned to the land. French and Swiss immigrants, seeing similarities between their homeland wine regions, in particular around Gers and Boudry, turned their hand to wine growing.

Where the first vines were obtained from is lost in the mists of time, but it is considered that some originated from the Busby Collection and to have come to the district via Geelong. Some of those original vines are still producing today.

The Government doled out with a niggardly hand, at casual auctions, strips of land along the Concongella Creek. One Loius Metzger purchased one such parcel of land. With the view to producing wine, Metzger was the region's pioneer vine–planter and winemaker. A Frenchman with exceptional knowledge on the subject, his small scale experiment was successful, proving to his neighbours that the land and climate were conducive to wine growing.

Impressed by his example, in 1863, Messrs Trouette and Blampied set about establishing their St Peter's vineyard a few miles up stream at Great Western. Trouette and Blampied established a nursery selling vines to others and planted their own vineyard along the Concongella Creek. As the vines matured an impressive winery was constructed. Trouette and Blampied produced the first sparkling wine in the Colony of Victoria.

Inspired by Trouette and Blampied's sparkling wine, the energetic Hans Irvine, who purchased the Best's Great Western Vineyard (now Seppelt Great Western) vineyard, in 1888, was to further the history of sparkling wine production in Australia.

French Champagne expert, Charles Pierlot, who learnt his trade with the House of Pommery, visited Australia with the idea of gaining employment in the embryo industry. Irvine met and invited Pierlot to join him at Great Western, a challenge Pierlot accepted. During his 1891 trip to Europe, Irvine, an industrious man, visited France to see for himself the aspects of Champagne production.

Hence the birth of Australian sparkling wine. A tradition that has carried through to this day, with Seppelt Great Western Winery the seat of Southcorp's sparkling wine operations, the biggest production facility for sparkling wine in the Southern hemisphere

The historical ondenc, affectionately known as 'Glory of Australia' then 'Irvine's White' was the basis for white sparkling, while shiraz formed the base for the now famous, world recognised red sparkling wines. Today, with the upsurge and interest in vine varieties, sparkling wines are produced from a wider range of varieties, in particular the recognised traditional varieties, chardonnay, pinot noir and pinot meunier.

Side by side with sparkling wine the district also produces fine table wines. In an 1890s address, Irvine told a gathering that Hermitage, Burgundy and Malbeck were considered the best varieties for the region. Today, these varieties, now known as shiraz, pinot meunier and dolcetto, still grow in the region, with shiraz the flagship of the region.

Closely on the heels of Trouette and Blampied came the Best family. The Best's, brothers Joseph and Henry, assisted by family, ran a slaughter yard enterprise where Seppelt is now situated. Impressed by their neighbours, Trouette and Blampied's enterprise, they planted their first vines in 1865 next to the slaughter yards. In 1866, they purchased land close by, along the Concongella Creek, which they set to planting to vines with much enthusiasm. The Concongella vineyard was born. These two vineyards and subsequent wineries were destined to become the only vineyards and wineries in the region to successfully carry through to this day. They have played an important role in the creation of the fine reputation the wines of the region enjoy today and in the shaping of the Great Western district which is the nucleus of the Grampians region.

Impressed by the success of these four ventures, many other vineyards and wineries sprung up in and around

the gold fields districts. The majority of growers produced their own wine which they sold either to a larger winery as one year old wine, or on maturation, in bulk to a merchant or bottled under their own label.

The majority of one year old wine, especially that produced in the Great Western and Rhymney was sold to Hans Irvine at Great Western vineyards. William Thomson & Co., of Best's Wines purchased both Great Western and Rhymney district grapes and one year old wine. Merchants Leo Buring, Alexander & Patterson, Max Cohn and J.J. Gollers & Co., were also purchasers of regional wines.

By the 1890s, coinciding with the Land Boom, regional wine growth was at its zenith. Their were four Viticultural Associations: Great Western, Moyston, Stawell and Ararat; within the proposed area with a total of 1,912 acres under vine and 112 vignerons. Along with the Land Boom came the desire to look to export.

Regional wines already enjoyed recognition overseas. The Best brothers, together with Trouette and Blampied, had long been winning medals and prizes for their table wines, in this and other colonies, as well as England and France. In 1891, Han Irvine undertook a trip to Europe with the express purpose of placing the wines of the district on the English market. Irvine's trip heralded the beginning of a successful growth of district table and sparkling wines. both bulk and bottled, to England and India. Export sales reached their zenith in the early 1920s.

The *Ararat Advertiser* reported on 26th June, 1913 "Mr A.M. Laughton, Victorian Statist, has issued an interesting return showing the area under and produce of wines for 1912–13. From the return we extract the following. Stawell Shire—Number of growers, 53: grapes gathered, 18,013 cwt: wine made, 86,013 gallons. Ararat Shire—Number of growers, 39: grapes gathered, 11,694 cwt: wine made, 87,422 gallons.

Despite these healthy returns, the demise of the local industry was already in motion. It was reported in a 1913 issue of the *Ararat Advertiser* that "another of the local vineyards is about to be uprooted and the land again used for pasturage purposes". The high cost of wages, the charges demanded was the reason behind the decision, and the fact that grazing sheep calls for little labour outside his own family.

The 1920s Depression ushered in further slow, sad demise of the region's grape growing excitement, community employment opportunities and riches. By the end of the 1930s the surviving vineyards were centred around the Great Western district, the natural nucleus of the region's wine industry since its inception in the 1860s. Three only, Seppelt and Best's at Great Western and St Mark's at Rhymney, were commercially viable. The balance of the district vineyards and wineries slowly slid into oblivion, were purchased by neighbouring sheep farmers or, as in the case of St Ethel's and Hockheim, purchased by Seppelt as part of their expansion program.

St Mark's last vintage in 1949 marked the end of an exciting era and tough times ahead for the two surviving wineries, Best's and Seppelt. These two pioneer vineyards were the only enterprises destined to survive successfully beyond the 1950s to this day.

The demise of the industry within the region can be attributed to a number of facts and circumstances. The Depression was the single most devastating factor, but the importance and growth of wool returns certainly played its part.

The prices for bulk wine fell to threepence a gallon, not enough to cover costs. From the Depression through the War years to the early 1950s life was tough. Money for wine was indeed a luxury few could afford. The culture of the day did not include wine, in fact it was almost socially unacceptable to be seen drinking wine. Although in this district it was still considered very much an integral part of 'Shearers Break–up'.

For the two pioneer vineyards, Best's and Seppelt, the quiet years following World War II to the 1960's, were a period of consolidation Under the leadership of third generation vigneron, Eric Thomson and Roseworthy graduate, Colin Preece respectively, Best's and Seppelt stood in good healthy instances, ready to play their part in the 1960s renaissance Australian wine industry.

Domestically, the 1950's and 1960's were buoyant years.Wool prices were high and wine by the early sixties was once more enjoying a high profile. People on the land were considering diversification within their product range. In response to Australia's healthy outlook, the wine industry was looked upon as a bright arena for future investments. With diversification in mind, Russell Dalkin and his son Bruce, planted an area of their Great Western district property, 'Westgate' to vine. Stawell businessman, David Mccraken set to establishing

Boroka at Halls Gap. The Fratin brothers of Ararat, established Mount Langi Ghiran vineyard, emulating the vineyards, chestnut groves and the life style of their native homeland.

In 1970 Ararat engineer Desmond McRae, established a vineyard on the slopes of the township. On maturation of the vines the McRae family sold their engineering business, built a winery and set to establishing the name Montara within the wine industry.

The Thomson family of Best's and the late Colin Preece of Seppelt gave unstintingly of their time and wide knowledge of viticulture and winemaking to the fledgling enterprises. In 1960 there were two vineyards and wineries. Today thirty eight years later there are 27 vineyards, six of which are non–bearing with eight established wineries in the Grampians wine region.

The area of Great Western has consistently produced high quality table wines for well over one hundred years. Over one hundred years ago wines of the district were winning acclaim in international shows, the same thing is happening today. This district (Great Western) has persisted where others have failed. Could it be that we have continually produced wines of a style that have been accepted through the decades, or has it been the tenacity of the people who, like the vines they tend, have hung on and persisted when the going got tough? Or a combination of both?

It is our intention to pursue the recognition as a Geographical sub region the historical district of Great Western. This will not be easy because of the implications that arise with the name Great Western also being the brand name of one of Australia's largest selling sparkling wines—watch this space.

The newly proclaimed wine Geographical area of the Grampians has incorporated a more diverse area of soils and climate. This if anything, has enhanced and broadened the scope of the wines to be produced in this enlarged area.

I was fortunate in that from the time I started in the wine industry the only way has been up. The 1960s was the first red boom period. Red wine was in and fashionable, whether it be dinner parties in Toorak or Footie BBQs at Great Western— Red was the thing.

As an industry we emerged from a peasant underclass to be socially equal to the wool barons who were on the way down. Red wine was king, but grapes really hadn't been discovered. For another ten to fifteen years names like chardonnay, sauvignon blanc were more likely to be names for Melbourne Cup horses than grape varieties. Anyway they were white varieties and therefore of little consequence.

Within 10 years of the first great red boom we experienced the first red bust. Australians were tired of drinking warm heavy reds when it was 40°C in the water bag and decided it was much more pleasant to drink chilled riesling.

In 1975 when Trevor Mast came to work for me, one of his first challenges was to make shiraz into riesling. Even for Trevor this was difficult.Riesling reigned for a number of years. Cabernet sauvignon, at the expense of shiraz, slowly emerged—pinot noir had not been sighted at this stage.

Come the late eighties and the arrival of the juggernaut chardonnay, laying waste the rieslings, cabernet sauvignons, shiraz and anything in its path. By the mid–nineties, after nearly thirty years, shiraz is back in force and I beg the question, is riesling actually raising its delicate eyebrows for a wink of recognition.

Pinot noir is now favored among the converted, merlot by the trendy, dolcetto by the adventurous and pinot meunier by the true appreciators of red wine. A plethora of varieties and styles are now available to meet the challenge of the continual change of food styles being presented to us through Australian restaurants. I cannot guarantee that the wine industry can meet your every challenge, but speaking for wine growers in this district we will give it our best.

The big challenge now and as of the last fifteen years is viticulture This area boasts soils of marginal fertility, limited water and extremes in climate from snow to 40° heat. What do we plant? Climactically we are restricted to early to mid–season varieties

The trendy Rhone varieties of grenache, and mourvedre will not fully ripen here. Marsanne, semillon, and viognier are probably marginal. What about the great Italian varieties of sangiovese and nebbiolo? If we do grow them successfully, can we sell them, can the waiters and people pronounce the names?

This region has always striven for quality. The grower and winemaker are committed and we look forward to the challenge of the future.

Marieke Brugman: I'd like to welcome Will Studd. Will is Managing Director of Calendar Cheese Company, who has provided us with most of the Western District cheeses we'll enjoy in the next few days.

Western District Cheeses

Western District Cheeses

Will Studd: History, geography and climate have played a big part in the very short history of cheese from this area. First of all, the history. The Western District was first colonised, if that's the right word, by the Henty family down at Portland, who brought over some beef cattle from Tasmania and illegally parked them there, and that went on for two or three years in the early 1830's. At that time Melbourne hadn't been discovered or thought of, and it wasn't until 1835 that a little ship called Enterprise sailed into the Bay and founded the Colony of Melbourne. But the real dairy farming of the Region didn't start until three or four years later when Thomas Mitchell found his way across from Melbourne, across what probably some of you know as the Stony Rises, across to Portland, and he thought he was following a whole new farmland out that way. When he crossed the Stony Rises, he was very surprised to find that Australia already had cows in that part of the world. They didn't realise that there were actually cattle over that side.

In the early 1830's it was basically pretty small time geographically. For early settlers the coastal regions were ideal for cattle. The bush wasn't too bad. You didn't have to fight your way across the Stony Rises or the Otways, so to park your cattle down by the beach wasn't difficult at all, but it was very limiting in terms of developing herds, and developing a real industry. There are records of butter being exported with great glee back to Launceston around 1838.

The Western District since then has become wonderfully diverse, in terms of encompassing all the different breeds of animals that can be milked in Australia. If you've ever taken a drive down the road from Geelong, down through the Western District, down towards Hamilton way—on the left hand side you can pretty much see cows and on the right hand side you can see sheep. If you head up towards this way, if you're lucky you'll see a few goats. Basically, the climate works from the north to the south and you could argue that the cow is king down the south coastal regions and up in this part, its certainly the sheep and very recently, the goat.

Now if you go back into history, the real development of the dairy industry did not really start until after the Gold Rush. Prior to that it was all beef. The gold miners who came up into these parts probably had goats; it was apparently a lot easier to keep goats in these parts just because of the geography and because of the climate. You only have to look at the wonderful wetlands out there to see how a cow would go.

When the gold miners were in this region they had to be fed; and in order to feed them, it meant that the Southern coastal regions were essentially the breadbasket for this region. So farmers down there cleared the bush, put in a lot of beef cattle, and also started producing milk. When the gold miners ran out of gold up here, then people started to look for something else to do and the process developed a bit further; in fact through the rest of Victoria.

In terms of what we have today, you can really argue that it is only in the last ten or fifteen years that we've seen any development for specialty cheese in this Region. Prior to that, geography very much played a part, in the sense that the Western District is a long way away from the big markets for milk; so for farmers to produce milk in the Western District they need to do something with it, and the natural thing to do is to turn it into butter, and to turn it into hard cheese that will keep.

The Western District, since about 1850, has been famous for the export of butter, and the Pelican brand,

around the world (I don't know where Pelican came into it by the way); and also for cheddar cheese. Essentially a cheese that would keep. It could be made during the summer months and then exported back to Europe, and the big development that helped in that, unlike the wine industry, was the development of refrigeration around the 1880's and the development of pasteurisation around the 1880s, which allowed small farms to gather together and co-operatise; and for the first time to produce cheese on an efficient scale and export it. And that pretty much has dominated the way the Western District produced dairy products for the last hundred and fifty year.

About fifteen years ago, a German called Herman Schultz came to see me, and wanted to start making farmhouse cheese in a little place called Timboon, which is an old timber village that had been cleared about a hundred years ago and had since been turned into dairying. Now Herman was probably the second farmhouse cheesemaker in Australia, after our friends down at Gippsland, and he was certainly the first farmhouse cheesemaker that I know of that was to make white rind cheeses. What made Herman different, apart from the fact that he was going to make specialty cheese, was that it was on the farm, it was surface ripened, and it was with biodynamic milk. Now you know, fifteen years on, it sounds pretty passé, but in those days it was pretty exciting. It was all new. He had to learn a whole new way how to make the cheese, how it was going to work and it wasn't very easy. Of course, now you can buy his cheeses through all the specialty delis and all the supermarkets, and you'll also find he is even exporting a bit back to his homeland in Germany. Essentially he represents the benchmark for cows milk cheeses in the region.

Down at a place called Purrumbete was a beautiful bluestone mansion on Lake Purrumbete. It was where Thomas Mitchell came across the Stony Rises and was attacked by the local aborigines, and they had to hole up there for about two or three months while they sorted out where they were going.

Purrumbete is actually home to Australia's first herd of buffalo. They arrived here from southern Italy about eighteen months ago. Purrumbete has a special history in the Western District because apart from being the home of the early settlers for a while, it was also the home of the first Ayeshire cattle that came over.

The buffalo at Purrumbete are very special, because they are the only herd in Australia producing milk. We've got buffalo up north, but we did not have buffalo that produced milk. I could tell you a very funny story but I won't, about how a lot of people have tried to milk buffalo down here without success and with grave consequences, literally, but Roger Haldane had the good sense to go first of all to Italy and also to Denmark which doesn't have foot and mouth, and arrange a program to bring buffalo to Australia. He brought the first fifty five about eighteen months ago—he's now got a herd of about one hundred and ten. It's unlikely anyone else will be able to bring buffalo to Australia, for various quarantine reasons, so they're our first and only herd.

Now the future for that industry is very exciting, because Roger is going to put those buffalo over the Northern Territory buffalo and instead of having a hundred and ten buffalo in the next twenty years, we'll probably have something like a few thousand buffalo; and we'll start using the milking genetics to help the Northern Territory buffalo be a bit more useful.

Apart from that, Purrumbete is also famous for the Manifold family, and the Manifold family were the first people in the Western District to milk sheep. The gentleman before was talking about how the wool industry has been up and down. Well basically sheep farmers have to earn money one way or another. Robert Manifold, who is a great-great-grandson of the early Manifolds—and actually used to live at Purrumbete before the family fell on hard times and moved up the road—ironically now has the first herd of milking ewes in the Western District and is essentially milking Romney sheep.

The important thing about Romney sheep is that they are absolutely useless for milking, but just as we've got buffalo that have arrived in the last eighteen months, we are also very fortunate in the last eighteen months to have been allowed to import some East Friesland sheep via New Zealand, which are the original milking sheep of the U.K. They actually go back in fact and are related to, or come from the same area, as Friesian sheep in Holland.

Instead of producing a meagre one litre per day, which is what you can expect to get from a Romney sheep, these sheep are producing four litres a day, so you can imagine what's going to happen as they start to develop

the flocks over here—we're going to see a lot more sheep's milk being developed in the Western district.

So that's three animals that are being milked and successfully produce cheese over here, and the last one, I'm always a bit concerned whether it is, or isn't, Western district, but it's certainly close to here, its closer to here than, I think most of the areas I've just talked about; and that's Meredith.

Meredith, which some of you would have passed on the way here (I certainly did on the way from Flinders), is the first flock of ewes that have been developed in Australia—Richard Thomas had a lot to do with that. The Cameron family settled in the area about a hundred years ago. It's quite fascinating to walk around the farm, because you suddenly realise the implications of history. After the First World War, it was all Soldier Settlements and all these farmers were given these twenty, thirty acre blocks to start dairy farming and of course, they failed after a couple of years and the whole area was put back to sheep. Then again, you have the failure of wool to be a good commodity to grow and the Camerons went into producing milk from sheep. They're very much behind these East Friesian sheep too, but perhaps more exciting and more interesting to them, they've discovered that that particular region is wonderful for goats, and the Camerons now have probably one of the largest herds of goats in Australia, over three hundred and fifty goats which they are now milking down at Meredith. So they started off as sheep farmers but they've now decided that goats are much more productive, and much more exciting, in terms of trying to earn a living.

There are some problems with goats, but they're pretty worldwide. The interesting thing about goats—I should perhaps explain. The difference between goats and all the other animals I've just talked about, is that cows, sheep and buffalo, all need grass, so essentially you're limited where you can graze them, they're grazing animals; and sheep prefer a different sort of grass to cows and buffaloes, but when you get into goats; goats don't really care because they're what we call browsers, they're scavengers. For some of you, you know how we put our goats on blackberries and you see goats up trees etc, the reason goats do that thing and actually eat blackberries is that they are quite sensible. They're probably the more intelligent of those particular milking animals. They need a lot of nutrient and minerals in their diet. That's what they need to live and to produce milk, and those plants have very deep roots and they draw nutrients up into their leaves, so when a goat eats a blackberry it's getting its essential minerals, which it needs to keep living. So goats are probably the most sensible of all milking animals.

Just to conclude, the Western District is therefore blessed. I don't know any region in Australia that has such a diverse range of animals to milk. Obviously buffalo are unique to the region, but in terms of sheep, cows and goats, it's pretty rare to find all three being milked in one region, because climactically it just doesn't work, but it's such a diverse region that it has got these extremes that it really lends itself well to producing a good range of specialty cheeses.

Marieke Brugman: I ask Neil Seymour to speak next. Neil is with Mt. Zero Olive Oil and we have some of his gorgeous oil that we will be using in the cuisine in the next few days.

The Olive Oil Industry

The Grampians Olive Oil Industry, its Relationship to the National Industry and the Scope for Biodynamic Farming

Neil Seymour: Thank you and welcome to The Grampians. And a special welcome from me, because I take great delight in meeting people with gastronomic bent and knowledge and culinary expertise, because I feel there is a great deal for me to learn in producing good quality olive oil, the best quality olive oil, by talking to people like you, and hopefully the same will apply to you people.

If you learn a little about the difficulties and the ease of various aspects of producing good quality olive oil,

then we can work better together. So I take great delight in that, and a couple of things that are relevant in that are the styles of oil you produce. Believe it or not, oil can be manipulated just like any other food in its production, so that we can vary the style of an olive oil we produce, according to what the market and the culinary people might like—to a degree. Certainly quality is paramount as far as we're concerned and I wouldn't compromise that at any time.

If I could tell you a little bit of a story about my wife and I. My wife Jane is here and hopefully you'll meet her and have a chat with her tonight, about why we're in olives. Everybody asks us why we're growing olives. We went on a holiday to Europe and spent about three or four months in southern Europe in amongst vineyards, olive groves and lavender, and came back with our heads in the clouds a little bit and there was a little advertisement in the paper for an olive grove in The Grampians. The Grampians, as you'll discover, is an absolutely wonderful place, and we had a very soft spot for it. So it was very much with a sense of romance and intuition that we snapped this place up, and we still have it. We've been developing it for about five years. Very happily and with much passion and still a little bit of that romance, although some of that romance as you'll discover as you hear a little more of our story, has been a little tarnished, I suppose.

The Grampians, as Graham Pizzey mentioned, is a very harsh environment in the sense of it's climate and soils, and we're on some twenty five feet of sand, pure sand, which has eroded away from The Grampians sandstones, and is very low in nutrient, so it is a very harsh environment. Coupled with the frequency of droughts, it makes life rather difficult for growing crops.

Just a little bit about olives in The Grampians—the olive groves in The Grampians were commenced around the end of the second World War, about 1945, when a gentleman by the name of Jacob Friedman had a vision for growing olives in Australia. He proceeded to set up some companies to develop those olive groves and established some 60,000 trees in our region—Toscana being one of the major areas; our own plantation or olive grove at Mt. Zero; and another plantation. So that's about 60,000 trees. There were some other plantations established also, but I'm not sure of their history, although there were quite large producers.

Being in The Grampians, we're all alongside the National Park and another little story is worth telling you, about what it's like to manage an olive grove, or any sort of enterprise growing plants alongside a National Park. The National Park abounds with kangaroos, emus, wallabies and many other types of wildlife, which is one of the reasons we bought the place in the first place, not realising just what peril we were courting or unleashing on ourselves. One of the other things that we decided to do in commencing to manage this plantation was to be biodynamic, and the foundation of biodynamic farming is to manage your soil well and a very important part of that is to have very healthy vigorous pasture and legumes growing in the soil. Well we tried to establish those in this bare sand which had been ploughed for years, and every little shoot that shot up was eaten by kangaroos and wallabies. We're still battling with that, so that's a problem to try to provide nutrients to trees without providing also synthetic chemicals. However that's our goal and I'll talk a little bit more about that.

Jane and I, when we first bought our farm—the two hundred acres of olives we have—hopefully some of you will visit it tomorrow; we lived in Melbourne, and I moved onto the farm. We had plans to develop it for olive oil and to provide bed and breakfast at the same time. We expected romantically that we'd have this all done in eighteen months—perhaps even twelve months if we did really well—and five years later we're just in the process of building our bed and breakfast and our house, so that we'll actually be able to live together permanently on this property. Now the reason for that is again what I mentioned before, the harshness of the environment and the difficulty of getting things to grow and be reliable.

Olive trees are very friendly, very beautiful trees, very forgiving trees, but they'll only produce if things are right for them. So the processes we had to go through in turning that olive grove around, which had been very seriously neglected for many years, was to clear scrub—perish the thought, let alone say a National Park—in other words to release our trees from what had been overtaking them, to do some very major pruning of the trees to change their shape, to change their style altogether and to try to turn them around. We've done many years of work, very intensive work, on many of those trees, and you'll see some of that tomorrow when you visit

the olive grove. The trees are quite different to what they were when we started. However, they're still not producing very well and we still have high expectations that they will.

During that period of time I've been living in a shed, and partly in Melbourne, and Jane has been in a sense supporting the whole enterprise. We have been successful on the other hand, in producing very fine quality olive oil, which hopefully you'll enjoy with your meal tonight, and there are some samples for you to also have a look at. Tomorrow also we'll be doing some tastings of various types of olive oil we've produced and you'll be able to test your taste buds against those also.

Some of the things we had to learn in becoming overnight olive farmers—it's been a very difficult process to try to learn to grow olives in Australia because there is very little knowledge here, and the knowledge you can acquire from people overseas is very limited in its application to Australia. There are a couple of very nice little stories I can tell you about olives, and one is about pruning. In reading much of the literature that I read, there is all sorts of information as to how to go about pruning trees to produce olives. The nicest one I think, is to prune a tree so that a swallow can fly through without it touching its wings. Another little bit of romance I suppose, but it is very true and there is sound reason behind it, because it opens the tree to sunlight and fresh air and helps to reduce the problems you might have with insects by allowing the temperature of the leaves to be kept a little warmer during the summer.

Another experience that we had was in pruning trees. When we first arrived, I can remember vividly—our first visit to the olive grove after we had bought it—we were walking around thinking well what do we do, how do we manage this place, what's the first thing we should do. Well we had a pair of secateurs so we'll prune a tree. So we had a go at pruning a tree and it's very interesting. That was five years ago and in our fourth crop that particular tree produced a very heavy crop of olives last year, for the first time in its life that I can remember of that tree. So it's taken four years alone for me to learn whether that pruning technique was right for that tree, or whether it was going to do any good at all—with olive trees you have to be very patient. However they were beautiful olives and produced beautiful oil.

The future for Mt. Zero olives is, I suppose, very much part of the olive industry as a whole. We focus ourselves on boutique olive oil, and that means that we're marketing ourselves to people who understand the best quality, the best flavours. That's where we see ourselves in the future. The industry is growing very rapidly, it's taking a quantum leap right at the moment and I get about five or six calls a week from people with prospective new enterprises, wanting to talk about how to grow olives. With five years experience under my belt I'm as experienced as anybody, but nevertheless I feel, not incompetent, but very far from experienced.

I mentioned we were managing biodynamically, and for those who are not familiar with biodynamics; it's a type of farming that is fairly specialised, and there's quite a bit of misinformation about strange things people do in the night that people talk about, but that's all baloney. Certainly you consider things like phases of the moon and the relationship between the moon and the sun in some of the things you do, but that's very minor in terms of managing a farm.

From a practical sense, a good biodynamic farmer has intense powers of observation, which I'm working on and have a long way to go. He or she focuses on the health of the soil and most importantly, the feeding of the plants and trees. In our case, the important thing is to feed the trees through humus, rather than through synthetic chemicals dissolved in the soil moisture. Now it's very different, and it has a very different effect on the health of the trees, and the health of the plants and also, more importantly for me, the quality of the fruit and the quality of the oil that we produce, and it also lends it a very distinctive flavour. You might discover that when you taste it tonight or tomorrow.

Another interesting sideline I suppose to biodynamic farming is that you are required to be absolutely ideal or purist. We're hoping to be accredited next year and one of the tests that will be conducted on us for that accreditation process will be to look in our kitchen cupboards to make sure we have no chemicals in there. So it's not only just managing the farm, it's a whole life, as far as that's concerned and I have a lot a respect for Herman Schultz that he has been able to establish a new industry, as was mentioned earlier, which is totally biodynamic also.

In conclusion, I'd like to welcome those who are coming to visit us tomorrow. You'll be perhaps surprised, or shocked, at the conditions, because presently we are in the middle of the worst drought we've experienced. We had another drought in 1994 where we didn't have one olive; this year we'll have some olives but the trees look as if they're dying, so that's a sad and sorry state it's in at the moment. On the other side, olive trees are absolutely wonderful; a good fall of rain and in two days they lift up, they turn green and look as if they've been in good conditions for years. They're wonderful.

The other aspect I'd just like to mention to you is that the bed and breakfast we're providing—we are in the process of building at the present moment—will be available for people to use later on this year, with a view to experiencing what it's actually like to live in an olive grove. There are some very interesting cultural things we can tell you, and you can experience, by living in an olive grove, and hopefully we can bring some of the cultural information and experiences from Europe to help people appreciate that experience.

So that's a little bit about a product which I think, these days, is becoming fundamental to good food and good eating. I hope you enjoy tonight and Bon Appetit!

Marieke Brugman: I'd like to invite Richard Weatherly to speak.

Landcare

Landcare and Whole Farm Planning—a History in the Grampians Region

Richard Weatherly: When I came here tonight, someone said, "Oh, you're talking about landcare. You must be from the Department". I'd like to get rid of that rumour. I've got absolutely no authority to talk about landcare whatsoever. I'm just a poor honest farmer "who doesn't know his left hand from his right", so all I say about landcare is very much my opinion. I think that the generally held belief that farmers are the destroyer of the nation, and have wrecked our soils, is unfortunate, because every farmer is running his own small business, every farmer is trying to look after the asset and every farmer is trying to provide what the people in the urban centres want, so I think we've got a collective responsibility. We've talked about, or Graham Pizzey referred to, the urban rural gap which is increasing. It's interesting to me that my father, who is eighty-three years old, learnt to milk a cow in Toorak, and his next experience of milking a cow was in the country—at Brighton! Now that's a time when everyone had an aunt, or uncle, or cousin in the country and milk used to come from cows and we had a much greater contact with birth, death and sex, as a childhood instruction.

I think the Western District of Victoria has really got a proud history in looking after it's land, as well as making the odd mistake. A number of the early families have left the legacy of protected grasslands, woodlands, forests and streams, and I think this should be recognised with gratitude, because whatever the reason the land was preserved, it has been at a significant cost to the families concerned. In today's dollars, it would not be unreasonable to argue that these families have foregone income of about one hundred and fifty dollars per hectare per annum to preserve land at or near it's original state. That's a big commitment.

Now the Soil Conservation Authority of the 1950s and 1960s worked with some of these farmers, albeit often addressing the problem areas that occurred on the land with remedial treatments. However some farmers early on were already looking beyond their boundaries, considering roadsides, river frontages and catchments—the bigger picture of land conservation.

There's one example which has been in the press regularly over past few year —I haven't seen the article, but I believe it was in *The Age* newspaper last weekend. John Fenton at Branxholme, just south of Hamilton, took over the management of his property, 'Lanark', in 1956. It was seven hundred and thirty hectares of some of the best sheep country in the world, with a reliable rainfall of seven hundred mls per year. But Lanark was a battered farm, that had been cleared of its original tree cover. The manna gums, the blackwoods and the

banksias, woolly ti–trees had all gone in the 1880s, leaving the land almost bare of trees, monotonously flat, parched in summer, bleak in winter. The swamps had been drained, so there was little water in the summer and in winter when the land lay waterlogged beneath a leaden sky, the cold winds whistled around the homestead, and such land is not productive.

Stock need shade and shelter to maintain body temperature before they start to produce meat, or milk, or wool, and grass needs shelter from winds to lower evaporation and drainage. John transformed his place by re–flooding wetlands and planting trees, and generally looking at it with a degree of environmental sensitivity. It is now not only aesthetically delightful, but it is highly profitable as well.

As Harry Butler stated at the Focus on Farmtrees Conference held in Melbourne in November, 1980, the concept that land is a private commodity to be used at the owner's whim, is false. Land is a national asset and cannot be subjected to the dictates of a private individual, unless it is within the framework of total Australia land planning. The same is true for water.

Many good Western District farmers were involved in the 1980 Focus on Farmtrees Conference, and went on to form one of the four Farmtree Groups that developed after the Conference. The Glenelg Farmtrees Group that was formed in this region, was an exceptionally farsighted group, and many of their innovations were visionary, even seen with today's benefit of hindsight. For example, they initiated a project designed to link The Grampians with the Black Ranges to its west, by means of wildlife corridors connecting existing farm plantations and roadside vegetation with new plantings.

As Farmtree Groups proliferated, they were united under the umbrella of the Victorian Farmers Federation, in a Farmtrees Program, which was essentially a forerunner of Landcare. The first two Presidents of the VFF Farmtrees Groups were both from the Western District, not far from The Grampians region.

It was The Grampians area that produced the core of the Western Tree–Sowing Syndicate, that was formed to develop direct seeding in south–eastern Australia at the beginning of the 1980s, they built the Western Tree Seeder that was the first machine specifically designed for sowing native Australian trees and shrubs, and to seriously research the technology of direct seeding.

By 1984 the Western Tree Seeder was sowing trees successfully in western Victoria, Tasmania, New South Wales and South Australia, enabling huge cost advantages in revegetation programs. The sort of advantages I mean are; to go out and plant a tree by hand at that stage was costing about three dollars fifty per tree, and it's a good man that will go out and plant two hundred per day. The Western Tree Seeder was putting in trees at less than ten cents per tree and putting in up to thirty five, forty, thousand per day, with one man.

In October, 1984, the Potter Farmland Plan was initiated, after discussions held between the Ian Potter Foundation and the Garden State Committee. Subsequently, a major revegetation program was developed to demonstrate more widely what some farmers were already accomplishing with farm plans. The concept was to select an area that was suffering from critical problems in land degradations, and financially to assist the farmers to address the problems as a demonstration to other farmers. One and a half million dollars from the Foundation—I believe that figure is correct—were to be spent over three years with an escalation of expense from the farmers concerned. Even in the last week I've seen a farmer, receiving an award for Landcare, saying that it was a visit to the Potter Plan that motivated him to get interested in Landcare in the first place.

In July, 1986, the head of the Conservation Department was initiating what was to be called Total Land Care on behalf of the Conservation Minister, Joan Kirner. Initially the Project was designed by four people over a drink after work—a new initiative for the Conservation portfolio in the Cain Government. It was particularly concerned with inducing all landowners to work together, and to look beyond their boundaries to the wider community, and basically what it did was, it wanted to take a lot of money and hand it over to landowners to involve them in becoming more united in their efforts in catchments.

Actually I think it was the great comedian and cartoonist, James Thurber, who was walking in the garden of a banker in Long Island and was moved to remark on the magnificence of the oak trees, some of which were immense. "Well, Thurber" replied his host "Would it surprise you to know that that tree over there was only transplanted there yesterday". "Amazing" said Thurber "that's astonishing. Just shows what God could do if he

had the money!".

Well, in 1989, Bob Hawke had the money, and he announced his One Billion Trees Program. The following year Landcare became a national initiative as a result of co-operation between the National Farmers Federation and the Australian Conservation Foundation due, in part, to the friendship between Philip Toyne of the ACF and Rick Farley the Executive Officer of the NFF.

In 1996, the Corridors of Green Project, which was initiated in the Murray-Darling Basin in 1994, was extended statewide. Syndicates of Landcare groups were invited to join together to bid for money for a two year program of vegetation linkages. There was to be only one successful bid—winner take all! Several consortia emerged in the Western District and one, the Central Hopkins Land Protection Association, was the successful applicant.

Building on the Corridors of Green Project in the Central Hopkins Region, this group developed its 1998 plans for a massive bio-link between the Otways Forest on the South coast and The Grampians State Forest, where we are meeting today. This will involve the building of a habitat corridor which will ultimately stretch over two hundred kilometres by way of the Hopkins River, and some of its tributaries, and it's a plan to plant millions of trees and shrubs in a belt of more than eight hundred thousand hectares and to fence stream frontages away from livestock.

All the areas of significant remnant vegetation and all environments, grasslands, wetlands, riparian fringes and woodlands will be managed as a habitat band, crossing the Otway and Warrnambool plains and the Victorian volcanic plains, which were referred to as the Stoney Rises, and that's some of the most degraded environmental regions in Victoria. There is actually only some point-two percent of the grasslands of Victoria still remaining.

Three interconnecting habitat links, each of more than two hundred kilometres, will form the backbone of a much larger open eco-system complex of native vegetation covering eight thousand square kilometres—in other words, the river systems will be targeted initially to get the remnant vegetation there, and link in the remnant vegetation blocks like Framlingham Forest and Mortlake Common and the scrubby hills just out of here. That will form a backbone which can be interlinked across farmland as part of shade and shelter complexes and other initiatives to form a block of habitat.

This will integrate native vegetation into mainstream farming systems, as part of their shade and shelter complexes and the project will provide opportunities for innovative development of commercial forestry, including the production of bushfoods to be integrated with environmental planting.

The project will bring together four of the consortia that bid for the Corridors of Green money in the first place, involving thirty Landcare groups and over nine hundred farm plan links. It will include the Framlingham Aboriginal Trust, alongside five Local Governments. Its evaluation and monitoring will be done in conjunction with five different Universities, studying all kinds of environmental and social issues.

Substantial Greenhouse gas benefits will accrue from this Project and these will be assessed and monitored. The feasibility of aggregating net emissions and the future of trading of surplus carbon credits will be examined. I'm sure that Senator Hill will be pleased with that, after the Kyoto Summit.

Initial estimates of the economic potential from carbon sales from the early stages of the project, in other words from the first three years, are between $900,000.00 and $2 million—all money that can be reinvested into environmental development in the Region.

Outcomes of the Project will be an internationally acclaimed broadscale biodiversity program that changes the face of the landscape which can be a model for other areas; development of an inventory of best practice on native vegetation conservation, management and revegetation techniques; carbon sequestration credits of national significance, with a regional approach to their marketing, and thousands of hectares of high priority remnant vegetation protected and enhanced in one of Victoria's most critical areas.

At the moment there are problems in that Framlingham forest is being killed by koalas—and I mean just literally killed by an overpopulation of koalas, and the areas that are most exposed by weather are just dying. This happened on Quail Island in the 1940s and it built up to the stage where—there's a photograph I've seen

from the paper in those days—you could see five dead koalas on the ground and the entire forest obliterated. That's the sort of thing that will happen in Framlingham if it continues. The forest will die, the koalas will die. On Quail Island it took years and years for any recovery to start to take place.

Now at the moment there is a program in place to remove koalas out of the forest—they're taking out a thousand koalas at a cost of $117,000.00. I'm no mathematician but that seems like $117.00 per koala to me. What we're suggesting is that we link it up with a few trees and give them access to go to other places—at least they've got the flexibility to move out. We're improving the environment and we're saving a bit of money on the koala translocation.

I think this Region has a proud record over its history in leading the way in Landcare. I believe that tradition is continuing, and we may look forward with great anticipation to the future. Thanks very much.

Marieke Brugman: Our next speaker is Barry Clugston

Land for Wildlife

Land for Wildlife and its Involvement in the Food Industry

Barry Clugston: Thank you for the invitation to be here. I had a forty minute discussion prepared, but frankly the previous speakers have picked up many of the points I wanted to make, so I'll try and condense it down to a few minutes and give Sarah and Tom Guthrie enough time to make a presentation as well.

My role is with the Land for Wildlife Program, which is a Statewide program in Victoria—although it is now popping up in other States in a similar vein. Tasmania has been trying to get one for some time. Western Australia has one active program.

It's a voluntary program for landholders, particularly farmers, to be involved in. Judging from the comments from previous speakers, you'd wonder why farmers really want to be involved in wildlife, but we've found that there is a great interest out there and there are many species of wildlife that aren't represented in State or National Parks, or even some significant forests. A lot of them are isolated on some areas of freehold land and the farmers themselves are understanding this, and asking how can they look after and maintain those species on their properties. The value of the Land for Wildlife Program is that we can make contact with those people and have discussions —throw a few ideas around – about how they might look after the habitat and how they might look after the wildlife on their property. That doesn't mean going out and feeding them or looking after them. It means looking after the habitat and making sure that their management decisions that they might make on a normal daily basis, are not going to impact too severely on the wildlife.

Now I think that's been a very successful program in Victoria. We now have just over four thousand properties involved in the scheme. The scheme is different in that it's a voluntary scheme—it's not like the Trust for Nature Program that involves a legal covenant placed on particular areas on the property. As a Land for Wildlife scheme we look at the grasslands, we look at the bush remnants, we look at the corridors, we look at the wetlands, the streamsides—even household gardens can provide significant habitat for wildlife; and there is much interest by many of the farmers to be planting species in their gardens and in their corridors that will be beneficial to wildlife.

Alongside that particular program, we've had discussions with many farmers who now can reveal that they have an area of remnant vegetation on their property. I say that a bit with tongue in cheek, because in the times Richard Weatherley and Graham Pizzey spoke about, in the 1950's and even back in the 1940's, it wasn't the done thing to have a remnant vegetation area on your property—it was a no-no to have any bush, the idea then was, "you really should have been a better farmer than that, you should have had a bulldozer and chainsaws and be out there improving the land".

Fortunately many farmers saw through that idea, or didn't get around to it, or were able to save a particular area of bush on their property for various reasons, or they kept it quiet and very much under the hat—it's only in the last ten or fifteen years where they have been able to say "Yes, I have an area of remnant vegetation on my property" and "How can I make it better. How can I make sure the rabbits don't have too much of an impact" or "How can I make sure it doesn't have problems"—like too many koalas, for example, or too many possums, or too many redneck wallabies, or around here, particularly in recent debates, too many long-billed corellas.

So there's a lot of things we like to roll around with these farmers, and combined with those discussions there's been a lot of interest in maintaining economic viability. The farmers themselves have this in the forefront of their minds when they get out of bed in the morning until they go to bed at night—how can they survive, and if they have been relying on wool, then that is very much focussed in their minds at this stage. So we need to be very mindful of these economic considerations. But we are also involved in discussions with people about other types of enterprises, and some of these have been raised tonight and I find that there is a terrific interest in other types of productions that will maintain some degree of viability

When I was growing up on my parents' Mallee farm, we had wheat as the primary product; barley, oats, and a few fat lambs running around. They were the main products. If I return to that farm now, which my brother is running, he's got a whole range of other types of grains, other pulses, other legumes, and even other livestock that they now consider as a normal part of the operations. Things have changed in these last few years and wheat is almost a secondary product. On many farms up there, the wheat production has gone right down in favour of these other types of agriculture.

Even in more recent years, there's been interest in actual production of new style wildlife as an agricultural product, and emu has been one of those. I don't think the emu industry looks like surviving very well the way it's going, but it has some possibilities. Now I'm not going to argue the merits, the pros and cons, of emu farming in this forum, but there are questions being asked by a lot of people about how they can make some dollars out of other types of products. Bushtucker is very much to the fore in a lot of people's minds. There are a lot of products naturally growing on many farms that perhaps people can consider. Discussions can perhaps help farmers make some decisions along those lines. There's even a narrowly focussed industry going on at the moment, and that's the herb industry, which would be a lot of interest for people who organise and prepare food in a restaurant. There is a lot of interest in that developing industry at the moment for the domestic market and perhaps even for the export market.

I was very interested in Neil Seymour's comments about the biodynamic industry, because there is also a lot of interest from very traditional farmers about improving the quality of the food that they produce, and so they are questioning the values and questioning the inputs—well all inputs quite frankly—and that ranges from the fertilisers to the chemicals that have been fairly normally considered in the past. Now they are questioning just how much chemical should they be using. Is it affecting their own individual health? Is it affecting the quality of the products that they are sending off the property? So the interest in organics, the interest in biodynamics and the interest in clean green agriculture is certainly being highly debated right across the agricultural industry at the moment.

I'm going to draw the line there; we're well over time. Thank you for your interest and good luck with the next few days of searching around this wonderful district.

Marieke Brugman: Thanks very much indeed Barry. Our last two speakers in this bracket are Sarah Guthrie and Tom Guthrie.

New Ventures in an Old Land

New Ventures in an Old Land—the Face of the Future

Sarah Guthrie: Nestled at the foot of the Grampians National Park in the historic Mafeking Valley is our property 'Thermopylae', an easy half an hour drive from where you are seated at this present moment. From there we grow, produce, and cater for, wool, wine and weekenders. Loosely covered by weekenders are both the domestic and the international market.

Sit back and imagine yourself as an international visitor to Australia for the very first time and on your first visit to a farm, namely 'Thermopylae'. You might well start out with a farm tour of the property with Tom. The tours are called 'Tom's Tours'—affectionately of course. You might also be joined by our four canine staff—Jonty, Peggy-Sue, Billy and Couchie. Driving through the paddocks in the Ute, Tom will discuss some of the day-to-day operations of prime lamb production and wool growing of our six thousand Merino and Corriedale sheep. Then suddenly out of the blue, the four dogs will be sent off to perform—perfectly, usually—a sheep dog trial, mustering a mob of sheep.

The property is three thousand acres, and half the area is natural bushland. Next the conversation with Tom may lead on to the purchase of the property by his grandfather in 1926, and since then many changes have occurred. Bushland was cleared to make way for grazing and redgum trees were utilised for fence posts. Today's trends see farmers, such as ourselves, aiming to restore the balance and return many areas of farmland back to their original state, and from the previous guest speakers you'll probably gather that we do that through Landcare grants, projects and incentives through Wholefarm Plan Training courses and Land for Wildlife with Barry Clugston. This enables us to grow trees, fence off waterways and encourages regrowth of native vegetation.

Next, Tom will drive you to the Vineyard—it's 3.6 hectares and overlooks a stunning view of the property and Major Mitchell plateau. Tom will outline the challenge in trying to grow quality cool-climate shiraz and chardonnay grapes on our relatively new vineyard. He'll also outline the seasonal activities of picking, pruning, harvest and bottling. Our wine is sold under the Grampians Estate label and Arthur Streeton's famous painting 'Land of the Golden Fleece' is the feature of our label. Driving back to the homestead you may view any number—any number!—of kangaroos and emus grazing in the evening light before they return to the bushland of The Grampians National Park.

A brief freshener at the Miners Cottage before we settle into a glass of Grampians Estate Shiraz or Chardonnay while listening to the evening sounds of kookaburras and cockatoos. Either home grown lamb or beef, with all the trimmings, and the conversation may shift from how 'Thermophylae' came by its Greek name to what time of the year shearing takes place. You may see a possum climb a tree as you walk to The Cottage to retire for the night. At last, breakfast. Farm-fresh eggs from our free-range hens—they're not nearly as pampered as those of Henry Crabbe's in Pie in the Sky. Accompanying your toast is some delicious 'Thermophylae' honey. Discussion of the day's planned itinerary of The Grampians ensues and then it's time to say farewell.

I have used these scenes as examples of how our farming enterprise encompasses these three businesses—of wool, wine and weekenders, and how all three are very closely linked, and how each complements the other.

The tourism enterprise began thirteen years ago but developed significance during the wool recession in the early 1990s, when the costs of producing wool exceeded the returns on the bale of wool. As both the farm cottages we operate were already on the property, we were utilising resources which currently existed, and both cottages were in need of renovation. In the past three years, the income derived from tourism has more than doubled—from $18,000.00 three years ago. The industry is growing and the domestic and international markets are looking for a real farm experience. Our unique and historic location to The Grampians National Park and to Mafeking is a real bonus.

Our guests staying on a fully or self-catered basis are welcome to participate and experience farm life at their own level, which may include many of the day-to-day and seasonal activities, such as feeding, crutching,

drenching, mustering and shearing. From time to time guests can join us in the vineyard to partake in pruning and picking, according to the time of year.

Last year over 700,000 people visited The Grampians, so there is great potential for these visitors to seek out accommodation, in addition to spending their tourist dollar. Our location makes an ideal base for exploring The Grampians and the experience of staying on a property.

Just to finish, for many traditional farmers to remain viable in agriculture today means big changes and new challenges. Diversification into more productive and specialised forms of agriculture, such as growing of bluegum trees, farm tourism and grape growing, are providing new opportunities for regional and rural Australia which will enable it to survive and prosper well into the next century, and hopefully we will be part of that too. Thank you.

Tumbukka Welcoming

Tumbukka Welcoming Ceremony

The Award–winning Brambuk Aboriginal Cultural Centre opened in December, 1990, was designed by Architect Greg Burgess in consultation with five surrounding Koori communities—the Framlingham Aboriginal Trust (Kirrae Whurong community), Horsham Aboriginal Co–Operative (Goolum Goolum Community), Warrnambool Aboriginal Co–operative (Gunditjmara Community), and the Kerrup Jmara communities which includes the Aboriginal Elders Co–Operative (Lake Condah) and Portland Heywood and Hamilton. The Centre is managed by the five communities (from South–West Victoria and the Wimmera area) and provides an important focus in the area known as Gariwerd (The Grampians).

The name 'Brambuk' arises from a combination of two words—'Bram' being the Bram–Bram–Bult brothers from the Dreamtime and 'Buk' meaning belonging to. The building is designed to represent the totem of the area—the sulphur crested cockatoo. The bricks from which the building is constructed represent the Goolum Goolum Community with the stonework on the chimneys representing the Lake Condah area, the Kerrup Jmara communities. The Framlingham area community is represented by poles which are an integral part of the design. Five circular areas within the building also represent the five communities. A curving internal ramp to the top section is the eel dreaming of the Aboriginal Elders' Co–operative and the room in which the first section of the Symposium was held on Sunday was designed to represent a Gunditjmara totem—the Southern Right whale.

Mark Matthews welcomed Symposiasts on behalf of the communities involved in the Brambuk Cultural Centre and also introduced young male dancers to present a Creation Dance.

Mark Matthews: Before we start off I'd just like to say Nga–Keenatt which means "Welcome" in the local language of this area and give you a brief talk about the Centre to give you an idea of what it's all about, and then we'll go into a dance performance which we call our Creation Dance, and then we'll get down to some didgeridoo explaining and playing a bit of a tune afterwards.

Accompanied by didgeridoo the dancers performed a Creation Dance, depicting the emu (Kowwirr), the kangaroo (Myngjan) and man (Mara)

Mark Matthews: 'Bunjil' is our Creative Spirit. He actually created all men, plants, laws, boundaries, just about everything to do on earth. When he finished his time on earth, he rose into the sky and became a star. So the first bright star we see represents 'Bunjil'; all the other stars we find around that bright one are actually tribal people. He runs around here now as the form of an eagle, so every time you see an eagle, we believe our native spirit is still watching over us.

Just a bit of background about the didgeridoo. You'll find that the didgeridoo wasn't actually played in Victoria or in Tasmania. In other words there is no aboriginal name for didgeridoo in this area. It actually originated from Arnhem Land, and the top end of Queensland. They're naturally hollowed out by termites, so in other words the didgeridoo itself is basically made for you. It's just a matter of walking around knocking on your piece of wood trying to find out if it is hollow.

Different lengths you'll find give you different sounds. So the longer the didgeridoo—the deeper is the sound. Shorter is more high pitched. You'll never get two didgeridoos that will sound the same. The thickness of the wood itself in the middle will alter the sound again. The mouthpiece is the most important thing, I believe, of the didgeridoo. If you do not have that the perfect size for you, you'll never get the proper sound through the didgeridoo. Now the same is required to get easy sounds to get out of it. The first one is using your lip. The second one using your cheek to squeeze the air out. The third one, this time using your tongue moving it up and down very quick or close to the bottom of your teeth you get a boomerang; very slow, a kangaroo hopping. The fourth sound, this time using your voice box. With your voice box you can do just about anything you like through a didgeridoo; just about anything, and all different animal sounds. While we're doing the sounds the vibration of your lips is always going. Once that vibration stops you actually lose the whole sound, so it's very important to keep it going. The next sound uses the voice box for a dingo or a dog, and a sick kookaburra. The last sound we get out of it, this time using your lips again, very tight like the same way you play a normal trumpet. They are basically the five easy sounds.

Now with our breathing, what we do with that uses the teeth as an airbag and filling up your cheeks with air, and using the muscles of your cheek to actually squeeze the air out at exactly the same time you breath in through your nose.

Thanks very much, and enjoy your evening.

(Mark Matthews had demonstrated each of the above sounds—the 'sick' kookaburra receiving an extra round of applause).

Marieke Brugman: It gives me very great pleasure to introduce Dr. Pamela Parker. She has an illustrious and highly distinguished wide international career —the notes are there, I'm not going to embellish on them Pamela was brought to Australia under a UNESCO scheme to run the Bookmark Biosphere Program, and certainly as someone who has been involved for many years with environmental education, when I first heard about the Biosphere Project I was really excited, because it was designed to bring together disparate people from the community, people who might not traditionally have deigned to share a coffee or sit in a room together, and actually design through planning and through issues of sustainability, a future that we all want to enjoy. Without further ado, Dr. Pamela Parker.

Keynote Address

Keynote Address: Food Quality of Life, Biodiversity and Sustainability

Dr. Pamela Parker: Thank you very much. It's terrific to be here. One of the spectacular things that you are doing here is bringing together food, quality of life, biodiversity, and sustainability. That's a fantastic package, and in fact it's probably the only package that's really worthwhile. Australia is special in all of those respects For one reason it's one of the twelve most biologically rich nations on earth, and of the twelve, it is the only developed nation.

Biodiversity, which I think we all used to think of as aspects of natural history, has a number of definitions and it relates to the literal DNA, the codes for the chemical factories that all living organisms are, in one sense or another. It pertains to how those chemical factories are packaged into units called species, and it describes the relationship species have to each other and to the physical environment, to make the world the place that we know it.

Coming from the biodiversity discussions and convention have been a series of concepts, one of which is the nation of ultimate responsibility for a given species. In the case of many species, those species occur in a number of nations. So for instance African elephants have a number of candidate countries for nation of ultimate responsibility; but in the case of Australia where the vast majority of the biodiversity that's here is uniquely Australian—possibly shared with New Zealand and New Guinea—that responsibility falls right on Australia directly.

There are lots of ways of approaching the issue, but one way of looking at it is the amount of biodiversity per hectare per person in the tax base to support the maintenance of that biodiversity, and that puts Australia squarely in the middle of a major challenge.

Another aspect of biodiversity in Australia has been the pattern in which European occupation took place. A lot of what we see in the landscape is shaped by our cultural background. There are some very elegant studies that have been done at the University of North Carolina by some sociologists and some agriculturalists, taking a look at some parts of the U.S. with respect to agriculture having arrived and being put down on land systems previously unaltered by production of crops.

Two of those examples focussed on the Amish people who moved to Pennsylvania very early in the settlement of the U.S. They left Germany, they came to the U.S. to pursue religious freedom and they replicated what they left behind them. They almost immediately built stone barns and permanent structures. You go to these areas that were settled by the first immigrants and their families are still there; and so are their barns and houses and so are their modes of growing things. Very diverse farms. Soils have remained fertile. The concept that these people brought was centuries of occupation that they traced back in their family history in Germany They brought that down into Pennsylvania, and they're still there and show every sign of going on.

Another group that was studied was the Scots–Irish people who immigrated, particularly to the South–east in the U.S. and they had a history of being moved every time there was a war, being used to dilute some other resident group. They would be in a particular place one year and translocated somewhere else the next year, and they brought with them a view of the land as a resource, and a crop cycle as an opportunity to feed your family that year. And when that cultural background came into the South–east of the U.S. they looked at the land as having a capacity to produce cash crops and they grew cotton and tobacco, and they concentrated on monocultures; and they made money, and the soils were exhausted and they moved on.

In both cases, what people saw in their landscapes before, they brought with them, and that's very much been part of the Australian history here.

In particular, I have the immense good fortune to be working with a group of citrus growers in the Riverland and as probably many of you know, the price of valencias has led to a massive uprooting of orange trees; mainly because the costs of keeping those trees alive exceed any hope of what one would get for bulk juice if those oranges were sold. Navels are hanging on. People are putting grapes in. The profitability for grapes in the Riverland are such that you can get your costs back out of a vineyard in four years. It's not surprising as people probably subliminally look at the declining quality of water in the area and that short term investment which will return its capital is very attractive, even though one doesn't necessarily project long beyond that because of the trends in water quality.

Changes in the water quality in the Riverland—the Murray–Darling Basin Commission announced some very interesting data about November of last year. Because there are no other rivers globally that are basically semi–arid rivers, as is the Murray, all of the models and predictions about sub–surface saline water and its movement into the river were off, as it turned out, by a factor of two. So both the volume and the salt content of the water entering the river is double what was expected and will have some very long term impacts in the

Region.

If all agricultural practices in the Murray–Darling Basin today that resulted in the loss of deep–rooted plants were to stop, it would still take eleven years for all of the water that is moving towards the lowest point in the Basin, which the river has already found, to be cleared from the system.

So it is in this background that this extraordinary group of citrus growers, using the Natural Heritage Trust funding as an opportunity for them, are sitting down to ask this extraordinary question—which is, is citrus sustainable in the long run? Can they be citrus growers, live in this Region, have the Amish outlook of being there forever and hope to have their grandchildren enjoy more of the resource than they have had? To show immense respect for the generations to come by leaving them an ever–expanding resource base; is that possible with the species that evolved somewhere else under totally different climate and soil condition?

So they are asking first, what is best practice? And they are looking to develop a set of standards acceptable to the industry, by the industry, through the industry. And they visit each other's properties; those of them that have put their properties up for this consideration, and actually rate each other, certify each other, for their achievements in best practice, with the view that over time they'll raise the bar as it becomes more and more possible to do that.

The other extraordinary question they are asking, is what is sustainability in a rigorous sense? There is a lot of Government literature, much of it is excellent, on the theory and the values surrounding sustainability. What's very difficult is to bridge the gap between those ideas and what it is precisely that you do on the ground.

One question the citrus growers asked, is if you have achieved sustainability, how would you ever prove it? What would you measure? And they set out to look at soil health, as an indicator of how sustainable their agricultural practices are. But when they turned to the basic science there was no standard. There was absolutely no clear–cut diagnosis of what soil health or unhealth might look like. They could predict that there would be a loss of soil biodiversity and that different species would assume greater or lesser prominence in healthy and unhealthy soils, but that those would probably be very different on clay soils than on sandy soils. So they formed a partnership with CSIRO's soil biologists and they laid out a matrix of properties. They have picked a traditional property, which means—you can say it sort of quietly under the table—this guy nukes it.

They have picked a high–tech traditional grower. This is someone who is using neutron probes but with full array of chemical and other supports for agricultural endeavour, but doing it in a very precise way. They picked an organic grower; and they picked an insecticide–free grower who is using a whole array of integrated pest management to manage the herbivores in his citrus.

And they're setting off on this bold experiment and they have their minds very open on the question of sustainability and what it will mean for them, and I salute them. I don't know of any other group that's been quite that brave. It certainly wouldn't be done in the U.S.

The question really, is how do we eat well and how do we pass on land and water resources undiminished, or even enhanced to the future generations?. If we are able to do that we will also be able to contribute to the maintenance of bio–diversity, and if we are able to do that we will have a lot of extra resources available to us.

If you look at land there's a small fraction of it that's tied up in National Parks. There's a rather lovely story told, through the N.S.W. Parks Service, of an analysis done of just what parts of N.S.W. are in the conservation estate. Not at all surprisingly, much of what's in the conservation estate was land that was not highly productive for agricultural purposes at the time it was set aside, and therefore it was affordable and land that is on a steep incline or otherwise difficult to access. So you have a portion of land in the conservation estate. You have a portion of land that's tied up in cities; and cities are growing, particularly in Africa and other places in the Third World, and that growth of cities is probably correlated with a drop in the productive capacity of the world landscape to support people. And so the poor are moving to the cities. As the cities grow you lose additional arable land and you put greater demands on the arable land that's left in production.

In the past, throughout human history, we've tended to move into the tropics and into the semi–arid and arid lands in the search for additional productive land and that works to an extent, but it's usually short term

and there are very good reasons those lands have been left to last to be occupied. So it's an interesting challenge.

Agriculture itself reduces biodiversity. That's how we get the characteristics in the plants and animals that we are using for food. The reliable productive characteristics that allow them to feed us. It's generally accepted that agriculture probably arose seven to ten thousand years ago in probably four places, more or less at once. The fertile crescent in Northern China, which is no longer fertile, was probably a millet–based economy; and would have been wheat and barley with a few other plants. Middle America, is the home of squashes, beans, peppers and corn; and in the south American Andes, many of the same crops; along with potatoes and tomatoes. South Asia is another candidate, but there's relatively little archeological evidence to support that.

It's interesting that of the two hundred thousand flowering plants in the world, only three thousand species have ever significantly been used for food. Surely all of them have been tried at one time or another, often with not great results one would imagine. But of those three thousand species that have been eaten, only about two hundred have been developed as domestic crops, and only ten to twenty of that two hundred would be considered major agricultural production today.

These plants occur in eleven families, although there were twenty or so other plant families that have had one–offs, such as the vitaceae thank goodness, which have produced one or more very useful products. Gathering is highly satisfying, such as picking berries. Also we sublimate it and we collect stamps and antique furniture and lots of other things—it's very basic to the things we do.

Origins of seed agriculture probably took place in the warm temperate regions and that development of root agriculture probably took place in the tropical lowlands, or places that had a marked dry season. One of the scenarios that's been put forward is that people were basically settled, first because of fishing or other freshwater resources in an area suitable plants were available, the climate was not too rigorous; they had a settled and secure mode of living and they needed additional food—insufficient game or other plants available to them. It's been suggested that agriculture came almost by accident—throwing things out on the rubbish heap and when those things germinated and were of the same species they had been eating, agriculture developed from there.

Probably one of the most spectacular examples, which has probably not changed much from the beginning, is the potato kitchen garden in South America, where bits of the root—the tuber, are taken for food daily, the plant goes on and on, and the kitchen refuse is thrown out into the garden and so you get a recycling program going on.

When people domesticate crops they tend to do a series of things to that base material. First of all they get rid of spines and alkaloids, which are things that make the plant hard to handle and not taste very good. In the process they reduce the competitiveness of agricultural plants against other species. They select for gigantism—concentration of the resource. They select a wide range of morphological variability—for instance, red potatoes are easier to see if you're digging them in the ground than brown ones. They select for a species with a wide range of physiological tolerance, and that has made it possible for instance to move citrus production to Australia; and they suppress those mechanisms that would argue for plant distribution. They reduce, in the case of vegetatively producing crops, seed fertility. They change growth habits. They seek rapid and even germination. Inbreeding mechanisms are encouraged to fix advantageous adaptations, and nearly all domestic plants are polyploids, no longer directly tied to the original species.

This leads of course on the one hand to the green revolution; and on the other hand, to enormous vulnerability of these crops that are highly productive for a few characteristics, to a variety of other problems.

There's some just terrific research; and interestingly enough it's Australian–based, looking at how to get some of the genetic material back into crops—and in the case of the potato, there have been species not having anything to do with edible potatoes—research done at the WAIT; taking those species which have hairy glandular leaves, taking the genes for those leaves and moving them back into the potato crop where they're just simply less palatable and less accessible to insects and other pathogens.

Another example of a solanum, again in Australia; a solanum related to potatoes that produces a lot of

solasodine—an alkaloid that is a precursor to corticosteroid production, and in the thirties and forties the Russians came to Australia and did a lot of work, then exported this Australian solanum laciniatum all through Europe where it was used as a drug factory until biochemical technics have hauled it back.

So in conclusion; biodiversity, good food, sustainability of our societies, quality of life, are all very much bound up together and as we seek new ways of doing these things with ever greater reliance on diversity; conservation and agriculture will move to be very close partners indeed.

Discussion Session

Discussion Session

Marieke Brugman: Pamela, thanks ever so much. I guess I just want to give people in the audience the opportunity—Pamela is not able to be with us tomorrow. Some of our local speakers who have especially come out to be with us tonight won't be either; they are all staying for dinner, but are there any questions people want to raise from the floor at this stage?

Sarah Stegley: Which are the other countries, other than Australia, that have a Biosphere reserve?

Dr.Pamela Parker: There are about three hundred and fifty Biosphere reserves globally. Twelve are in Australia, and all of them are part of a global network that was originally set up to capture the major ecosystems of the world and put samples of those major ecosystems in touch with each other, communicating, sharing data, monitoring global climate, cataloguing biodiversity. Ralph Fletcher, who some of you may know, who was the Chief Scientist to Bob Hawke, was one of the architects of the revision of this program in the 1980s, when he and colleagues in Paris sat around the table and recognised that people were part of those ecosystems too. So the program changed and it began to include communities around ecosystems and in addition to maintenance of biodiversity, the other imperative was communities exploring ways to live within these ecosystems in a sustainable fashion.

Australia has been unique in that Paul Keating in his environment statement in 1992, married federal money with private money to provide for a diversity of land tenures in Bookmark Biosphere reserves that allows the community to do things, in terms of pursuit of sustainability, that fall outside of the general legislation that surrounds a National Park.

Gerard Holuigue: What is your feeling about what's happening with the corporatising of these seeds in the sense of biodiversity? In Europe there is concern about the corporatising of seeds of plants; that it's going to ruin the stock—it's going to reduce biodiversity.

Dr. Pamela Parker: Well at first it looks like a great idea, because it allows countries that have a lot of biodiversity to make money off of that biodiversity. At a deeper level, it's very difficult and if I could just switch to—it seems like drawing a very long bow here—but the way endangered species are managed in the zoo community. Originally there was a price put on them, and something like an Okapi, which is the forest relative of the giraffe, was selling for $130,000.00. A very rare mammal, so you'd have a female sitting in one zoo and a male sitting in another zoo, and no way to get them together because nobody has the money to buy the mate. This is a bit of that same dilemma. I guess it's a question of when we will recognise that we are in a global community, and yes, these things have development costs, and there must be some way to manage that equitably.

It is also a question of how consumers are going to feed back into the system. Going back to the citrus group

in the Riverland, they've basically decided that their market is their wholesalers—you know it's the wholesalers that decide what size of oranges are going to be in markets—it's not the consumer, and so the big question is going to be how to link up things like taste, and nutritional quality—if indeed nutritional quality is related to soil health. How to get those issues before consumers and empower them to buy, to make a decision not based on whether it turns brown, but based on taste and nutritional content.

(Question raised from audience regarding imposition of irrigation limits in certain areas, such as the Murray–Darling basin).

Dr.Pamela Parker: You're really sort of pressing on the limits of a democracy, because restraint upstream doesn't benefit those upstream, it benefits those downstream and so it goes all the way down the line. We elect our Government officials in geographical units that are in effect positioned along the stream and it's extremely difficult for people to get re–elected when they're pushing restraint that's going to benefit the next town down. It's really part of the question of how strong a Federal Government you want, and whether that Federal Government should be overseeing things like rivers that move from State to State. It's a really difficult problem, and one certainly would not wish to have something other than a democracy, but again I think, public education; creating a generation of informed voters able to wrestle with the issues of allocation of scarce resources. That's the way we've got to go.

In effect, as I understand the Murray–Darling Basin Commission, what happens is that people come together and negotiate, and there are limits to what you can negotiate when whatever Government is in power in whatever State, needs to get re–elected and needs to do so of supporting development in that State. I think it is just extremely difficult.

(Question from audience about issues raised in a 1992 book from Vintage Publications: *The Rise and Fall of the Third Chimpanzee*).

Dr.Pamela Parker: Jared Diamond is the author of the book and he loves to be provocative. The book looks at the two per cent of DNA that separates us from pygmy chimps. That's it—ninety–eight per cent of our DNA is in common, and it's just that two per cent. He asks the question "What is quintessentially different about people and chimps that you might attribute to that two per cent," and he finds that there are seven things; one of which is this capacity for environmental destruction. And a lot of his orientation comes from a series of studies; he's a very fine ornithologist as well as a medical practitioner, a physiologist.

One of the pieces of work he did early in his career was to look at the islands in the West Indies and the New World, and those were rapidly transformed islands in order to support sugarcane for the rum trade, and they went from being wet tropical islands into cane production and have come out the other end, a few centuries later, desert islands. And there are pretty obvious climate reasons why that happened. You know, as you eliminate the deep–rooted vegetation and the transpiration that occurred, you quit trapping the rain and you quit recycling water right over the island, and eventually you've got what you've got today.

If you look at the spread of salinity and acid soils anywhere in the world, Australia is just particularly sensitive, because the soils are generally poor and much of the Continent experiences a very stressful climate regime, so that the sensitivity to unsustainable uses is particularly acute. That being said, it's what you do with the situation that makes all the difference, and I think that Australians are amazingly resilient and open–minded. I mean if you just look at Landcare, where was that ten years ago? You know, it was a great idea and it had a huge cultural transformation that's come from the ground up, and I think that a lot of that can change the predictions.

Another thing that can change is what we grow, and to go back to the citrus group in the Riverland, they are also experimenting with elements of the Native Flora that is not currently in the market. And they are doing this with the help of the Williamson Foundation. In a well–established flora culture production you can yield

$30,000.00 per hectare per year—that's about in the fourth year and beyond. If some of these citrus lands that are too salty to continue to support citrus trees, or vines, can be used to grow some elements of the native vegetation, be it flora that are salt–resistant and cope with the poor soils, you can once again make a living, and so they're seeking ways of doing that and taking some Plant Breeding Rights out on some of the Dodonaeas and Acacias that occur in the area.

The real question again, is how do you talk about sustainability and how do you answer Jared Diamond's question? If you think of the harvestable resource per hectare as being the amount of energy and nitrogen fixed in a given year, then that's what you've got. On those extremely marginal lands that amount might be lower than the interest rate, then you're in trouble. But if you can escape that by finding a very high value product—and just in a bit of talk that I heard here earlier many of you are exploring those possibilities—you can escape that equation. And another way you can escape it, is to just kind of rent the surface of the land if you will, and nature–based sensitive tourism is an example of that.

Richard Weatherly: Pamela, you've talked about the health of the soil and the soil biota, and with the early European arrivals in Australia, they brought exotic species and soil biota, so we're very used to dealing with foxes, rabbits, and starlings, sparrows and all the big feral animals. How much is known about what feral animals we have in the biota and microbiota in the soil? And what effect are they having?.

Dr.Pamela Parker: Well, that's a really good one and mostly it's a big question mark. There was a paper came out in *Nature* about two months ago that was done by a global network of earthworm biologists, who were incredibly concerned about the introduction of earthworms suitable for agriculture that really have the capacity to extirpate native earthworms; and this is particularly so in the case of Australian soils. What this means—not enough work has been done. Obviously one wouldn't want to lose one's earthworm fauna just for cultural and aesthetic reasons, but what biodiversity, what useful genes, what soil services the native earthworms may be performing is another question. Another question too, is the introduced earthworms. Are they dependent on the additives brought into the soils. So that, is it a little bit like superphosphate and native grasses?. They're just simply incompatible in the long run. But that's a big question.

Marieke Brugman: Thanks very much again, Pamela. Thanks specially too, to all of our Grampians speakers. Just to make clear tomorrow. Tomorrow morning's proceedings are actually back here in this room in the Brambuk Centre. Lunch will be served here in the garden, and you'll actually meet your Camp tomorrow afternoon.

Sarah Stegley: Just listening to Marieke from your point of view; what's important for you to realise is that tomorrow when you leave your accommodation is that you are not going back to it. So when you leave tomorrow, take your bags to the roadside so that John the coach driver—who is a little lamb from heaven who has turned up in my life and I'm already in love with him—he also is involved in the camp so John is a key member of the team; he will take your luggage. So whether you want to walk up here to attend the meeting tomorrow or hop on the coach with him I care not less, as long as you give John your luggage because he'll be taking it out to the Camp for you.

Some of those accommodations are hard for him to get the coach into, so if you can meet at a point that makes it easier for him. That's not the case at Boronia Peak which is easier for him to get the coach into, but the other two places Wonderlands and D'Altons are harder for him, so all meet somewhere where he can do that. So that's the only message I wanted to add, you won't be going back to where you're going to sleep tonight. And you won't be going back there during the day, and you will not be getting to the Camp to meet your luggage again until five o'clock in the afternoon, so if there is anything you will need from your luggage during the day, have it in your handbag.

Pamela, thank you that was just fantastic. And all the other speakers. We really do feel now we've been

welcomed into The Grampians and have some understanding of the flora and fauna and personalities that make it up.

Before we leave here, I would really beg of you all to make sure that you have a walk through the Koori Display Centre. It's called 'A Journey Through Time' and it's actually one of the most moving displays that I've ever seen, in terms of the relationship between the original inhabitants of Australia and the Europeans coming here.

Marieke Brugman: The very last thing before we can get into some drinking. Roz and Marg from Bellcourt Books have been very kind to come all the way from Hamilton with a delicious selection. They're with their books tonight, so purchases can be made tonight and up until about 1.30 tomorrow afternoon—they won't be joining us at the Camp, so people might like to take the opportunity to browse and buy.

Pulse Dinner

PULSE DINNER

Aperitif
1993 Domaine Chandon Vintage Brut, 1993 Domaine Chandon Vintage Rosé

Entree
Smoked Salmon with Dill Mustard Sauce
1997 Brown Brothers Gewurztraminer, 1997 Mount Langi Ghiran Four Sisters
1997 Seppelt Riesling

Main
Split Pea Curry, Fried Rice, Vegetable Pakoras,
Broad Bean Falafel, Lentil Salad, Cucumber Salad
1995 Bazzani Dolcetto Shiraz, 1994 Brown Brothers Nebbiolo,
1994 Best's Bin 0 Shiraz, 1995 Montara Shiraz

Dessert
Mt Emu Creek Romney, Timboon St Josephs, Mt Emu Ricotta,
Figs, Honey Comb
1995 Seppelt Botrytis Gewurztraminer

Coffee & Chai

Phillippa Grogan: Tonight we are going to have three of the dishes cooked by an Indian woman, Mrs. Jarwal. They are a chickpea curry, traditional rice and pakoras. Then we have a Lentil Salad from Stephanie Alexander, made with lentils from The Lentil Company which is in Horsham, which includes their first crop of Puy lentils grown in Australia—who have had a lot of help from Agriculture Victoria which is also based around Horsham. We also have some lovely falafal made with broadbeans by Jeanette Fry as well as some Mohr's trout from New South Wales. A beautiful beetroot salad, grown by Marieke. We have some tomatoes from Marieke also—beautiful tomatoes—with rocket, and also my Dukkah. For afters, the cheeses include a St. Joseph Blue from Timboon, a Ewes' Milk Ricotta from Mt. Emu Creek and the Romney Fresca which is their semi-aged

Sheeps' Milk cheese—and some amazing wines.

Reviewed By Ted Wilson: After a short afternoon session in the beautiful setting of the Brambuk Lodge the Symposium tackled the first meal of the three days. In keeping with the Symposium's theme, it was entirely appropriate that the first meal should concentrate on pulses. As a renewable source of protein with desirable side–effects on land quality (fixing nitrogen in the soil), they are a highly significant and nutritious food source with extremely ancient antecedents. Rome imported huge quantities of lentils in ancient times, mainly from Egypt, and they were used as packaging for shipping delicate or fragile goods and pottery: the shippers thus making a profit on both the goods and the packing. The obelisk that now stands in St Peter's Square in Rome was imported by Caligula from Egypt and transported by ship packed in 120,000 measures of lentils.[1]

Pre–dinner drinks of Domaine Chandon vintage Brut and Rosé set the festive mood as many people renewed acquaintances and friendships and prepared to get down to the serious business of the evening.

The entrée of smoked salmon was served as whole sides and just broken into pieces by the diners. The dill sauce that accompanied it was a trifle too sweet for my own preference but the symposiasts I spoke to who tried all said it was excellent. I only tried the Brown Bros Gewurztraminer, a clean and dry traminer, which went very well with the strongly scented flavours of the fish.

The main courses were based around a sample of the first lentille verte du Puy to be grown commercially in Australia in northern Victoria. These small dark grey–green pulses are reputed to have the best texture and flavour of all the lentils but are expensive. They are imported from France and are only available from specialist food stores.

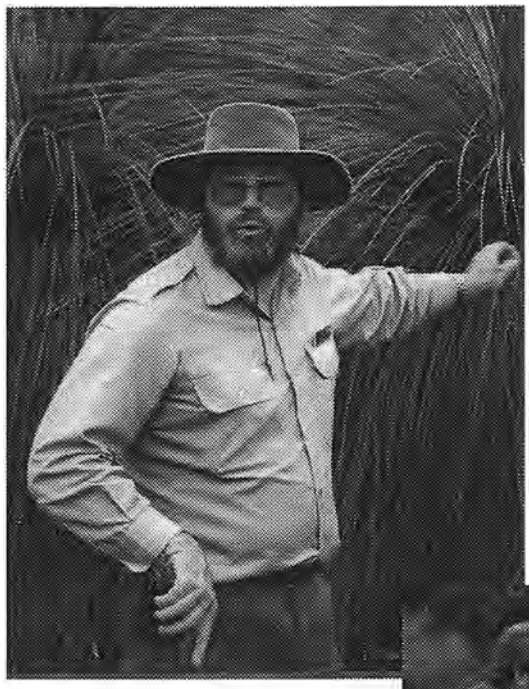
The Puy lentil salad was excellent. Each grain remained separate and had a delightfully nutty texture. They seemed to be capable of absorbing a great amount of flavour in the cooking. In her book, *The Cook's Companion*, Stephanie Alexander gives a basic master recipe for brown lentil salad.[2] The lentils are cooked in water with onion and other flavourings (garlic, diced carrot and celery) that have been sautéed in oil. Once cooked the lentils are tossed in olive oil, vinegar and parsley and served at room temperature. The finished dish was superb, each grain was separate, not mushy and richly earth flavoured. Dark slate grey–blue in colour, the salad also looked very appealing served in earth–orange terracotta dishes.

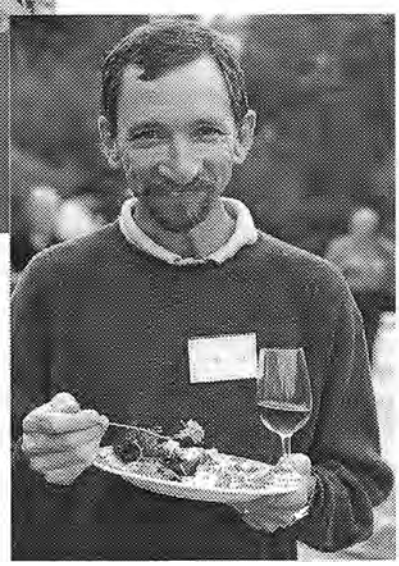
The fried rice and pakoras were good although not as impressive as the lentil salad. Fried rice and pakoras are not dishes I can get excited about. The broad bean felafel, made from another ancient bean, was distinctly different in taste to the more common felafel made from chick peas. The one shortcoming (if you can call it that) of the broad beans was that they made an extremely dry felafel mixture which tended to de–hydrate your mouth if you had more than a couple. The meal was well balanced in that this dryness was compensated for by the cucumber and beetroot salads which provided both acidity and moisture. I had a glass of the Best's Bin 0 Shiraz with the main courses.

Desserts continued the theme of the dinner being barely processed cheeses with fresh figs and honeycomb. By this stage this diner was flagging—as a new Symposium attendee I didn't feel as though I had had adequate training for a meal of this size and quality. A small dab of the ricotta, coupled with the beautiful figs and a bite of the honeycomb was more than sufficient.

I resisted having a glass of the Seppelt's Botrytis and instead sat back watching the diners while I contemplated the meal. An excellent textural and visual feast that set the theme for the entire Symposium: good food carefully cooked and thoughtfully presented. Like many Australians I do not consume a large variety of pulses, except for dhal and an occasional vegetarian restaurant outing I tend to ignore this important food group. The meal served as a wake up call: since returning to Melbourne I have bought some Puy lentils and yes, they were expensive! I am still deciding whether to have them as Stephanie's lentil salad or do a braised leg of lamb accompanied by them. I will let you know at the next Symposium.

1 Toussant–Samat, Maguelonne, *A History of Food*, (trans. Bell, Anthea), Blackwell, Cambridge MA, 1995, p.42.
2 Alexander, Stephanie, *The Cook's Companion*, Viking Penguin, Melbourne, 1996 pp. 399–400.



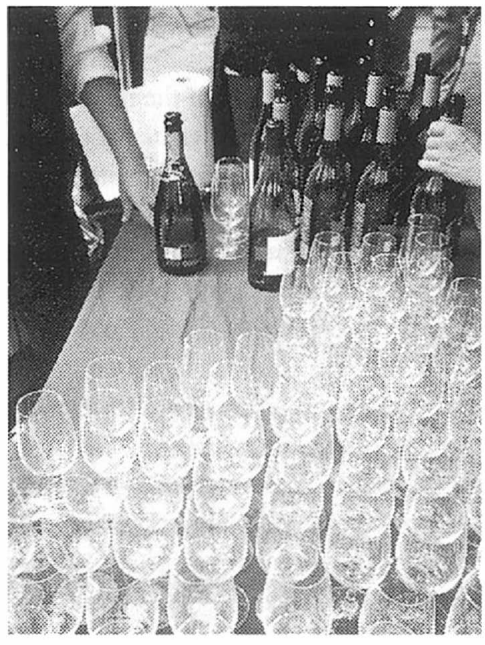


Tenth Symposium of Australian Gastronomy

Day 2

Beyond the Tuckerbox

Securing the Future



Indigenous Knowledge

The Role of Indigenous Environmental Knowledge in Securing the Future—Ethical and Political Dimensions

Dr. Nancy Williams: A few months ago (6 December 1997), in his Radio National program *Comfort Zone,* Alan Saunders interviewed Peter Latz and Vic Cherikoff on topics related to bushtucker. In the course of discussion, reference was made to issues of commercial harvesting and marketing. Peter Latz asked Vic Cherikoff what his response to an Aboriginal request for royalty payments would be. He suggested that such a request might begin as, "You're eating our oranges." Vic Cherikoff (after a barely audible "too hard" expostulation) said, "Even if they said, 'Yes, let's do it,' you couldn't administer it." He then suggested why it would be difficult if not impossible to administer royalty payments from the point of view of the economics of production and marketing, as well as respect for what he exemplified as the cultural sensitivities involved.

In this paper I discuss some of the reasons that could indeed make it difficult in terms of Aboriginal relations to the Australian environment of which bush tucker is a part. But I hope that in the course of spelling them out, the potential role of indigenous knowledge of environmental resources and their management in a sustainable future becomes better understood. A crucial issue then is how to deal equitably with indigenous proprietary interests in both tangible and intangible environmental resources[1].

My use of the terms 'ethical' and 'political' in the title of the paper deserve explanation; in particular, since I do refer to law and legal traditions, the use of 'political' rather than 'legal'. My rationale is this: indigenous peoples' notions of proprietary interests in resources are moral; acknowledging that basis raises issues both of morality and ethics for non–indigenous people. My use of the term political is intended to flag issues of policy: in my view, policy informed by appropriate understanding is likely to be good policy and good policy is essential in the formation of good legislation.

Intellectual property is a form of property; and for Aboriginal people, property may be either individually or communally held. The existence of communal interests in native flora and fauna and in knowledge about them requires specific protection, and, if necessary, statutes specific to indigenous people based on their relationship to land and resources which is the basis of both individual and group identity. Recent work done under the aegis of the United Nations as well as that of indigenous and academic bodies within Australia canvasses the factors that need to be taken into account in arriving at equitable arrangements for their protection and use. I seek here only to add to the process an exploration of the conceptual challenges in accommodating such arrangements within a common law tradition. I assume that if they can be seen and acknowledged, they may be effectively dealt with.

In the 'real world' of course changes in Aboriginal societies occur, just as they do in all other societies, and Aboriginal people in Australia have accommodated among other things to a capitalist economy and to the varied projects of capitalism. Accommodation on the part of the dominant polity in the commercial use of indigenous species will allow the accommodations that Aboriginal people must make more nearly equitable. In the concluding paragraphs of this paper I mention some recommendations that have been made for such accommodation.

In the first part of the paper I illustrate some of the major aspects of Aboriginal people's relationship to land. I should say here that my own work with Australia's indigenous people has been almost entirely with those whose lands are in the North chiefly North eastern Arnhem Land and the Darwin hinterland in the Northern Territory, the East Kimberley of Western Australia, and, to a more limited extent, areas of north Queensland including Cape York Peninsula. Some of the groups of people with whom I have worked, and continue to work, have coastal estates, thus marine as well as terrestrial resources are important to them. For information about the relationship of indigenous peoples to their estates in other pads of Australia, including the Torres Strait Islands, I rely chiefly on the published work of other scholars as well as discussions with them.

In the second part of the paper, having set out the basis of the ethical and political questions involved, I discuss some paths that have been followed, some instrumentalities that have been established, and some forums that have been used to develop equitable solutions to issues of harvesting and marketing bush foods[2].

Land (and Waters): a Sacred Endowment

In searching for appropriate English–language terms, we can envisage lands and waters as bestowed on indigenous Australians by spirit beings who moved through the land in the distant past (but not in a random, unpatterned way). Aboriginal people regard their land as a sacred endowment, and—as I wrote once (1986.)—scholars who wished to learn how Aborigines perceived the beauty of Australia or maintained its abundance or conceived their attachment to it, found that "Aborigines affirmed both use and ownership of land in religious terms... [and that] comprehending the religious foundation required a particular approach to religious symbolism." I went on to acknowledge a debt to one of the scholars who contributed most to non–Aborigines' understanding, Professor W.E.H. Stanner. In 1976 Professor Stanner characterised the religious foundation of Aboriginal ownership of land in this way:

"If Aboriginal culture had an architectonic idea I would say that it was a belief that all living people, clan by clan, or lineage by lineage, were linked patrilineally with ancestral beings by inherent and imperishable bonds through territories and totems which were either the handiwork or parts of the continuing being of the ancestors themselves. This belief was held in faith, not as an 'official truth' or dogma, but as part of a body of patent truth about the universe that no one in his right mind would have thought of trying to bring to the bar of proof. The faith was self–authenticating. The very existence of the clans or clan–like groups, the physical features of the countryside, the world of animate and inanimate things, were held to make truth, as received, visible... Customs, usages, even the fact of language and dialect were taken to be evidential: after all, who but the ancestral beings had taught men the ways of living and speaking? Songs, stories, dances, mimes and rites of high solemnity, deep secrecy, and sometimes of holy status, gave powerful buttress (1976:19)."

Aboriginal people's relation to their lands and resources is not unique among the world's vast array of diverse indigenous societies; there are commonalties. As Jean Christie (1996:65) says, "For indigenous peoples, their lands and waters underpin who they are and are the foundation of their very survival as peoples. Over and over again, when reflecting on biodiversity or indigenous knowledge, indigenous people from all over the globe insist that living things cannot be separated from the land they grow on, and that peoples' knowledge and myriad uses of natural resources cannot be separated from their culture, and their survival as peoples on the land. This oneness—of land and the things that live in it, of people, their knowledge and their cultural connection with the land—is the only basis for meaningful consideration of biodiversity and indigenous knowledge about it. What is at stake is the intellectual integrity of peoples, not simply intellectual property".

Christie's (1996:66) characterisation of the nature of shared interests in intellectual property is apt and particularly useful in the present context: "While specialised knowledge is often entrusted to particular groups or individuals, the body of a people's knowledge is held collectively, and intergenerationally. Like land and its resources, knowledge is maintained and enhanced for the benefit of the community 'in trust' for future generations".

In the Introduction to her book on bush foods and medicines, Jenny Isaacs (1987:11) says of the relationship of Australian Aboriginal people to their land and its resources: "Most importantly, Aborigines are the caretakers of their tribal lands and the plants and animals created by the ancestral beings. Each food, therefore, has ceremonial or religious importance. Tracts of land are owned by different people and permission must be gained before gathering food, hunting animals or catching fish".

Deborah Bird Rose has written a great deal about Aboriginal people's relationship to land, and she has recently expressed it in terms that are particularly relevant to the focus of this paper: "Ownership and transmission of knowledge is a crucial key in understanding people and their country. The actual information which people possess, teach, exchange, and inherit constitutes intellectual property. And knowledge, in all Aboriginal systems of information, is specific to the place and to the people. To put it another way: one of the most important aspects of Aboriginal knowledge systems is that they do not universalise. Moreover, the fact that knowledge is localised and specific is one of the keys to its value... If there is one thing that is absolutely not free, in Aboriginal land tenure systems and in Aboriginal politics, it is knowledge. This point is often misunderstood by settler Australians who, when told something, feel free to use that information as they wish". (1996:32).

Identity

The Yolngu people are the owners of land and seas in North eastern Arnhem Land. I have understood in this way: "Person and place, group and jointly owned land, are bonded conceptually and semantically. Individuals take the most important aspects of their identity from the spirit–beings with whom they are associated, through both their mothers and their fathers. These spirit–beings in turn assume the characteristics, particular activities, and appurtenances by which Yolngu know them in relation to particular lands". (Williams 1986:27).

Mick Dodson (1997:43) speaks of Aboriginal people's relationship to land as combining economic and other factors. He said, "Our traditional relationship to land is profoundly spiritual. It is also profoundly practical." He went on to say that, "For instance, hunting, fishing and harvesting are neither merely economic or cultural activities. As older people walk the country they teach the young; they tell the stories and teach the responsibilities. The distribution of the catch or harvest enables kinship obligations to be learned and fulfilled". (1997:43)

Mick Dodson (1997:41) also said that "To understand our law, our culture and our relationship to the physical and spiritual world, you must begin with land. Everything about Aboriginal society is inextricably interwoven with, and connected to, the land. Culture is the land, the land and spirituality of Aboriginal people, our cultural beliefs or reason for existence is the land. You take that away and you take away our reason for existence. We have grown the land up. We are dancing, singing, and painting for the land. We are celebrating the land. Removed from our lands, we are literally removed from ourselves".

For the Yolngu Aboriginal people of North eastern Arnhem Land, their individual spirits reside in the land—usually the land of their father's clan, which is also the land to which they hold joint title. They come from specific places to their mothers, where land and language are different from their fathers, and they return to their own land after death.

A map drawn by children a few years ago as part of a teaching/learning process in the bilingual school at Yirrkala in North Eastern Arnhem Land was accompanied by 'Notes on the different places and how they came to be' (1992b:21). The notes (all in Yolngu matha, the local languages,), refer to the acts of certain spirit/creator/ancestral beings who bestowed land on the Yolngu clans (reference is also made to specific resources related to their acts at those places—honey and water in this case).

A fundamental metaphor expressing identity in terms of the relationship of individuals to land is foot and footprint (and by extension, track). Most people are familiar with the representation of footprints and tracks in Aboriginal paintings from many different parts of Australia. Yolngu people often translate the word *djalkiri* into English, literally foot or footprint, as foundation, both of Yolngu culture and society and of their individual identity. A few years ago, for example, students in the Yirrkala school (1992a:27) drew a stylised footprint with the word *Djalkiri* in the centre and lines radiating 360 degrees to words expressing the basic elements of individual (and specific group) identity: *minytji, dhawu, miyalk rom, manikay, dhapi, gurrutu, dharuk, ngaraka wanga, djinawawuy rom, wangarr, darrarruwu rom, bunggul, bapurru, miltji,* and *warrangulwuy rom* (rough translations: paintings [of sacred designs], stories [including sacred myths], 'women's business', singing [ritual chant], circumcision [the first rite in the graded stages to fill manhood], relations of kinship, languages [clan–specific], focal site of land [symbolising the bestowal of land by the spirit/creator beings], sacred law, time and, events, and beings of the time of the sacred endowment of land, ritual dance, symbols of clan identity, groups of people [linked by some common factor], rules for proper everyday behaviour).

Dhayirra Yunupingu wrote an article in his language, Gumatj matha (one of the Yolnga languages) with accompanying English translation, for *Yan*, an occasional publication of the Yirrkala School's Literature Production Centre. He discussed the use of the terms for body parts in Yolnga conversation "about the land and its various parts" (1992:17), and took issue with the interpretation of this usage as simply metaphorical. He argued that it is something more. His list included the term *luku*, which is interchangeable with *djalkiri*, along with nose, mouth, chest, elbow, and others. He said that "Balanda people [his reference here is to English-speakers] call these Yolngu Matha [Yolngu language] Metaphors... those Balanda have missed out on something, what it really means, and how it is that we Yolngu people look at our land. Because those Balanda

look at the land as if it doesn't contain any meaning, so it turns out that they look at the land without being aware of its significance. They just look at the land, and say how pretty it all is, and they cannot see at all how it is that the land has actually carried us here. And another thing, they don't interact with the land in the same way as we Yolngu do.... In our minds, the minds of Yolngu people, this land is like our own bodies, or the land represents ourselves, so for example, whenever a person will die, it will be this very land which will slowly wipe out all traces of the person, here in this very area, and this is so that we will somehow still be able to interact with that person's spirit properly.

Also, this land of ours, it provided our ceremonial objects, sacred [people of the] Yirritja and Dhuwa [moieties], and it wasn't only the sacred things which were given but the land also provided the sacred names, the kinship, the subsections, the homelands, and whatever language you might speak. So wherever we Yolngu people see this land, we must care for it, even as if it were our mother.

So we Yolngu look over and care for this land, and so it rests on our heads, it comforts us, when we think sadly about our old people, and we remember the places where they used to gather together and the places where they died.

Yes. This is what they passed towards us, and this is why we educated those little ones, so that some time they will educate their own little ones... when we say something like: 'Are you mangutji–weyin (eyes–long, staring too much)?' Mangutji can refer to what? Your eye, a seed, a pool of water, or even your girl–friend or boy–friend. In those cases, how are you making meaning? You are making that person reflect the nature of the land, or an animal, like when you say nguml–weyin (nose long)". (Yunupingu 1992:17–19).

Franca Tamisari, an anthropologist who has worked with Yolngu (and reminded me of the article by Dhayirra quoted above) has provided an elegant interpretation of the significance of *djalkiri* for monolingual English–speakers. "In a general sense, *djalkirri* [her spelling] refers to all visible marks lent by the ancestral beings, such as named places and landscape features, to the kinship relationships among groups derived from their positioning across the land, to language as narratives which recount the ancestral beings' actions and journeys, and to personal and group names. In addition *djalkirri* also refers to the correct manner of doing things, taught to humans for hunting, foraging, processing of food, the making of tools, or the performance of paintings, songs and dances which are often associated with these practices. *Djalkirri* thus not only fuses place and body, but marks connections between places and relationships between people, visualises movement, unravels narratives, embodies names and reveals the itineraries to be retraced in songs and the actions to be performed in dances. *Djalkirri*, as the foundation of Yolngu Law or Culture, is simultaneously a way of moving through life, coming and going out of being, visiting the same camping places, sitting around a hearth which has been used by family members long gone, reproducing or re-performing everyday activities in the fight way, following the way taught and the footprints lent by the ancestors." (n.d.:4, Yolngu terms in parentheses omitted.)

Tamisari goes on to explain that "Any ancestral manifestation—a feature of the landscape, a name, a song, a dance, a design, a kinship relationship, a journey narrative—is *djalkirri*, the footprint, the visible marks left behind by the ancestral beings... It is the quality of visibility which brings to the fore a far more dynamic dimension of the idea of embodiment which is central to Yolngu as well as to other Aboriginal cosmologies and epistemologies. (n.d.:21)

It is... the interaction with the land in particular, and in general with... 'ancestral track'—names, narratives, songs, dances and paintings—that knowledge is acquired. More precisely, it is seeing and experiencing the ancestral 'footprints' with one's body that ancestral knowledge is accrued, transferred and negotiated... people accumulate ancestral knowledge by seeing a place and by interacting with it." (n.d. :24)

Caring for Country: Prescriptions and Proscriptions

Few people seriously doubt any longer that Aboriginal people manage their lands and seas. The question whether the management was conscious or only the happy but not explicitly recognised consequence of practices they followed is, however still sometimes raised. My own experience has made clear to me that

Aboriginal management was explicit and principled. Kohen (1995:125–7), an archaeologist, in his book *Aboriginal Environmental Impacts*, makes a distinction between management and exploitation, while saying that a fine line divides them: "Essentially, management involves the utilisation of the landscape without any long-term deterioration, whereas exploitation involves long–term degradation to the detriment of the environment". He goes on to name two main interrelated factors which determine whether land-use practices can be defined as management or exploitation. The first is the nature of the land–use strategy and the second is the human population density. Both of these factors may seem intuitively obvious, but they need to be justified because of the implications for our understanding of traditional and contemporary Aboriginal societies and the nature of their impact on the environment... Once land management practices were adopted by Aboriginal people to increase the productivity of the landscape, then there were pressures on their communities to maintain the environments they had created in order to feed the growing population... the environment which confronted Europeans in 1788 was certainly one which was managed, and which was certainly different from what Australia would have been like without Aboriginal land–management practices. That is not to say that there would have been any major obvious physical differences. The biogeographical history of Australia determined the range of plant and animal species which would occur within the region, but the balance and distribution of species had been altered by Aboriginal involvement, most obviously by the use of fire.

Aboriginal management of their land and sea estates is based upon their detailed knowledge of all its features. As implied above, much of that knowledge is embedded in religious belief and practice. It is also inextricably linked to the system of land tenure.

Bruce Rose (1995:1) undertook a study of central Australian Aboriginal people's perceptions of land management issues as part of the Central Land Council's Crosscultural land management project (with funding support from the National Landcare Program). Rose found that "Aboriginal people see caring for country as an integral part of living on their land. Caring for country forms part of the relationship individuals have with each other and with the land. It is not seen as a separate activity which must be 'carried out'. From this perspective the most important issues are land ownership and access to land so that Aboriginal people cm care for their country".(1995 :ix)

When he questioned people about "European notions of conservation", Rose found that "Aboriginal "management" of the environment is understood through song and ceremony. It is seen to be more of an integrated process whereby knowledge of the natural world is gathered through personal experience and passed on through tradition and culture. Aboriginal management links people to their environment rather than giving them dominion over it. Aboriginal relationships to land are defined in terms of culture and site protection, land usage and harvesting of natural resources". (1995 :xviii)

In Arnhem Land, Yolngu land–owning groups organise responsibility for management through a set of checks and balances expressed in links of kinship. The checks and balances rely on each person's having a relationship to certain lands through patrilineal links and to certain other lands through matrililateral links. Although a patrilineal group holds title to m estate, that group cannot unilaterally make decisions on important matters concerning the estate, whether the issue to be decided is—in non–Aboriginal terms—religious or economic. Not only must individuals related matilaterally to the land-owning group be consulted, they must concur in the decision.

Female owners' children and their daughters' children are most actively involved. Within the title–holding group, authority determined by birth order and age prevails in decision–making related to the land of that group—at least any decision that will be accorded legitimacy and has the greatest likelihood of being implemented will be recorded as having such authority.

Land–owing groups are linked (usually agnatically) through common or shared religious myths of land bestowal, to certain other land-owning groups, and a decision on any matter affecting the land or resources of one in principle requires the concurrence of all (who may refer to themselves as 'sister' groups or as being in a "company" relationship. This is a substantial check on any decision affecting land or resources. An even stronger and more immediate check inheres in the relationship of a title–holding group and a group

composed of certain uterine relatives, usually described in some manner as the children of the women members of the title–holding group. This relationship is widely known in English as that of 'owner–manager', and in the Yolngu languages as yothu yindi. The nicest explanation I have seen of this relationship is one by a Yolngu woman, perhaps motivated by the simplistic translations of that term which followed the popularity of the Yothu Yindi rock band.

Merrkiyawuy Ganambarr's (1994:235–236)explanation appears in the Macquarie Aboriginal Words dictionary in the entry she wrote on the Datiwuy language, her language: "I want to explain to you what yothu yindi really means. You have probably heard about the rock band Yothu Yindi. Yothu yindi is really a relationship term. The relationship holds for people, land and all that we see about us, for things such as animals, plants, wind, water and many more. Yothu means 'child' or 'baby' and yindi means 'big' but in the expression yothu yindi, yindi refers particularly to the mother. This expression always involves two things in a relationship to each other. So if I am someone's or something's yothu, they are my yindi. I am in the Datiwuy clan. For the Datiwuy clan the Wangurri can be the child (yothu) or the mother (ngandi) (and vice versa). This relationship is shown to us by the mingling of the waters from two rivers coming out from the Wangurri and Datiwuy lands.

We can use yothu yindi to talk about relationships between different things, about people, tribes, ceremonies, land and so on. For example, I am the yothu (child) of the tribe Gumatj. Gumatj is the yindi (mother'). Why? Because my mother is a Gumatj woman. So all Gumatj people are my yindipulu (-pulu is a suffix used to describe people, clans, etc., related through the mother's side). Also I am the next yindi for my yothu (child'), but I am also yindi for anyone who has a Datiwuy mother. So we see how the relationship extends from the immediate family to cover whole tribes. Because of this, men are also considered yindi (mother') and men can be yothu yindi to each other. All the members of the rock band Yothu Yindi are in this relationship to each other, and that's why they chose the name.

Another group of people who are closely linked with the yothu and yindi are those we refer to as māripulu (grandmother's group—in the kinship system māri refers to your grandmother on our mother's side and all her brothers and sisters). The māri is the 'head' of this group since the māri is where yindi and yothu come from. This is especially important in ceremonies. These groups all join together, with the yothu and yindi having the manager role on behalf of the māri.

We all have our own links as yothu, yindi and māri to many different tribes. My own links will be different to those of my children, and my mother and my grandmothers, binding us and the tribes in this area all together in a complex way. This contrasts to our father's line where we are a single group."

Yolngu responsibility for land includes control of resources as well as maintaining territorial integrity. Thus a decision concerning the use of any resource in an estate for more than the immediate needs of an individual or family is in principle subject to the same constraints as one concerning a grant of subsidiary rights in lands. In contemporary terms such a decision might involve a proposal to establish a commercial fishing venture or a request to harvest certain fruits for marketing or to gather seeds for a nursery. When a person is travelling through land of his ngandi (mother) or his māri (mother's mother), he is actively, not just metaphorically, "looking after" that land. Its physical condition and the status of its resources are noted, as are evidence of others' occupation or use. Those observations are regularly the topics of discussion among Yolngu. When some concern about unauthorised or injurious use warrants, leaders will gather to consider taking action.

For Yolngu, conservation of resources is a conscious concern. Moreover, certain harvesting practices include conservation techniques. For example, women dig some varieties of yams in such a way that a portion which will regenerate is left in the ground. Certain techniques of trapping fish involve provision for live storage and release of fish not needed for immediate consumption. Men assert that the toxic substances used to stun fish in one technique of fishing do not affect the immature stock. Yolngu men told me that their techniques for cooking meat of a large animal where it was killed, for carrying and storing it, and for reheating it before it was eaten on subsequent days, are intended to prevent waste.

Land owners and their yothu may impose restrictions on the extraction of certain mineral deposits used for ritual decoration. I was told for example that leaders who controlled the use of one unusually rich yellow ochre

quarry became concerned because mining the ochre was increasing the effects of natural erosion. The religious significance of the site gave additional cause for concern and the leaders decided to prohibit further mining lest the deposit be completely exhausted.

A further example of long–term conservation policy, again drawn from the Yolngu, is in the siting of Yolngu base camps in the past. Rotation in the use of base camps, two to four years of more or less continuous occupation followed by a comparable period of non–occupation, was a means of allowing the plants and animals in the area to regenerate and the winds and rains to clean the site.

Bill Neidjie told me on one occasion of his frustration at being unable to implement conservation measures in certain areas to allow the regeneration of particular species perceived to be in low number within Kakadu National Park, of which he is one of the principal owners. He expressed it in terms of wanting to restrict access to certain areas for that purpose, but the Australian National Parks and Wildlife Service (as it then was) always wanted, he said, to extend carparks.

Jenny Isaacs (1987:46) discussed issues relevant to conservation in her 1987 book on bush foods. There, she was inclined to think that Aboriginal practices only indirectly resulted in conservation. Thus she titled the pertinent section 'Accidental Farming' (a term she borrowed from a 19th century observer), and said that "Conservation in its generally used sense of environmental preservation cannot strictly be applied to Aboriginal management of land. Nevertheless, Aborigines indirectly conserve the resources of the land by taking only food that can be consumed immediately and not tolerating waste. In times of drought, they harvest an available supply of food and store quantities for some time. Some myths explain the common practice of replanting portions of yams and other root vegetables to ensure a continual supply of food".

Isaacs (pers. comm.), reflecting in 1998 on her use of the term 'accidental farming' and what she wrote in the mid 1980s, says "the trappings of settled peoples may not have been an aspect of Aboriginal life, but they did knowingly cultivate their land and plants - through fire, replanting, especially yams, and depositing seeds in humus rich environments". She adds that at the time she wrote the book, 'the position I took was fairly adventurous and taken as a direct rebuff of the then mining and rural lobby claims that Aborigines never 'did anything' with their land, that they would die out without stores and provisions and that the bush was an unproductive wasteland. In fact the whole book was meant to establish a world of Aboriginal plant knowledge and use hitherto unknown by the public. It worked to some degree but the commercialisation of products without significant Aboriginal involvement has left me fairly angry and ambivalent."

In the 1987 book, Isaacs (1987:47) relates Aborigines' conservation practices to their religious beliefs, and says that: "To Aborigines, there are no relationships between people, plants and animals that do not also involve the spirit world. Customs, rules and traditional law determine all practices associated with the gathering, cooking and eating of foods throughout Aboriginal Australia. Whether these have arisen as a means of controlling resources in an environment where food is difficult to obtain, or whether some food taboos have a basis in Aboriginal medical lore, has not been fully explored".

The forms in which Aboriginal knowledge of the environment is encoded and communicated are numerous. One mode we may call inter–species communication. Isaacs (1987:13) described it this way: Aboriginal people have an encyclopedic knowledge of Australian plants and animals and of seasonal changes in the Australian environment. A batwing coral tree flowers, its orange blossoms fall and women know it is time to go and dig crabs from their hides under the mangrove mud. Their fat, too, will be orange, and the flesh good and filling. Another flower blooms to warn that poisonous stingers are in the Northern waters, while the milky white flowers known as 'oyster flowers' tell people to move camp to the oyster beds, for the oysters are fat and white. Every child learns the importance of such natural signs. The winds, the blooming of plants and the seeding of grasses, rather than a fixed calendar of dates and months, herald the changes of seasons".

Deborah Rose describes inter–species communication in the context of describing the Ngarinman–speaking Aboriginal people's perception of their environment as a moral system. She (1988:381) says that "all animals are spoken of and treated as moral agents; so too are some 'natural' phenomena such as sun, moon, and rain; and so are some categories of beings that Westerners do not recognise, but which are important parts of the

Ngarinman cosmos. Ngarinman people see the cosmos as a whole as being conscious, as are most, if not all, of its parts".

When Rose (1988:381) wanted to learn the Ngarinman terms for seasons she found that she had to recognise first that her questioning was constrained by her own understanding of what seasons were. She found that in addition to a term for the time of big rains, and a generic term for rain, there were a set of terms to refer to all the different types of rains: the cold–weather rain, the hot–weather rain, the first rain after the really hot time of year, and the smell of the first rain. There are also different coloured rains, which relate to matrilineally defined categories of people. Rain is conceptually related to all water, and different coloured rains are conceptually linked to different coloured river water. Again, different coloured river water relates to the action of the rainbow snake, as does the rain itself So there is a complex and interconnected set of ideas about water that relate to the rainbow snake.

The Yolngu have comparable conceptualisations of the relation to river water to the sea and to the flow of currents in the sea.

Rose (1988 :382) goes on, in describing Ngarinman people's links between water and the rainbow snake to say, "But the rainbow snake is not alone; it has its allies in the turtles, fish, hogs, tadpoles and flying foxes. In a normal course of events, rain comes because the flying foxes have told the rainbow snake that the earth is getting very hot, the bees are all getting dry, the flowers that are food for the flying fox are gone. They 'say' this by going to roost along the river. So one portion of the seasonal cycle is conceptually linked to a range of faunal species. Many of these species are associated with human beings through matrilineally derived categories of identity. In this way, humans, animals and seasons are brought together as part of a system... seasonal knowledge here is based on a logic which asserts that two separate but simultaneous events stand in a communicative relationship to each other. [For example,] 'March flies are telling you the [crocodile] eggs are ready. The value of this kind of information is manifest: the moment at which crocodiles start to lay eggs is quite unpredictable by the western calendar, but it is entirely predictable if one pays attention to march flies. Furthermore, to be bitten by march flies, one need not be in a place where crocodiles are likely to lay eggs; but the bites are a signal to go and look for crocodile eggs... The other type of biting fly tells you that the bush plums are ready. 'When the brolga sings out, the... (dark catfish, associated with flood waters) starts to move.' When [a certain little bird] starts crying, it's hot weather time and a good time to kill emu.' 'When the flowers of [a certain tree fall into the water, the barramundi are biting."

Rose (1988 :382–3) interprets this mode of communication as revealing a moral system in which there are many different agents of communication and they are arranged in a non–hierarchical way. Thus, in addition to the obvious pragmatic significance of the information that is transmitted, Rose argues that 'here are further questions regarding the political economy of knowledge, and the intellectual requirements of responsible human behaviour. In order to act responsibly, humans and others must be constantly alert to the state of the systems of which they are apart- Awareness is achieved by learning basic sets of messages, and by continually observing and assessing what is happening around them."

Finally, Rose (1988 :384) argues that a "concept of the cosmos as an acentred information system has implications for decision–making: Ngarinman people are reluctant to intervene in ecological processes except in limited and localised ways, or in ways that are authorised by accumulated experience, expressed as Dreaming or Law... their reluctance derives from the facts that no individual or species has a monopoly on information, that responsible action can only be based on knowledge, and that it takes time to accumulate sufficient knowledge to arrive at an understanding of complex events."

The significance of this understanding for a responsible land ethic, Rose (1988 :386) concludes is that "any land ethic that is not human–centred must involve knowledge of other living species and of living systems. Responsible action can only be based on a sound understanding of what is going on in all parts of the system. Deeply embedded notions of hierarchy, centralisation, specialisation and progress are inimical to a land ethic that is not human–centred. We have to realise how deeply embedded these notions are in Western cultures".

Ross Williams (1996:113–114), Aboriginal and Tortes Strait Islander Coordinator, Great Barrier Reef Marine

Park Authority, himself an Aboriginal man, presented a paper at the Ecopolitics IX Conference in Darwin in 1995 subsequently published in the proceedings of that conference. The focus of his paper is on Aboriginal knowledge of turtle and dugong in the area of the Great Barrier Reef and the actions that indigenous people are taking to reduce their own impact on turtle and dugong.

"Aboriginal and Tones Strait Islander peoples', survival was only ensured by their unique and intimate knowledge of their environment and the ecology of its species. Within the marine ecosystem your knowledge of species like dugong and turtle was fundamental if you were to be successful in capturing these animals. Turtle and dugong have always been an integral part of the coastal indigenous peoples' traditions and culture and must be respected, not only in life but in death. Within these groups there were members whose particular task it was to hunt. These people alone had to have intimate knowledge. And today there are people with that same intimate knowledge and these animals are still used for semi–subsistence food or ceremonial purposes...

Unfortunately in the last 10 to 15 year period, indigenous people have seen a gradual decline in the numbers of dugong and turtle, particularly in the area south of Cairns... [I]ndigenous peoples have made and are willing to make some incredible traditional and cultural sacrifices in order to help the populations locally and regionally. These measures have included severe restrictions on hunting, to outright self imposed moratoriums. This was only achieved by the empowering of communities and in particular, elders, to govern and interpret their own traditional culture."

Williams (1996:115) goes on to say that "For the management agencies it is a slow process to accept indigenous knowledge and management principles as a legitimate tool for the future management of marine areas." Williams argues that "Indigenous knowledge should never be seen as threatening or challenging to management agencies or the foundations of scientific understanding, but complementary through the broadening of our collective management structures and basic ecological knowledge". At the time he wrote, and with reference to the area of the Great Barrier Reef he said (1996:116), "Indigenous people have never been asked what they know about dugong and turtle. They have never been asked for their opinions in the areas of importance for turtle and dugong, nor have they been approached as to the best management techniques". During the next year, however, a major marine turtle project in North Eastern Arnhem Land that involved biologists at the Northern Territory University and the Aboriginal rangers in a Yolngu organisation, Dhimurru Land Management Aboriginal Corporation was underway (see Kennett et al, 1997).

Part Two

Australian Aboriginal people are increasingly calling not only for recognition of their ownership of land and seas, but also of the resources within them. And along with that, the ability if not the right to be compensated for their utilisation. Importantly, also at issue is acknowledging proprietary interests of knowledge systems related to the resources. Questions (and assertions) have been made in terms of 'intellectual property rights'. More recently the questions are phrased in terms of 'traditional resource rights'. Michael Mansell (1997:195) asserts broadly that, "The cultural and intellectual property rights of Aborigines includes our art, ceremony, language, performance and song. It covers our knowledge of our heritage, culture, medicines and even the history of our communities, including who we are and what we do. It includes us as individuals and as a people".

Turning specifically to issues arising from Aboriginal relationships with the environment, Mansell (1997:202) says that, "The existence of native title may well stop trespassers seeking to take plants on native title lands. But there is nothing to stop a visitor finding out which plants on native title lands have medicinal qualities and then going elsewhere to collect the plants. Native title does not protect Aboriginal knowledge nor Aboriginal intellectual property... Traditional use of natural products involves knowledge—transforming a plant into medicine requires knowledge of the plant itself, which part of the plant to use, the right time to pick it, how to prepare it, what other substances need to be mixed with it and how to administer it". Mansell then asks, "Why is this knowledge not capable of legal protection like the knowledge Europeans use for

inventions [which may be protected by patent or copyright]?"

Reform, Mansell (1996:205–206) argues, may be effected through statutory protection: "If the applied knowledge of non–indigenous people is already protected through patent, copyright and plant breeder legislation, extending that form of protection to areas of applied Aboriginal knowledge is a logical and sensible step. A federal law covering Aboriginal knowledge, values and uses of plants is needed. That law should recognise that the knowledge of the use of plants is property, capable of being owned and traded. Whether this property right is held individually or collectively depends on the attitude and custom of the local people". Mansell then continues, urging that "Where more than one Aboriginal group claims rights over certain knowledge, each of the groups has a shared proprietary interest capable of protection by the courts. Hence, if a pharmaceutical company negotiates with one group for usage rights of the knowledge and the plants to which that knowledge relates, other groups able to prove their rights could negotiate or sue to gain a share of any wealth generated, or prevent the transfer of the right. That latter course may happen when the knowledge is sacred and not transferable.

It is important that the recognition of such Aboriginal property right goes beyond mere use. A law protecting Aboriginal use of plants allows for outsiders to gain access to Aboriginal knowledge, locate plants in a different area and use them for commercial gain. Aborigines would get nothing because their use is preserved. Such an approach would be tantamount to reducing the value of Aboriginal knowledge of biodiversity to a second class property level, which defeats the very point of recognition. Just as legal protection for an invention extends to the knowledge applied, the product and technique used by scientists, so too should it be for Aborigines. But who owns the actual plant or seed or germ plasma, the subject of Aboriginal innovation or scientific invention?"

Mansell (1996:207) says, "The problem is not whether natural species can be owned, for they clearly can: [the problem] is the refusal to recognise indigenous ownership of those species." He also says that, "Although this position is being eroded by native title, Aboriginal ownership should extend to the natural species to which Aboriginal knowledge applies." Approaches to international mechanisms may not provide a great deal of protection, Mansell refers to Article 8(j) of the Convention on Biological Diversity (see below) and says: "Article 8(j) of the Convention on Biological Diversity refers to the need for States to pay heed to indigenous knowledge. However, the wording of 8(j) implies this will be subordinate to future rules. Article 8(j) is limited in its application to those living traditionally and the main thrust of 8(j) is to expect indigenous people to give access to their knowledge and practices. Australia can simply refer to the Native Title Act and claim compliance with article 8(j)".

The major questions, according to Mansell (1996:207–208), are: "to what extent, if any, do Aborigines have property interests in the plants which have been traditionally used? If there is a property interest, is it in the technique and knowledge displayed when Aborigines use the plants, or does it extend to the plants themselves? Should Aborigines own all the species of plants the group used, no matter where they exist, or should rights be usufructuary only? It would indeed be strange to consider the question and deny property rights in the plants when...property exists in other natural resources of the land. To deny Aborigines ownership of the plants is to diminish the quality of Aboriginal traditional use and knowledge of those plants, creates a gateway for exploitation of traditional knowledge and further denies the likelihood of Aboriginal economic development leading to self determination".

The forums where the issues have been debated and solutions sought have so far chiefly been conferences and symposia organised by indigenous organisations or academic organisations, sometimes jointly organised or sponsored by representatives of both sectors, and international agencies responsible for indigenous interests.

The 1992 UN Conference on Environment and Development (U NCED or The Earth Summit) "produced a number of international agreements that highlight the importance of indigenous peoples and their role in the conservation and sustainable use of the components of biological diversity" including the Preamble of the Convention on Biological Diversity (CBD), Article 8(j), Article 18.4, and Agenda 21 (Posey 1996:44).

The title of CBD Article 8 is *In–situ Conservation.* It declares that "Each Contracting Party shall, as far as possible and as appropriate" do certain things. Article 8(j), about whose efficacy Michael Mansell, as noted above, expressed serious misgivings, entreats each State, "Subject to its national legislation, [to] respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote the wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices".

"Perhaps pragmatically more pertinent," according to Darrell Posey (1996:45), an ethnobotanist, "is the fact that representatives of indigenous peoples are actively involved in discussion at the commission on Sustainable Development (CSD), which was set up to monitor and coordinate the CBD and other environmental conventions and agreements... Issues of access and benefit–sharing, focussing upon [Intellectual Property Rights] are becoming high–profile."

For a number of reasons, Intellectual Property Rights (IPRS) provide less than adequate protection for indigenous peoples. Posey (1996:54–57) outlines and summarises the mechanisms and solutions that have been debated as means of achieving both recognition of indigenous rights and providing equitable economic outcomes. He defines a category of indigenous initiatives that includes self demarcation of indigenous peoples' territories, community data bases of indigenous knowledge and local biodiversity (Community registers, indigenous knowledge, data bases, and community–controlled research), and a category of legal agreements that includes contracts, covenants, material transfer agreements, and information transfer agreements. A third category, traditional resource rights, appears to be gaining support as an appropriate alternative to IPRS: "Given that knowledge and traditional resources are central to the maintenance of identity for indigenous peoples, the control over these resources is of central concern in their struggle for self determination.

Traditional Resource Rights (TRR) has emerged as a concept that more accurately reflects indigenous and traditional peoples' views and concerns. TAR amasses 'bundles of rights' already widely recognised by international legally and non–legally binding agreements in an effort to build a solid foundation for more equitable systems of protection and benefit sharing.

Basic principles upon which TRR is based include: basic human rights, right to development, rights to environmental integrity, religious freedom, land and territorial rights, right to privacy, prior informed consent and ill disclosure, farmers' rights, intellectual property rights, neighbouring rights, cultural property fights, cultural heritage recognition, rights of customary law and practice.

Although general principles can be found in these agreements, they are on very different political footings. Some are enshrined in legally–binding Conventions, while others are found in non–legally binding documents or model proposals.

Thus, existing 'bundles of rights' are wide–ranging, but still inadequate. TRR is more of a process than a product. The concept can grow as additional rights accrue and are adapted through the development of national and international legislation. It goes beyond other sui generis[3] models in that it seeks to protect not only knowledge relating to biological resources; it also asserts the right of peoples to self–determination and the fight to safeguard 'culture' in its broadest sense.

TRR is rights driven, not economically motivated. Yet by prioritising indigenous peoples' rights to say NO to exploitation and by acknowledging their basis rights to control access over and receive benefits from traditional resources, commercial and research institutions should find equitable agreements and partnerships more easily attainable (Posey 1996:56)".

Can Knowledge be Alienated?

In concluding sections I begin to unpack what seem to me key concepts relating to 'ownership' in assuring that indigenous plants, animals, and indigenous knowledge play an equitable role in securing the inure. They

are concepts that seem to me to be basic in coming to terms with the ethical and political dimensions of property fights. I stress 'unpacking' because I believe that little progress will be made in developing long–term equitable arrangements for the use of indigenous resources if their conceptual underpinnings are ignored. Because cross–cultural communication is involved, I suggest that we begin by making explicit hose notions, presuppositions even, that otherwise remain implicit for native English–speakers who share a common–law background. I discuss these notions under the rubrics of property, exchange, and alienation.

Property

The historical trend among European peoples, perhaps most significantly those who are English–speaking, in the use of the term property has been conceptual narrowing: without qualification property has generally come to mean private property (in linguistic terms, that is its unmarked meaning). A recently published encyclopedia of social and cultural anthropology contains an entry titled 'Property' whose author suggests that the use of the term for cross–cultural analysis is justified "if property is broadly understood to refer to the social organisation of rights and entitlements over resources, both physical and intellectual..."(Hann 1996:454). The presupposition in this conceptualisation is 'control over' some entity which may be vested in individuals or in groups. Consistent, however, with the trend I mentioned above, in the Australian legal system derived from English common law, although proprietary interests may be held jointly or in some other way in common, the fiction of a 'legal person' is often invoked as title–holder. The notion of property in Australian law is also inextricably linked with the notion of commodity (and non–corporeal entities may be commodities).

Exchange: Gifts and Commodities

In the many sociological analyses of exchange, the process, as well as the agents and the objects of exchange, has most often been contrasted under the rubrics of gift and commodity. Here I draw on and discuss only the works of Mauss (1967), Sahlins (1972/1974), and Carrier (1955). Both Sahlins and Carrier are essentially responding to the analysis of Mauss, first published in 1925.

Mauss (1967:1, italics removed) asks, "In primitive or archaic types of society what is the principle whereby the gift received has to be repaid? What force is there in the thing given which compels the recipient to make a return?" In what follows, including my references to Sahlins and Carrier, I substitute small or small–scale form of social groups for primitive and archaic because the latter terms derive from a philosophy of history that posits a unilinear form of social evolution that I believe has no use in the analysis of social forms and social relations (nor is it historically valid except in a trivial sense). That is, I attribute certain differences in exchange process to the scale of the social grouping in which they occur (and also argue that the otherwise polar opposites represented by gift and commodity occur in social groupings of varying scale).

Mauss (1967:2, italics added) further explains that he is looking for "a set of more or less archaeological conclusions on the nature of human transactions in [primitive and archaic societies] whose exchange institutions differ from our own [and to] describe their forms of contract and exchange. It has been suggested that these societies lack the economic market, but this is not true; for the market is a human phenomenon which we believe to be familiar to every known society."

Relying on the historical and ethnographic texts available to him, Mauss concluded, using the Maori *hau* (The spirit of things" 1967:8) as example, that "The obligation attached to a gift itself is not inert. Even when abandoned by the giver, it still forms apart of him. Through it he has a hold over the recipient, just as he had, while its owner, a hold over anyone who stole it". (1967:9)

From the Maori and other examples, Mauss infers that "We can see the nature of the bond created by the transfer of a possession...it is clear that in the Maori custom this bond created by things is in fact a bond between persons, since the thing itself is a person or pertains to a person. Hence it follows that to give something is to give a part of oneself.. in this system of ideas one gives away what is in reality apart of one's nature and substance, while to receive something is to receive a part of someone's spiritual essence. To keep

this thing is dangerous, not only because it is illicit to do so, but also because it comes morally, physically and spiritually from a person. Whatever it is, food, possessions, women, children or ritual, it retains a magical and religious hold over the recipient. The thing given is not inert. It is alive and often personified, and strives to bring to its original clan and homeland some equivalent to take its place." (1967:10)

Mauss says the societies in which the giving and receiving of gifts is obligatory have a system of "total presentations, that is to say of permanent contracts between clans in which their men, women and children, their ritual, etc., were put on a communal basis [in which] gifts are probably of an obligatory and permanent nature, and returns are made only through the system of rights which compels them" (1967:7)

Mauss further says that "Total presentations not only carries with it the obligation to repay gifts received, but it implies two others equally important: the obligation to give presents and the obligation to receive them...there is a series of rights and duties about consuming and repaying existing side by side with fights and duties about giving and receiving. The pattern of symmetrical and reciprocal rights is not difficult to understand if we realise that it is first and foremost a pattern of spiritual bonds between things which are to some extent parts of persons, and persons and groups that behave in some measure as if they were things". (1967:10–1 1)

There is something inherently appealing in Mauss' analysis of the force of giving and receiving, something that strongly suggests that it is a form of exchange not uniquely characteristic of "primitive or archaic" societies, but is a form of exchange in all human societies.

Marshall Sahlins (1972) relies on the original text of the Maori sage's explanation of *hau* and a Maori colleague's translation of the original in his response to Mauss' analysis to provide a quite different interpretation of the 'spirit of the gift' Sahlins' reading is that, "one man's gift should not be another man's capital, and therefore the fruits of a gift ought to be passed back to the original holder... [It] is necessary precisely to show a turnover: the gift has had issue; the recipient has used it to advantage"(] 974:160). That is, the term 'profit' would be more appropriate than 'spirit' of the gift except that the former term "is economically and historically inappropriate to the Maori" (1974:160). The Maori term *hau* is at issue, and Sahlins (1974:162) says "We have to deal with a society in which freedom to gain at others' expense is not envisioned by the relations and forms of exchange."

But, Sahlins (1974:166–167) acknowledges, *hau* does have a spiritual quality, although it is "more [in] the realm of animatism than animism [and it is] associated With fecundity." In fact, "the spiritual quality *hau* is the principle of fertility... the benefits taken by man ought to be returned to their source, that it may be maintained as a source." It is also as if the Maori have "a general principle of productiveness, *hau*. [W]ould the Maori... .need... to distinguish the 'spiritual' and the 'material'?"

Does not the apparent 'imprecision' of the term *hau* perfectly accord with a society in which 'economic', 'social', 'political' and 'religious' are indiscriminately organised by the same relations and intermixed in the same activities?... "Everything happens as if *hau* were a total concept" (Sahlins 1974:168)

Sahlins (1974:180–181) sees a parallel in the way Mauss and Marx characterise the qualities of things exchanged: Their characterisations are both in some sense animistic; thus in the first chapter of Capital where "One quarter of corn is exchangeable for X hundredweight of iron. What is it in these things, so obviously different, that yet is equal? Precisely, the question was, for Marx, what in these things brings them into agreement? – and not what is it about these parties to the exchange? Similarly, for Mauss: 'What force is here in the thing given that makes the beneficiary reciprocate?' And the same kind of answer, from 'intrinsic' properties: here the *hau*, if there the socially necessary labor time. Yet 'animistic' is manifestly an improper characterisation of the thought involved. If Mauss, like Marx, concentrated singularly on the anthropomorphic qualities of the things exchanged, rather than the (thing–like?) qualities of the people, it was because each saw in the transactions respectively at issue a determinate form and epoch of alienation: mystic alienation of the donor in primitive reciprocity, alienation of human social labor in commodity production".

I suggest that in fact a 'natural' category of gift exchange with features similar to those Mauss attributed to it exists in some form in all human societies. Moreover there are common factors in the relationship of

people to things in all societies (homely but affecting examples in white Australian society may be the reaction to having ones' house burgled or the inability to dispose of an unappealing gift given by a close relative or friend).

In his 1995 book, James Carrier aims to "investigate the ways that objects are implicated in personal relationships... by describing historical changes in people's relationships with objects, as well as the modern state of those relationships." (1995:10) Carrier's assumption of historical change is that "economic relations become increasingly differentiated from other types of relationships. (Parry 1986:466) People come to see economic transactions as impersonal and rational; they come to see social transactions as personal and affective". (1995:10) Carrier uses "the model of people, objects and social relations that springs from the work of Marcel Mauss [including the aim of showing how the Maussian model can be applied to industrial societies". (1995:10)

Carrier (1995:11) summonses his historical thesis as arising from an interest in the "movement of much production and circulation into distinct realms characterised by commodity relations, and how this has affected the ways people conceive of and transact in, gift relations. The core of my historical argument... is that the spread of industrial and commercial capitalism has meant the spread of alienated relations and objects. This spread, however, has not done away with people's need to have their objects be possessions, nor has it abolished the need to transact possessions in personal relationships. Rather, in some ways, it has made that need more urgent. At the same time, however, the spread of capitalism has made it more difficult to fulfill that need, for one of its consequences has been that most of the objects people confront are commodities, inappropriate for transactions in personal relations".

Alienation

If the spirit of the gift is profit (as Sahlins 1972 argues), and an asset producing profit is not a 'free good' or a perpetually renewable resource requiring no input/cultivation (do any such exist?), then the asset must be protected and its continuation assured/nourished/nurtured—the more generously, perhaps the greater the future profit.

In Western or non–indigenous societies, the distinction between gift and commodity rests on assumptions about alienability: a gift is almost by definition given (exchanged?) as a token of love but it is inalienable in terms of the relationship of the giver to the receiver. A commodity, conversely, is by definition alienable. In fact, the concepts of commodity and alienability are mutually implicative. Both rest on equating property with private property, in the sense I mentioned above of individual ownership.

With respect to the scale of social relations, we can observe that all people (at least in Australia) are currently involved in some 'large–scale' social relations and some 'small–scale' social relations. We can also observe that a notion of alienability is present in all the social groupings that constitute Australian society. (Carrier alludes to a continuum of possession and alienability.) Sahlins' analysis can be reinterpreted by substituting the concept of social scale for evolutionary change.

The shared identity of Aboriginal people, their land, seas, and resources has been well documented. We should be on course to resolving issues related to commercial harvesting and marketing of the resources and the equitable sharing of any financial benefit that might accrue. Aboriginal people have demonstrated their willingness and ability to negotiate, and it now seems possible that the incidents of native title may be found to include non–corporeal entities such as intellectual property. Stephen Gray (1997:63) of the Northern Territory Law School notes that the 1993 Commonwealth Native Title Act "defines native title rights and interests as 'the rights and interests... possessed under the traditional customs observed, by the Aboriginal peoples or Torres Strait Islanders [and it] also protects native title rights or interests where they consist of or include 'carrying on a particular class of activity' [defined as including] a cultural or spiritual activity." Thus, Gray (see also Hardie 1997) says, "Arguably, therefore, the recognition that the nature of Aboriginal interests in land is to be determined with reference to Aboriginal laws and customs that native title holders also hold intellectual property rights in their own genetic resources in a manner consistent with Aboriginal law and

custom. Effectively, genetic resources and traditional knowledge are a 'nature or incident' of Aboriginal native title to land. Alternatively, native title to genetic resources may be considered to exist independently of native title to land, although its survival rest upon similar principles to those enunciated in the *Mabo* decision".

If this argument prevails, then at a stroke the qualities of inalienability and shared interests may both attach to indigenous property in Australian common law.

Concluding Comments

Indigenous people naturally desire both to gain recognition of their knowledge of their resources and their use as a means to improve their economic position within Australian society. Henrietta Fourmile (1996:38) refers to "indigenous people trying to economically benefit from the biodiversity of their lands and their knowledge of it", while pointing out obstacles in the path. Fourmile notes the recent growth of the bushfood industry and its basis with "indigenous people who have identified over millennia the edible species and their preparation, thus establishing their intellectual and cultural property rights with regard to those species." She says, "The Australian Native Bushfood Industry (ANBIC) has recently been established with a grant from the Rural Industries Research and Development Corporation. Currently the bushfood industry is worth m estimated $ 5 million per year with ANBIC hoping to accelerate its growth to S100 million within three years. It is also concerned to establish a native bushfood industry association which will take bushfoods to local and export markets underpinning them as mainstream food ingredients of our Australian food culture for the 21st Century".(ANBIC 1995)

Although we now have some guides to their solution, questions such as the following still arise: whether indigenous people may have proprietary interest in plants and animals in which they have traditional interests such as spiritual links but which are commercially harvested on land to which they do not have title; whether they may have proprietary interest in species taken from their land which they have not traditionally harvested or used but which are commercially developed (and perhaps altered in the process); whether they have proprietary interests in knowledge gained from them with respect to species on their land but which is applied to species not on their land. Moreover, as Gray (1997:63) puts it, "the issue would arise of whether Aboriginal groups which were unable to establish native title to land could establish native title to traditional knowledge or genetic resources."

The critical question has to do with control: Who are the agents of control over proprietary interests? Are they individuals or [some specified] group? The question then follows: is it possible to alienate knowledge from a group where profit depends on shared responsibility to maintain the knowledge as a group asset?

Ultimately the question is one of the relationship of people to things: some attributes are common to all people in social groups of varying scale, pace Sahlins (see above). Knowledge can be and is objectified. It can be the subject of proprietary interests. As in the case of interests in land, individuals can constitute a group that is corporate with respect to their proprietary interests in a corpus of knowledge. Do questions remain in terms of negotiating those interests as if they are commodities?

Footnotes

1 That fact that these issues need to be addressed in a wide public forum is also indicated by the recent publicity given to a Ph.D. research project involving a native species at the University of Technology in Sydney that makes no mention of the possible relevance of indigenous interests. The project was reported in *The Australian* on 20 January, and Peter Thompson (RN *Breakfast* program) interviewed the Ph.D. student on 21 January 1998. It appears that the research is designed exclusively to produce bigger, better native spinach [presumably Trigonia] hydroponically.

2 One of course is Radio National with programming that includes *Comfort Zone, Earth Watch,* and indigenous programs such as *Away.*

3 Sui generis laws are specially designed laws. As Christie (1996:67) explains, "intellectual property rights were invented in the 19th century, to protect inventors from having their ideas commercially exploited by somebody else. They were seen as a trade–off between innovators (creators of intellectual property) and the wider society, and were promoted as a stimulus to research and innovation. Inventors were granted a legal monopoly over the commercial use of their invention for a given period of time; in exchange, they would make their invention known to the public. This is still the basis of intellectual property law. Though never designed to cover living things, intellectual property rights are now commonly granted over living organisms which have been the subject of scientific research. On the one hand specially designed (or sui generis) laws called plant breeders' rights were introduced in most industrialised countries in the 1970s and 1980s; they granted limited monopoly in the marketplace to breeders of new plant varieties. On the other hand, with little or no public debate about its implications, a parallel draft occurred which saw the application of patents to living organisms including whole animals, plants, micro–organisms, genes and even human cell lines".

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Tales of Tropical Tucker

Tales of Tropical Tucker: Sustainable use of Native Wildlife in the Top End
Gordon Duff
(The Committee regrets that we were not able to reproduce the full text of the paper given by Gordon Duff. There was a technical hitch with the recording and with his approval we include an abstract of the paper, which will at least give a glimpse of the direction of his thoughts)

Abstract: Sustainability means different things to different people As more attention focuses on species conservation, maintenance of biological diversity, economic development and changing patterns of use of our native species, it is becoming increasingly apparent that there are no simple answers to questions of sustainability. Our decision for the future must be formed from a diversity of lessons drawn from many parts of the spectrum of human knowledge, experience and cultural traditions This paper draws on such lessons from four northern Australian icons: crocodiles, barramundi, magpie geese and marine turtles. Their importance extends well beyond the tuckerbox—the recipe for sustainable use includes cultural, ethical, economic, political and ecological ingredients. Each can provide valuable signposts on the pathway to a sustainable future, and highlights the unique and intriguing nature of the Top End environment

From Gathering Culture

From Gathering Culture to Commercial Culture
Andrew Beal
(The Committee regrets that we were not able to reproduce the full text of the paper given by Andrew Beal. There was a technical hitch with the recording and with his approval we include an abstract of the paper, which will at least give a glimpse of the direction of his thoughts)

Abstract: The recent emergence of the Native Foods Industry is enabling aboriginal and non–aboriginal Australians to enjoy a cornucopia of Australian native nuts, seeds, fruits. berries, herbs, spices, tubers and leafcrops. The stunning flavours, colours and textures are now exciting chefs, cooks and diners all over the world

Clever marketers are promoting the concept of a truly Australian cuisine featuring native ingredients, often in concert with the mainstream ingredients we are all familiar with. Its development is helping to provide a sense of identity for Australians and evokes emotions of national pride.

To date, most native raw produce continues to be sourced by collection from the wild. The high prices paid and the variable quality of raw produce have served to severely constrain industry growth. Cultivation of some of the 'best bet' crops has commenced, and the next stage of industry development will see great emphasis placed on expanding the native crop production base and a sharp focus on quality.

Efficiencies will flow from increasing the scale of farming operations, breeding improved varieties, efficient agronomic management practices, and mechanisation throughout the production chain. Savings to flow from this stage will drive the price of the raw product down, making native ingredients more accessible to consumers

The native foods industry has presented us with a unique opportunity to establish a legitimately Australian cuisine and to foster the farming of crops which are well suited to Australia's climate and soils, and for which there are currently no international competitors.

Drink the Farm!

Drink the Farm! Eat the City!

Terry White: It took me a while to realise that the landscape in rural Victoria leaks. We laboriously removed the original vegetation cover that used the rain where and when it fell (Fig. 1) and replaced it with annual vegetation that is a lot more choosy. As a result, irony of ironies, we have a host of land degradation problems on our farms that result from too much of a scarce resource!

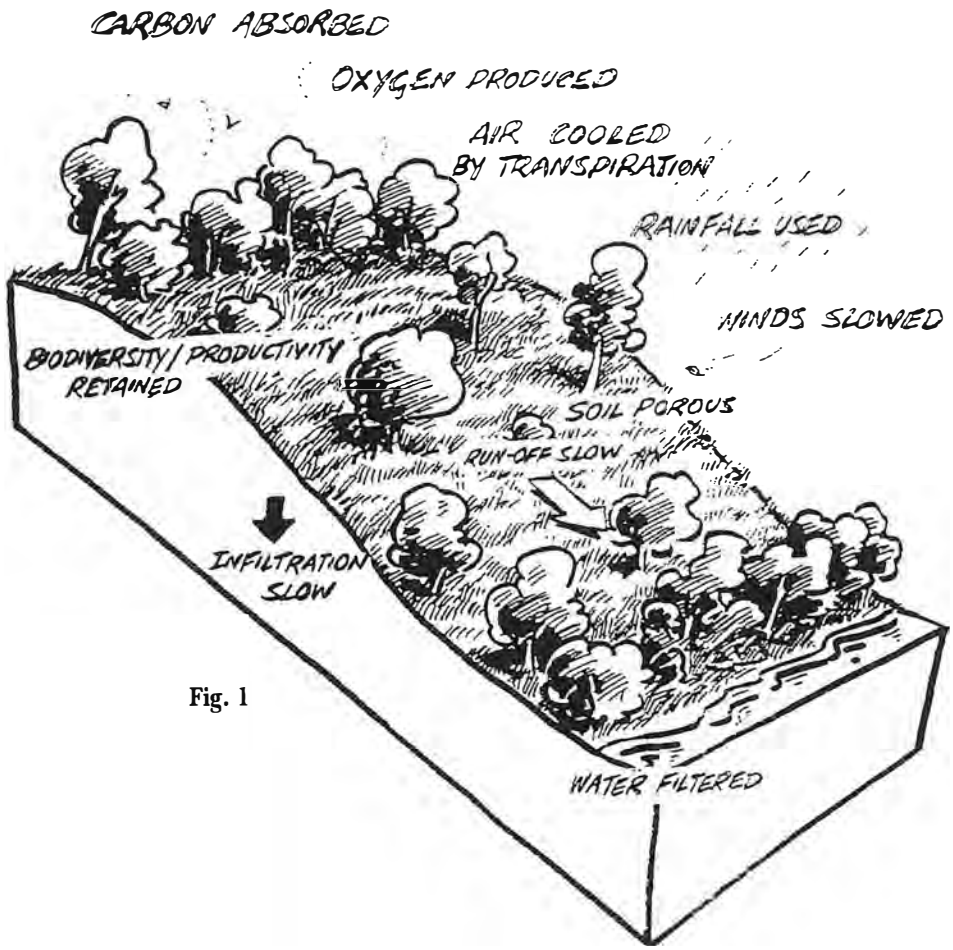


Fig. 1

Without sufficient vegetation to productively use the rainfall, much of the water runs rapidly across the surface, picking up pollutants and causing soil erosion and flooding. (Fig.2) Some of the water also soaks rapidly into the ground until it meets a barrier of clay or rock at which time it rises toward the surface. As groundwaters rise, they dissolve salts stored in the soil. Major problems of dryland and irrigation salinity result as salt builds up on the surface when the groundwater evaporates and leaves the salts behind. (Fig.3) Run–off from these saline sites threatens the ecology of many of our rivers and streams and effects the towns and cities that rely on them for drinking water. It is this process that has made the Murray River almost too salty to drink by the time it gets to Adelaide.[1] It's an unhealthy situation. But it's one which is steadily being addressed by landcare and catchment management groups who seek to restore the water balance and safeguard water quality by: planting crops and trees which will use the incoming rainfall most productively; replacing wasteful flood irrigation with systems that deliver water only where and when the plant requires it and by planting wide tree and shrub belts along creek lines to slow erosive run–off and prevent sediments and nutrients from being washed into waterways.

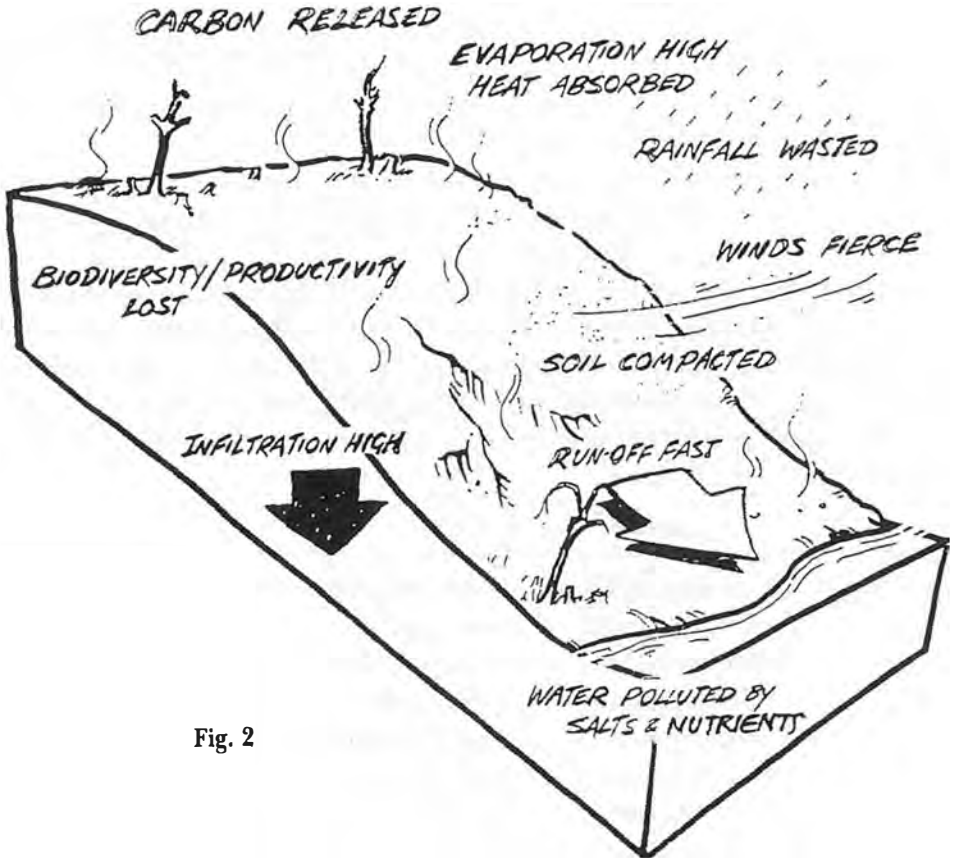


Fig. 2

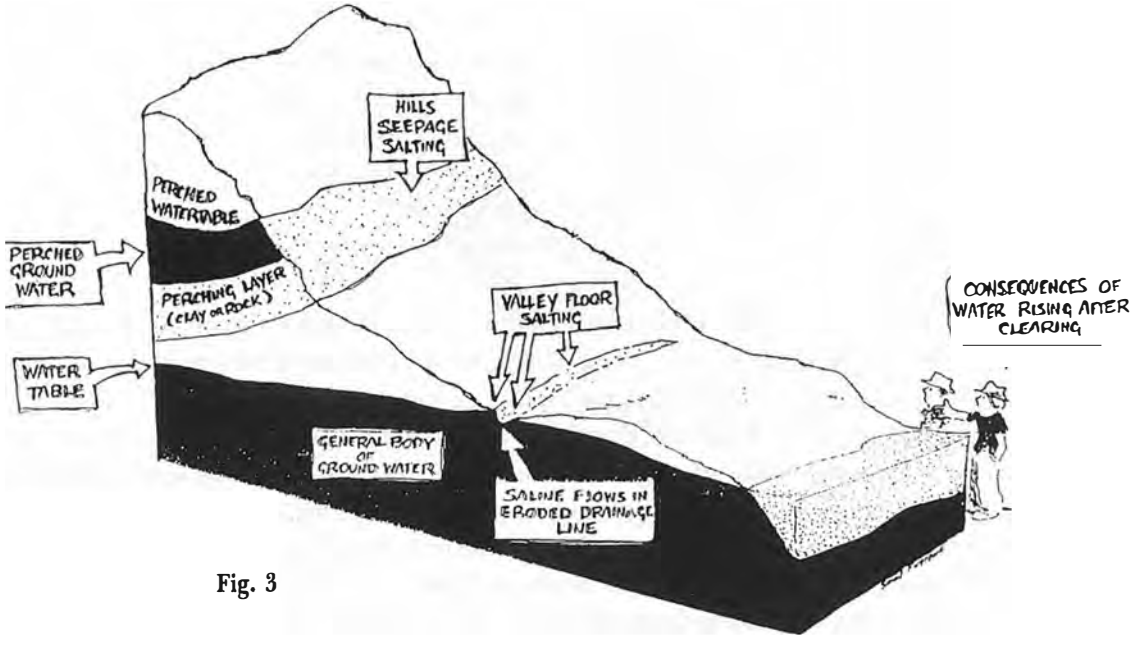


Fig. 3

The vision is of a healthy landscape, one where "a large proportion of rain is retained... and run–off water carries little soil and litter with it (ie. the landscape conserves resources). A landscape is less healthy if, for a given fall of rain, the run–off and sediment load is higher (ie the landscape is more leaky, it tends to lose resources)"[2]

The city also tends to lose resources. First we cleared the site for the village and then we cleared a bit more and put in a metropolis. Instead of using urban rain as a precious resource to be conserved, we direct this gift into downpipes, guide it into gutters after it has flushed our streets and then expel it and its load of sediments and nutrients into our creeks and rivers and eventually, to the sea. (Fig. 4)

In effect, in both city and country, we are given drinkable rainwater as an opportunity and we turn it into a liability by allowing it to flush country contaminants such as soil, salts and fertilisers and city contaminants such as heavy metals, oils and litter off the surface of the land and away.

This comes as no surprise to American Architect Malcolm Wells. (Fig. 5) Most current design he says, is destructive of nature's life giving functions. "For years architects have been advising their clients to build on beautiful... lots... with streams (and) views. But now we know better. Such lots should be left alone! Our job is to restore life to worn-out land, and there is no more satisfying way to do it than to build in such a way that human needs and nature's needs coincide." [3] As an aid to the achievement of that goal, he's developed a checklist which sets out nature's design criteria

Checklist Design		**Malcolm Wells 1980**
destroys pure air		creates pure air
destroys pure water		creates pure water
wastes rainwater		stores rainwater
produces no food		produces its own food
destroys rich soil		creates rich soil
wastes solar energy		uses solar energy
stores no solar energy	—	stores solar energy
destroys silence		creates silence
dumps wastes unused		consumes its own waste
needs cleaning and repair		maintains itself
disregards natures cycles		matches natures cycles
destroys wildlife habitat		provides wildlife habitat
destroys human habitat		provides human habitat
intensifies local weather		modifies local weather
is ugly		is beautiful

To better understand how nature could clean water in an urban setting, let's try a hypothetical. Imagine the entire Victorian population took an extended holiday to Queensland for around two hundred years. What would happen?. In the country, vegetation would soon spring up and restore the water balance by using the rain wherever and whenever it falls. In the city, dust would soon build up on the roofs and streets, winds would bring in seeds from miles around and—starting with mosses and lichens and continuing with grasses shrubs and trees—plants would rapidly colonise every urban nook and cranny and life, as always, would create life. Because all the roofs would be covered in grass and because the roads would be broken up by tree roots, the city would again be spongelike. Rain would first be caught and held on the rooftops before seeping down to ground level and then meandering its way downhill to the nearest creek. The whole water cycle would be slowed, nutrients and sediments would be trapped and used, the air would be cleaner and the atmosphere would be far more pleasant. (Fig. 6)

All very well you say, nature can create pure water, but to what extent can modern cities do that, burdened as they are by water systems that involve large reservoirs and complicated distribution networks?. Systems that use drinking water to flush toilets, water lawns and wash roadways?. Systems that only treat wastewater at the end of an equally expensive and complex sewerage network of pipes and pumps?. Fortunately, this system is reaching

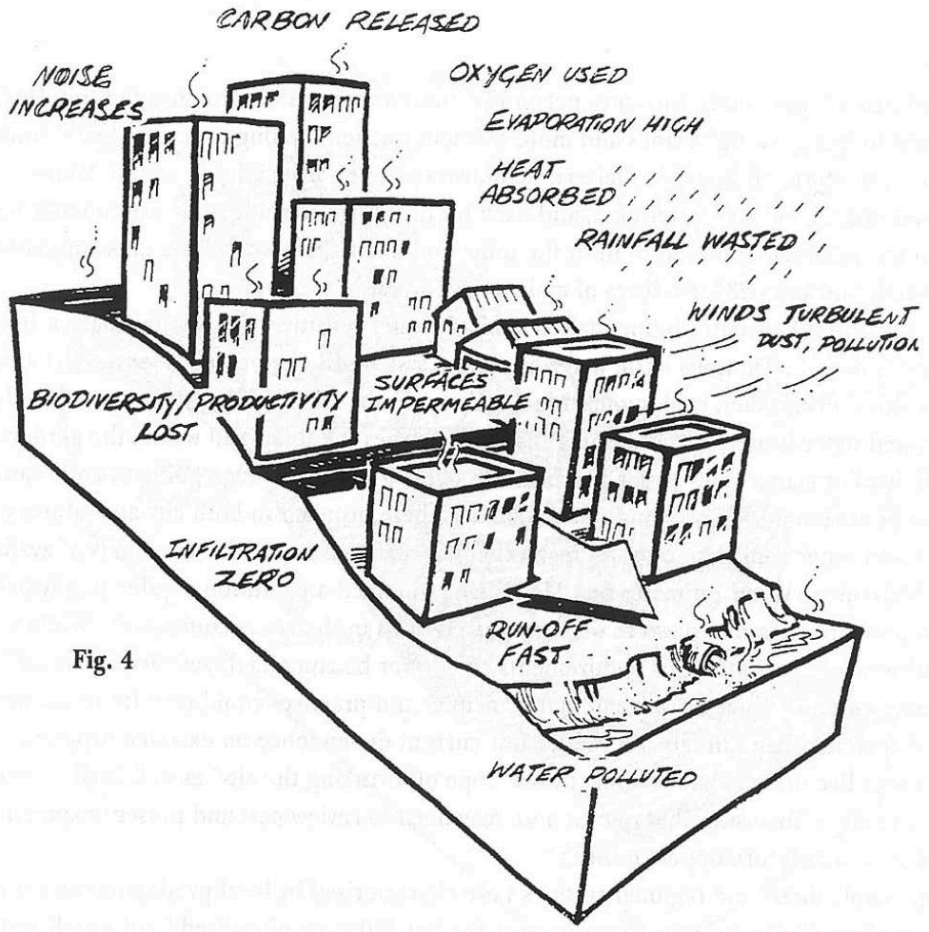
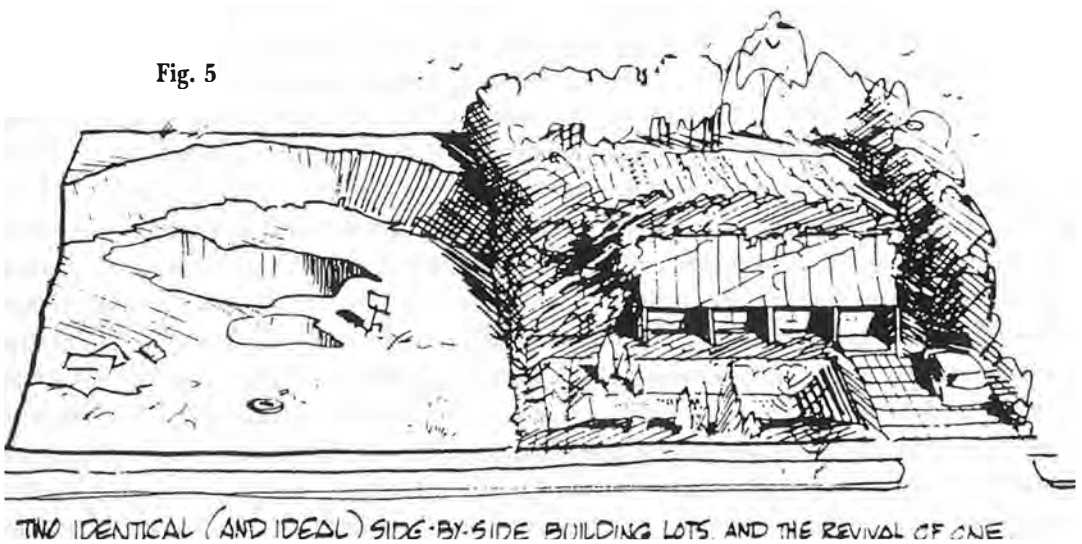


Fig. 4

Fig. 5



TWO IDENTICAL (AND IDEAL) SIDE-BY-SIDE BUILDING LOTS AND THE REVIVAL OF ONE

the end of its shelf–life. The opportunity now exists to replace it with something better.

Water Sensitive Design is a term coined in Western Australia to describe a more natural approach to managing water resources. This approach seeks first to conserve water by changing habits and using more efficient appliances. It optimises the use of rain by promoting the use of drinking water tanks. It allows stormwater to soak slowly through porous pavements. It filters waterborne sediments and pollutants through vegetated waterways and artificial wetlands in order to deliver clean water safely into urban creeks. As in the country, so in the city. "The healthy landscape captures more water by having vegetation which slows run–off

and makes the run–off path more tortuous, permitting more water to infiltrate into the soil. Healthy landscapes have longer growing periods and more efficient nutrient cycling processes than unhealthy ones." [4]

In Melbourne, the Stronell house in Malvern demonstrates these principles in action. Water is captured on the roof, stored in a 20,000 litre water tank, and used for drinking , washing and garden watering. Greywater from the laundry is filtered and used to flush the toilet and water the garden. The tank supplies all household and garden needs and saves 234,000 litres of mains water a year.[5]

In Sydney, the Mobbs house in Chippendale is similarly water sensitive. The Mobb's have a 10,000 litre drinking water tank and a Dowmus waste water treatment system. Kitchen compost and water from the flush toilet, shower, bath, dishwasher, washing machine, sinks and tubs are all biologically treated in the wastewater tank and recycled water is used in the washing machine, flushes the toilet and waters the garden. The system saves 102,000 litres of mains water a year and prevents 60, 000 litres of sewage going to an ocean outfall.[6]

However, without resource–conserving systems such as these installed in both city and country, current trends in population and water consumption rates mean that we will soon be pushing the limits of available water in both places. Melbourne Water estimates that Melbourne will need an additional water supply before the year 2020. This means expensive new dams as well as reduced flows in the rivers concerned.[7] While it is not feasible that all of Melbourne's current water requirements could ever be completely satisfied by rainfall alone, the steady implementation of water sensitive design principles and practices could do a lot to conserve, harvest, store, use and recycle urban rainfall and reduce our current dependence on external supplies.

So, if water sensitive design gives us some future hope of 'drinking the city' as well as the country, can we also begin to 'eat the city'? To answer that question we may need to review past and present experience in urban food growing as well as future opportunities.

In the past, "staple diets" and regional cuisines were characterised by local production and consumption and the on–site recycling of all nutrients. However, over the last 150 years globalised food supply systems have so separated food production and consumption that a mouthful of food in the industrial world typically travels 2000 kms from its point of production to its point of consumption with the result that people are 'spatially and psychologically distanced from the land that supports them'.[8] Recent research indicates that the area required to provide food for the average resident of Canberra for instance, (part of the city's 'ecological footprint') is 1.39 ha or 18 average houseblocks.[9] Add to that the area required to satisfy individual needs for water, energy, timber and other resources and the predatory relationship between the modern city and its local and international hinterland becomes apparent. A healthier situation is required.

Urban agriculturalists argue that diminishing per capita access to land and water will soon force cities to feed themselves. The benefits of urban food production, they argue, will drastically reduce current damage to rural food production systems and the unpriced damage to the air, soil and water that accompany them; re–integrate urban families with nature; reframe sewage & garbage as valuable sources of food production nutrients rather than costly and repulsive 'wastes'; reduce fossil fuel use and land and water pollution; lower farm operating costs and consumer food prices; reduce the need for transport and maintain polycultures and bio–diversity.

In 1992 the United Nations Development Program decided to support urban agriculture development in Africa, Central America and South America. In 1997 initiatives in Europe and North America were also included and in 1998, Geoff Wilson was appointed to report on activity in Australia, New Zealand, the Pacific Islands and SE Asia.

Based in Brisbane, Geoff believes that microfarming methods such as hydroponics, aquaculture, vermiculture and small animal husbandry can now be safely and economically integrated on rooftops. As part of a Mt Gravatt mainstreet development program, Geoff wants to establish a rooftop demonstration farm in the heart of the shopping centre to show how biogas digesters can sterilise food wastes from local restaurants and food shops, transform it into energy (methane) and farm nutrients. As part of a cyclical process, digester sludge will serve as a food source for worms (vermiculture); worms will provide a food source for fish (aquaculture); nutrient rich pond and worm effluents will stimulate plant growth (hydroponics); rainwater will supplement requirements for fish ponds and vegetable watering; carbon dioxide from air conditioning units will boost greenhouse production and the resultant roof grown fish, crustaceans, herbs and salads will complete the cycle

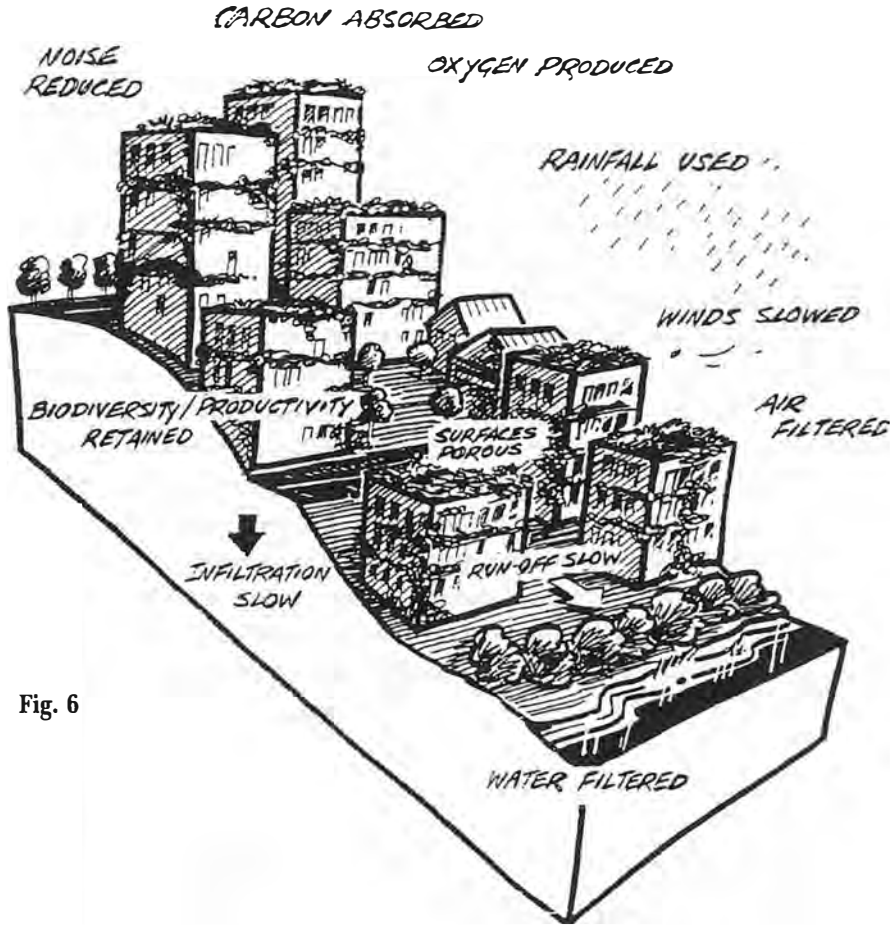


Fig. 6

by supplying restaurants and shops.[10]

But to what extent will food production proposals such as this ever become a main stream reality ?. In 1998 the City of Port Phillip in Victoria sought to answer this and other pertinent questions to do with urban vegetation in a research project on rooftop greening.[11] To carry out the research the City enlisted the assistance of students from four universities and six faculties with funding assistance provided by a State government 'Pride of Place' urban design grant.

The findings suggested that while urban food production has been standard practice for centuries in the cities of many 'underdeveloped' countries, where it contributes between 20% to 60% of the local food supply, these trends are not yet evident in Australia.

In Europe and to a lesser extent North America, the forces driving innovation in urban vegetation are not so much to do with food production as they are to do with other environmental issues such as improving air quality; improving indoor and outdoor comfort levels for residents; reducing energy demand for heating and cooling; reducing the quantity and increasing the quality of surface water run-off; and conserving indigenous biodiversity (genetic, species and ecosystem).

Internet contact with municipalities, manufacturers and designers in Europe and North America revealed that rooftops and vertical walls are being seen as potential growing spaces with many benefits for urban 'liveability'.[12] Rooftop Greening is moving from the fringe into the mainstream for two principal reasons. One; increasing urban densities are leading to a desire for greater access to green open space; and two, the role of urban vegetation in producing oxygen, fixing carbon dioxide and filtering urban air and water is becoming more widely recognised.

In Germany and Switzerland, many cities now have a combination of penalties and incentives to ensure that wherever possible, inner city buildings will have green roofs. In Esslingen West Germany for instance, by–laws

require every flat roof and even roofs with slopes up to 15 degrees to be vegetated. Similarly, in Mannheim, West Germany, declining air quality prompted the City Council to impose a by–law in 1988 which requires all central business district buildings to be vegetated. What is more, in Switzerland, the Grodania company reports that 70% of flat roofed inner city buildings must now be vegetated.[13] In Berlin, all 19 multi–story Daimler-Benz buildings on Europe's largest building site will have gardens on their roofs.[14]

These requirements have been made possible by the creation of a whole range of specially designed products: rubber membranes to ensure that roof surfaces remain waterproof; polystyrene insulation layers to protect plant roots from the effects of rising heat from the buildings below; protective layers to ensure that the waterproofing is not pierced and drainage layers made from recycled plastic with an egg carton-like form so that tiny reservoirs of water are available to plant roots on flat and sloping roof surfaces. (Fig 7)

In Canada and the United States, many benefits of rooftop greening are being emphasised. In Portland Oregon, the city energy department is keen to explore the possible savings in heating and cooling costs which might result from the insulating effects of rooftop gardens and in Ottawa, City Council investigation of the Mannheim experience has prompted the conclusion that: "green roofs provide solutions to many of the practical dilemmas municipalities currently face, including infrastructure repair costs, noise pollution, scarce amenity space, declining air and water quality, excessive inner city heat and even recurrent summer beach closing's." [15] While food production is not presently a major objective of urban greening the research has shown that the technologies are now in place to make food production on urban rooftop acreages a viable option when necessity or economics demand.

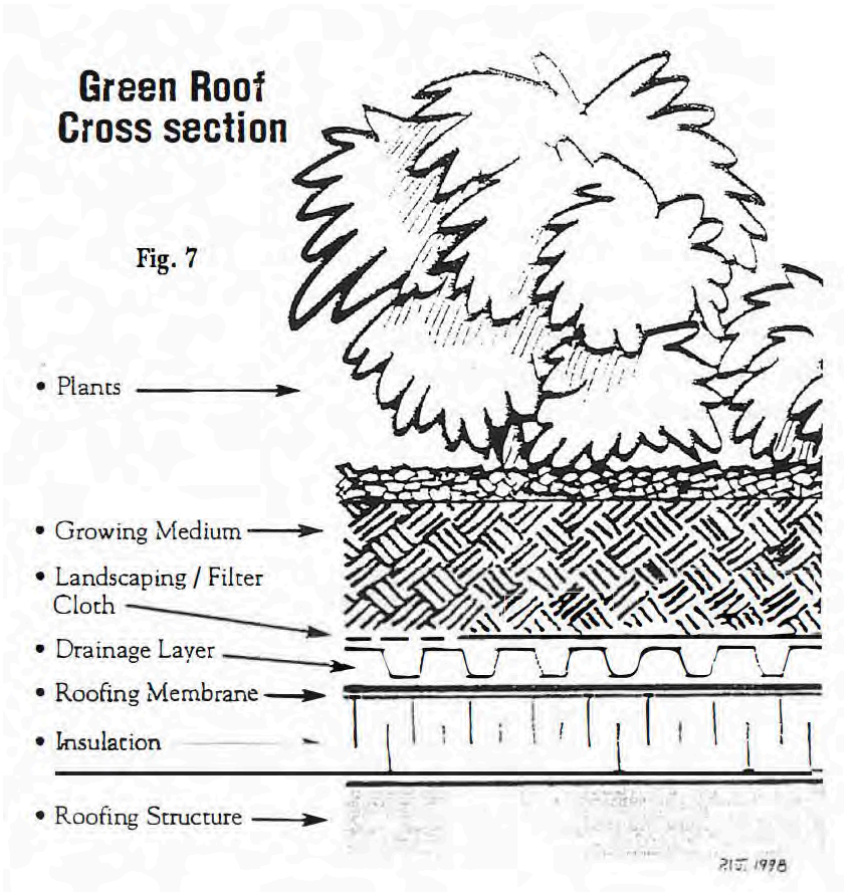


Fig. 7

Up to now, Australians have not shown themselves to be all that concerned about these issues because there's always been plenty of country to supply the water, food and energy we need. But with 85% of Australians already living in settlements with populations of 10,000 or more and urban densities in our capital cities

increasing annually, this complacency may not last.

The extent, to which these strategies are widely employed in the future will depend, I think, upon necessity. And as necessity is the mother of invention, we only need look at those cities that are currently most desperate to catch a glimpse of our possible future. We know for instance, that during the period 1970 to 1990 the share of households in Greater Moscow engaged in food production increased from one in five to two in three.[16] After the collapse of the Soviet economy in the early 90's, this trend has accelerated. Prisoners in St Petersberg are now growing an increasing percentage of their food on the roofs of their high rise prison.

In Havana Cuba, the end of soviet supplies and subsidies caused an eighty percent drop in fertiliser and pesticide supplies and a fifty percent cut in fuel and spare parts. Between 1990 and 1994, as farm production dropped almost halved and daily intake of calories and protein fell by one third, these massive food shortages prompted the rapid creation of more than 27,000 organic gardens covering 5,000 acres in the Havana metropolitan area. [17] Two students in a Permaculture course I ran four years ago at Latrobe University went straight from that course to Havana where they worked for six months as permaculture volunteers establishing a food garden on the top of a public service building. At first they were mocked. But as the vegetables were ready to harvest it was a different story. The service station opposite, closed because of cuts in oil supplies, was jack–hammered by its owner and a market garden created in its place.

Recent incidents in Australia and New Zealand involving polluted water, gas shortages and power failures have revealed just how fragile our globalised food system is. Nature creates clean water and produces good food. It's high time we invented farms and cities that do the same.

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Dur-é Dara: Richard Weatherly is a biologist, and a naturalist—you met him yesterday. He is an inventor, he's a merino sheep farmer, an artist, a sculptor and a conservationist. He lends his leadership and influence to community driven initiatives and schemes aimed at sustaining and securing the future of his own community. A pioneer participant and practitioner of Landcare, he has some stories, information and concerns to share with us. Welcome.

Landcare

Landcare—Looking to the Future

Richard Weatherly: I'm a farmer and I've got to speak as a farmer today. That, in my opinion, doesn't mean that my train of thought is still boarding at the station, which seems to be a popular opinion in the urban masses. Equally, I don't see the urban people as 'left–wing as a pinyin goose and green as a Yankee dollar', but I do see you as my clients, because if you eat mutton or beef or emu—or bread; then you're my clients. But I see myself as your hunter–gatherer. I'm your contact with your roots in the country and unlike a native community, I'm not the hunter and my wife Jenny is not the gatherer—but we're a team who hunt and gather together, at least I hope we are.

I think, because of that attitude; that I'm your hunter-gatherer. That means we're finding an ecosystem; we're harvesting the excess production from an eco–system, and that's easy to do with beef or mutton, or wool—you're still consumers if you use wool and if you don't—if you are in synthetics or cotton—I hope you all freeze to death in your tents. I own the cattle, I own the sheep and I own the ground we grow the crops on. That means that I've got to construct a certain type of eco–system. I'm not really rewarded for the idea of developing native habitat to farm native Australian species, because you own them—because you represent the States. Ideally, I'd like to be in the situation where I could create National Parks on my land and harvest the excess production from that, to hold the eco–system in balance by harvesting the excess and feeding you in the towns, but that is legally impossible for me to do at the moment, and equally because you own some of those species, or all of those species, some of them become a problem to me in the way that I'm farming my country at the moment

They build up in numbers and inevitably the response to that by Government is too slow, and normally, it's absolutely bloody gutless as well. I mean, you've seen one of your National Parks being destroyed by kangaroos at Hattah–Kulkyne and it was ten years too late before anyone bothered to screw their guts to the sticking point and say that there was a problem there and we've got to do something about it. We've watched Corella numbers build up in Victoria for fifteen years, and the response is still gutless in how to deal with that, when basically it's destroying habitat for other species, and no species is sacrosanct.

One of the big alterations in human attitudes is that we anthropomorphise our wildlife, and each individual in the human species is given supreme value. No human is allowed to kill another human—each human being is a valued life, and we extrapolate that onto our wildlife and each corella and each kangaroo and each everything else has got value as an individual. But in fact, it's value is as a species and in evolutionary terms, species sacrifice individuals for their benefit, for their evolutionary benefit and for their existing benefit. Anyway that's really what came to me out of what we were listening to earlier.

Last Friday, I was invited to present the Landcare awards in the Yarram–Yarram Catchment Group down in Gippsland, and one surprised farmer, who incidentally came from this area originally, received a runner–up award, and each farmer, as they received their award, made a few comments. He reluctantly received the microphone into his hands and said, "But I'm not even part of Landcare—I'm just trying to run a profitable farm"—and so he was. The good thing about him is that he had the guts to go out and do it for himself. Now he designed principles to create the habitat on his farm which was providing shade and shelter for his animals; he was increasing production by doing so; he was existing alongside a National Park and had a good flow of species between the farm and the Park; he had actually worked out a way of keeping a thousand kangaroos off four hundred acres—so he was only getting one or two kangaroos per annum on four hundred acres, which made it possible for him to survive without criticising the Government, the National Parks or the urban majority, and he was in equilibrium with his surroundings and doing a superb job. Now the great thing about him is that he was doing it himself. He wasn't waiting for somebody to hand out money for him. He wasn't saying, as so many Victorians do—"It's a great idea. I wonder whether we can get a grant from Greening Australia". But he sat down, and every year he wrote into his budget, he bought his drench, and he bought his other farm supplies, and he budgeted in so much fencing for trees, so much for tree–seed, so much for his

environmental management. Really, what he was doing was running a very well run small business.

Years ago, I was a Trustee for a financial trust, and we were discussing buying shares in a company called Gibsons Chemicals, and one of the other trustees, who was a lawyer, said "Yes, that's a good company. I drive past there every morning on my way to work and they've got a well–mown lawn all the time". And I thought "What a bloody ridiculous thing to say". Then I thought "Well yes, he's right. What he's saying is that they run their Company well. They maintain their environment, they're organised, they're disciplined, they know what they are doing, and that's what this fellow down in Gippsland was doing.

Now really, I think all farmers want to do that. As I say, we're the hunter–gatherers harvesting an eco–system for its excess production, and you look after your assets. Well, what stops us? Basically, disposable income.

We're told we are the most efficient farmers in the world—that there's no subsidies. But there is a subsidy—and its called Government Grants for Landcare. But it's not an equitable subsidy, it's a subsidy that's given on the ability of someone to develop a creative application form; irrespective of the quality of the project, so good projects can be knocked out because the application is bad; and bad projects can be funded because the application is good.

I think we can do much better to strip out those subsidies and give equity to all the farmers, so that the good farmers who can look after their asset and plan on their asset are the ones who are going to succeed, and the bad farmers are not subsidised by Landcare; because ultimately, Landcare money is geared predominantly towards the areas that are suffering most, who are predominantly the families who have looked after their properties less.

You know, we are all looking for a sustainable system. I'd like to know just what a sustainable system is, and if you say to a farmer "I want you to go out and farm sustainably", it's, you know "Oh yes, oh yes, I'll go and do that". Well, what do you do? I'd like to look at it the other way around. Basically, if he can remove all unsustainable practices from his business, he's got a sustainable farm. So perhaps what we want to do, is not to identify the sustainable practices, but to recognise what the unsustainable practices are, and even if they are little things, like using a product called Lemat, which is a dimethylate for spraying out red–legged earthmite because they're taking the clovers out of the clover crop; that's actually working on the microbiota of the soil, and it's the only pesticide we know has a big effect on earthworm populations. If you use it, you immediately have a very high population of young worms, or in other words, a low population of older worms, which means you've wiped most of your earthworm population and unbalanced it. We don't know what effects that's having, but we do know dimethylate does work.

So let's wipe that, and look at why the redlegged earthmite attacked the clover in the first place, and they tackle that because it's under stress, and very often the reason it's under stress is because we've put a lot of superphosphate on. We've actually acidified the soil and it's grappling with PHs of 4.2 and 4.4. So what happens if we try and address PH instead of putting on another pesticide? So I think what we're really talking about is putting farmers in the stage where they're in control of their own destiny, and raising their disposable income so they can look after the land as they want to.

Farmers have gone through a very tough time, and ultimately as primary producers they are paying for all the transition into subsidised manufacturing in urban Australia from the forties and fifties and sixties. I mean they are the ones who were paying $30,000.00 a year to have an employee in GMH because the group of motor cars were subsidised by tariffs. They were the ones who were paying $15,000.00 and $18,000.00 a year to have people employed in the Footwear and Textile Industries. So it's not a matter of whether Australian farmers are subsidised, it's a matter of the amount of capital that is not in the country now because it has been transferred to the cities through subsidies for urban industries. That's where Australian farmers are in trouble now. They haven't got the capital to look after their land.

O.K. Well what do we do? I think that we're talking in terms of Landcare about putting a dollar here to put a bulldozer over a degraded riverbank and plant some trees, and we're talking about pulling out weeds there. We're always talking about redressing problems. I mean, Landcare isn't decking bunnies on the back of the bonce or ripping out weeds or planting trees; it's about giving disposable income to rural centres, so they can

actually gear up their lifestyle again and become attractive, and they have to become culturally attractive. Because my feeling is because of the rush of urban people to the city, if you're going to breed farmers—like putting the ewes out with the rams, or the rams with the ewes—it takes two sexes to do it, and if all the girls are in the cities and all the boys are running the farms, it will be bloody hard to have the next generation of farmers; so you've got to provide some sort of a system in the town so that all the youth are staying there.

A couple things we've been doing down around Mortlake to try and make the town more attractive—I won't have time to go through all the things we're trying to do, and it is a complicated, integrated, process—but one thing we've done; we've tried to identify leadership and create better leadership. We've tried to create much better communication between the people; not just the farmers, but all the people and as part of that communication, we're putting farmers into groups of ten or a dozen people. They have a range of facilitators available to them—fully funded; and there is a modular package available to them of educative material available to be delivered to those farmers. So if the farmers say "O.K. This group are interested in budgetary management". We can say, "Alright, budgetary management—a very good facilitator is Charlie de Fegely. We will deliver this package to you, there is 108 hours of formal education. At the end you've got a certified Agricultural Certificate in Budgetary Management". But this group over here are interested in earthworms, so you say "O.K. Modular package on soil biota—Graham Hand from Logistic Resource Management—a very good facilitator, put him in touch with this group; 56 hours on soil biota; certified educational degree at the end of that".

So that all the factors are there in a modular package to be delivered by a range of facilitators, and the farmers create their knowledge at the rate at which they are interested and they can build up fertility knowledge; they can build up budgetary knowledge, planting knowledge, farm planning—the whole lot; at their own pace.

Really, we're talking about education, and we're looking for education opportunities for all age groups within the community. One program we've had going with Mortlake College grew out of Waterwatch, and for people who don't know Waterwatch, it's been going about ten years. It's a program where students take geographical measurements on the water. In other words, they look at turbidity and PH and dissolved oxygen and salinity and nitrates and phosphates and they work out the degree of degradation of the stream. Biology students look at the macroinvertebrates, and they survey the macroinvertebrates and they come up with the fact that there is no stonefly or there's no helmet beetle, or there's no Cactus fly, or there's no mayfly and they say "O.K. Well we predict this has got a PH around 8.4 and it's got a turbidity of x–amount" and you know they can cross–reference their ideas; the only problem being that the sensitive species in the Hopkins River, which is where we are working, appear to have adapted to highly degraded streams—it being one of the most degraded streams in Victoria, so that even in highly degraded water we are finding that there are still stonefly, mayfly, helmet beetle and Cactus fly.

But anyway, this seemed a sort of nice little idea and we got involved with the Mortlake College, but to take a Year Seven, Eight, Nine or Ten student out there, and stand him in the mud with the water squishing between the toes and say "Look, is this stream degraded?", "Oh, yes, it's degraded". Well, what does that mean?. "Well, I haven't a clue, it's not in relation to anything else".

So we talked to the Geography Co–Ordinator and as a result of that, she brought in the History Co–Ordinator, the Science Co–Ordinator and the Agriculture Co–Ordinator and we put the syllabus of Years Seven, Eight, Nine and Ten into meltdown. Scrapped the lot and started again with a new syllabus and said we want something that delivers a logical, interesting, Australian view of what this all means, so we started with the Theory of Tectonic Plates. It's all good Tim Flannery stuff really—how Gondwanaland broke up, how Australia moved northwards, how we developed these nutrient poor soils, how the eco–system developed and became very diverse to make use of these tiny possible niches, how it had to be co–operative, because to be competitive in that particular situation meant that a lot of those species couldn't survive; how the herbivorous megafauna developed with their reptilian carnivores, what happened when the first human beings arrived in Australia 40,000 or 50,000 years ago, the extinction of the herbivores, the fires that resulted from the increased grasses,

the development of the co-operative nature of Aboriginal society, and again it was a tight difficult environment to live in and you cannot manage it just as a simple entity; what happened when the European invaders arrived and what they did to the ecosystem and what they did to the Aborigines, and why they arrived in the first place. What induced them to leave Europe. How Europe had evolved. How the Icecap receded very very quickly, and only quite a short time ago—about 8,000 years ago, it started to recede very quickly, and it happened so abruptly that it left an opportunity for a primary colonising weed essentially to evolve on a hugely rich Continent and how agricultural systems developed in accordance with that sort of environment were inappropriate to an Australian environment.

And so now we can go to the kids and say "Look, is this stream degraded?" and they can say "Oh, yes its degraded". "O.K. what are you going to do about it?". "Well, we've got these ideas". "Right, are they fair and equitable to all the members of the community?" "Oh yeah, we think so". "Well, O.K. go out and sell them to the community". So we give them homework which means they have to involve the grandparents and the parents and their own siblings, and then they have to communicate within the community about their ideas.

Well, this seemed quite a good development, but it was isolated—it was 290 pupils, so we then connected them up on the Internet— firstly with Wickham College in Johannesberg and then with Downside School in Southwest England, and now with a school in the Western United States in New Mexico, and one in the Eastern United States in Wisconsin. And that means that they've got two areas which are primarily suffering from industrial pollution and two areas which are primarily suffering from environmental degradation to communicate with and they're exchanging ideas, they're exchanging data, and they're exchanging systems with these other schools; and particularly in South Africa already they're saying "Well, what about a school in the Orange Free State", "What about Lesotho" and "What about Swaziland" and "What about Zimbabwe", "Why can't we work on the Gwai River?" So this is a thing that seems to be snowballing and we now have to work out how you compare the Gwai River, which is dry for eleven months of the year, and the Todd River which is dry all the time. I mean it's a new concept in Waterwatch—working without water—but I think it's really encouraging to think of the next generation of industrial leaders and political leaders and legislators and our next generation of society already communicating on the Internet about environmental matters. Whether it's working I think, can be predicted by the fact that we've got a student going down tomorrow week to Government House to pick up the Premier's Award for being one of the top five in the State, and I'm pleased for her but I'm very sorry for the other students in her class who were two points behind and have been totally ignored because someone's been such a star.

I'm going to leave out all the other aspects of this program, which is immense. We're looking at things like farm health and safety, but not looking at identifying the problems and fixing them; rather we're looking at why these farmers are under stress. Why are they hurrying on simple jobs so that they are taking shortcuts? Is it because they are worried about the fact that their kids are in trouble in the town? Why are girl students in rural areas, between the ages of thirteen and eighteen years, throwing in the towel and not meeting the challenge, whereas in urban areas they're running circles around boys for those five years? What can we do to give children in rural areas free space for adolescence?.

Kids in the urban areas can get free space—they can go down to the park, or go to the cinema, or go to the disco. In a rural town if they go down the street, the woman in the dress shop reports them to the parents, and the fellow in the Post Office sees what they're doing, and the one in the greengrocer sees that they're smoking, and it all gets back to the parents. There's nowhere they can go by themselves; it's no wonder they piss off into the city as quick as they can—they've had it.

So it's a Human Resources Program; you know, there's research in agricultural practices, there's a lot of research on soil biota. We're researching in human resources, we researching all sorts of factors and the program I outlined last night about the Bio-link in the Otways originated from the same group.

I hope that's given you something to think about, about where farming stands in our current community. Thanks very much.

Panel Discussion

Panel Discussion

Dur-é Dara: For the next part of this session, we have invited three more people to join the panel. The first is Dr. Marion Maddox. Marion is a political scientist. She is an old symposiast. She has a PhD in Theology as you can see in your paper, and she is currently doing a PhD in Political Philosophy. Pam Gillespie is a Vigneron and Winemaker, passionate about water and permaculture. Her Demondrille Vineyard is near Canberra. David Thompson, from this area, has a bushfood business with his wife Julie, and he is very passionate about the issues surrounding the use and the merchandising of bushfood. We welcome you and ask if you would take five minutes each to make a statement about where you sit in regard to this topic, or choose to reply or ally yourself with one of the speakers. Then I'm going to say that I'm not going to do the job of most moderators and that is to rush around trying to think exciting questions to ask so that you can keep awake. You're going to have to do some work and you're going to ask questions that relate to this topic, or make a statement; I don't think it matters. We'll start with you please Marion.

Dr. Marion Maddox: I'm going to reply particularly to the first two speakers, although I want to begin by saying how much I appreciated the papers of all of the speakers, and also the welcome that we received last night.

I guess all of the papers we have heard this morning have been focussing around the idea of indigenous or sustainable non–indigenous practices accommodating themselves to capitalism, and Nancy (Dr.Nancy Williams) made that quite explicit early in her paper, where she said that there are things that have to be taken into account if indigenous peoples are to accommodate themselves to capitalist economy as indeed they must, and I found myself as Nancy was talking, writing a kind of—I didn't intend it, but I sort of came out with two columns on my notepaper of characteristics of indigenous landuse, indigenous concept of ownership based in spirituality; and then capitalist approaches to those same things falling into another column.

Nancy was pointing out that ownership proprietary rights in indigenous communities have a spiritual basis, that knowledge is not specific to place—not universalisable, that metaphor isn't a sufficient concept to explain the relationship between the material and the spiritual.

On the other hand we might say that a capitalist economy is based in a sharp division between the public and the private, where religion is seen as something entirely belonging in the private; as something completely that you have to keep completely to yourself, and ownership property rights are something that is grounded in the public, and so it can't be understood by a capitalist economy in terms of anything remotely spiritual I guess, whereas as Nancy pointed out indigenous systems of thought are not universalisable, capitalism wants to be completely universalisable—money is the universalisable category that can be projected on to anything and used as the measure of anything.

Finally, whereas Nancy quoted the point of view that metaphor isn't a sufficiently deep, or sufficiently textured I guess, concept to explain those connections between land, and the human and non–human life that exists on it; and the cultural interpretations that go with them; in capitalism everything becomes a metaphor, because everything is measured in terms of money; which after all is a metaphor for everything else that people do.

So I wanted to draw attention to that tension and also comment on it in the context of the direction that contemporary capitalism seems to be heading. We've heard a lot in the news lately about the Multilateral Agreement on Investment (MAI), which is a Multilateral Treaty which signatory nations would sign, agreeing to not put in place any laws that would hinder the activity of any multinational corporations operating in that country, so it would become much harder for nations like Australia to have environmental regulations say, or health regulations, that would affect the operations of overseas corporations, so it's something that people concerned with food should surely be interested in on a number of fronts, but in talking about preservation of indigenous ways of doing things, that's also an area of life that would be strongly affected by the increasingly globalising tendency of capitalism that says everything that is done has to be able to be accommodated to a global set of values, which are nothing to do with the values of the people operating on the ground, but are the

values of big corporations whose interests are not the interests of sustainability, either of people of communities—or indeed of nature; so I wonder whether we are actually being a bit complacent in talking about all of these various approaches—indigenous, non–indigenous, sustainable agricultural approaches—accommodating themselves to capitalism. I wonder if we have to be a bit more hard–nosed—enormous task though it seems—in trying to challenge the direction of contemporary capitalism, and compel it to accommodate itself to sustainability of people, of communities, and of non–human nature; which is a much more daunting task, but by not looking at it, I wonder whether, in the end, we give up the battle before we've started.

Dur-é Dara: Do any of the commentators at this stage want to comment? No? Well, we'll move on and come back.

Pam Gillespie: I'd like to start off by saying I always find these get–togethers extremely challenging and it gives me an opportunity to put very clearly in mind some thoughts and views and how—I've only been in the country community I'm in for two years—and how that integrates with what other people might be thinking in other areas.

I'm here because of the love of the land that I live on, and the quality of the land that can produce wine such as this not because it's the wine that I make but because the land itself lets me do that. It is an enormous thrill and beauty to be able to watch the growing of the vines, from how you treat the soils and the roots, through to the vines and see wines being made. I'm not a winemaker, I'm a flavour restorer and making sure that I restore all the flavours that the natural things give to them. Also on weekends when I do the cooking—I'm not a cook, I really rely on the natural flavours that our earth gives us there, and we've got to be able to look after that to maintain it into the future.

The biggest issue for us, because I live in the Murray–Darling Basin in what we now call the Highlands areas, is water—how we use it. It is our most valuable commodity that will lead us into the next century, and if we don't manage it correctly we won't have a future to look forward to. I think probably at the moment nobody is really paying the true value of water and we've got to recognise that it's a resource that we must pay for, and I suppose that leads me on to another topic that is an issue around us but not necessarily an issue on my own land, and that's how we handle the integration of native aboriginal people and the traditional farmers, and I believe that everything that has come out so far, apart from the natural recognition, is very divisive, common law is very divisive, it just encourages people to argue their point and perhaps I have to admire Barry Jones when he got up at the Labor Party Conference and stated "The worst thing that the Labor Party has done, and I'm not just blaming it on any camp, is after we had developed this wonderful legislation we didn't actually go out and market and explain and together in conciliation, work out how we can work with it", because it is only through conciliation and talk we all be happy, and we'll all look forward to being able to enjoy our natural produce, which is our land and water

David Thompson: It might help you understand my perspective just for me to say to you briefly what my background is— and that's teaching and a lot of environmental education—recently as a Koori educator; and I guess my involvement in the bush food industry comes from a great interest and love of the natural environment.

I think that it's very appropriate that we're meeting in this particular place at this particular time. Both in time and place it's very appropriate that you meet here. In time, we're just reintroducing the Wik debate into the Parliament and what could be more poignant than for us to recognise that in food resources in this country; the natural food resources, our dependence on the indigenous people for their knowledge that the whole industry is now based on and, in place, to be part of this wonderful Cultural Centre—to be conducting our proceedings here, which represents the longest sustainable culture anywhere on earth by a factor of probably ten; must point to us that this is a very special place in very special time.

My emphasis is about environmental and cultural responsibility, and I believe that unless we deal with these

issues, we are going to repeat the same mistakes that we've already made, both agriculturally and socially. Unless we come up with a better way of dealing with things we're going to repeat the mistakes of the past.

From that point of view I really think that what Terry White had to say today was really crucial. It has been a great pleasure for me to hear the other papers today and I must say another long held hero of mine, Richard Weatherly; to hear him speak again and to gain a new hero in Terry, was a great opportunity too.

This afternoon I'll be conducting some of you on walks around the bush and I hope that we can make you aware of the very basic holistic nature of our environment. What has that got to do with food? Well we'll make that point in situ, but I guess what we're really looking at is survival. The food that we eat is fundamental to us, and the environment that produces it is crucial. If we don't look at those holistic approaches we're really part of an end game, and unless we address that we're going the same way as past civilisations.

I just draw to your attention two quick points. One, the breadbasket of the Mediterranean used to be North Africa in Roman times. It was ruined by agricultural practices and over–exploitation. Two, the usage of resources in Australia by each citizen is about 350 times the resource use of a Third World citizen. That puts the impact of Australian food production the same as for India—we basically are impacting on our environment equal to or greater, in Australia, than the Indian population. It should bring a very sharp focus to what we do when we talk about food production.

Food production is carried out by a very small group in our country, out in the rural areas. What they do is on your behalf, because without that production there is no food supply. Cities are great vacuum cleaners sucking in resources from the rural areas, and unless you look at what's being sucked up, what's being done on your behalf you are really fostering practices that are unsustainable and will lead to all our demise. Thanks very much.

Jane Adams: A question for Terry White. Terry, I can't wait to see olive trees growing on rooftops all over South Melbourne, but I just wonder what you have done in terms of approaching both municipal and State Government to facilitate that and what reaction you've had again.

Terry White: At the beginning of last year both the City of Port Phillip and the City of Melbourne were beginning a new planning bureau. They both entered into public conversation about the shape of the city, opening up for public consultation the shape of the city to come. In both those contexts I wrote to them suggesting that rooftop gardens were something they should consider seriously, and in both cases got a very good positive reply. My submission went into their public consultation documents. That was as far as it went. Then I learned from a colleague that the Department of Infrastructure was offering urban design grants to Councils so I went to the City of Port Phillip with my proposal as a partnership option—that I would work with them to investigate those options. Fortunately they responded positively with a $20,000.00 consultation grant.

So, as far as I know, this is the only exercise in Australia of this type, but just in the short time that I have been on the Internet and contacting people in Europe; it's really amazed me the speed with which this opportunity is being taken up in Europe; so my feeling is, that if we are able to demonstrate that rooftop gardening is in fact a sustainable and viable operation, it will take on very quickly in Australia. But to me that's an open question.

The gardens that I see in Europe are clever but are operating in very constrained circumstances. It's much better, much easier, to put a plant in the ground and make it productive than to operate on a slab at altitude and make it productive, where it's subject to intense heat, intense cold, and turbulent wind, so it's a research project for us and for those students in the next six months, because really the jury is out.

If it proves to me that it's unsustainable, my interest in it will cease at that point. If we can demonstrate that this is a genuine option, then I would expect that the City of Melbourne would be the next to take it up. They've already had a sustainability strategy, where their consultant who they employed, recommended that rooftop gardening, a la New York, be examined carefully.

They haven't chosen to do anything about that at this stage, they've got a watching brief on what we're doing, but The Body Shop wants a design done in the next six months. Ross House, the environmental groups, wants a

design done. Royal Children's Hospital has a garden which is proving extremely therapeutic for kids who have terminal illnesses, it's a little patch on a desert–like plateau on top of the Royal Children's, so looking at that I just say, why do we put people in these inhumane circumstances? Why don't we use these opportunities?. As I said, who knows?

Richard Weatherly: Can I just ask a complementary question to that. It seems to me that there's a halfway step which has never been utilised in the cities at all. In contrast to the cities of Europe we are very short of water and each summer water restrictions go on in the city but it's not even legal to do housetop collection of water for garden watering. It's just such a fundamentally simple decision to say "O.K. There's so much lead in the air or other pollutants that you're not allowed to drink that water that you've collected,, but why the hell can't we put a 7000 gallon tank in the garden and water the garden from our own resources in the city.

Sarah Stegley: Because the M.M.B.W. historically sold water. You paid rates for your water.

Richard Weatherly: That's not a reason. That's an excuse.

Sarah Stegley: I know, but it's an historical reason that you couldn't put a tank in your back garden and collect water because they wanted you to buy it, so it's a nonsense and needs to be challenged by everyone.

Richard Weatherly: It shows the depths of the problems that Terry is facing.

Pam Gillespie: A question to Richard. Have your programs for children been long enough in practice to be able to monitor if they are having positive results with the way that particularly youth sort of view their own worth in Australian society. One of the things in the two years that I've come to the country, I don't think I've met any young people from the ages of between twenty and thirty. They are just not there. They're not staying in the country and surely they should be the people who are working it up to take it on into the future, but they're just not there. So does your program—has it worked at all?

Richard Weatherly: I think there's a couple of things in that. One thing is that we've got a long way to go ahead and it's not a matter of, if it's not working today then it's working tomorrow. I mean it's a gradual transition over five or ten years to build up the infrastructure in a regional centre to become attractive to children, but you're quite right that there is a deficiency in the numbers of young people staying in these regional centres and the sort of problems that are going to arise—we've watched in our district as a 35 year old farmer courted a girl for four years and eventually popped the question to her, and she said "Well, blow you Jack I'm not going to move my business out to the country. I'm not going to sacrifice all I've done to get to the age of 32, to move out amongst you hicks".

I mean the fact is that we've got to produce the sort of cultural background in towns of 1,000 and 1,500 people which is attractive to those people. Now, one of the things we're trying to do in Mortlake is to set up a telecentre which gives full access to e–mail and GIS mapping and GPS systems, and you know the various technologies available.

But those are the sort of infrastructure things that come in initially and as they build up then you get better hairdressers and better clothes shops and better access to cinema, and then the Musica Viva happens to come out twice a year and then get such a good result they decide to come out three times a year.

I mean little things like—we had a beautiful bakery in Mortlake, and the people got bored and moved on and did other things. Now there's an opportunity there for a bakery to start. If you could then use those kitchen facilities to expand into the catering system for the district so that district parties and functions are catered for and then start to create a restaurant in the town so that people don't have to travel 60, 70, 80 miles to get a decent meal—it would have to be of the quality that people came from Adelaide and Melbourne to eat

there—then you're starting to train twenty to thirty young kids in baking and catering arrangements and waiting at table, and you're starting to create a youth employment system which keeps kids in the area and helps self-esteem. But all those things take a long time to set up, so it's not as if it's wrong today and right tomorrow But that's the long term plan—we plan for twenty five years not twenty five days.

Nancy Williams: I'd like to ask a question—I have to say Andrew Beal has very kindly agreed to answer if I asked. I of course have tried to contribute something to the understanding of the basis of Aboriginal peoples' proprietary interests in the species, the so-called natural species, of their land, and Andrew has of course been dealing in a very practical and realistic way with producing them; and it seems to me that there are some issues there that he should be able to tell us about; in terms of how some progress is being made toward these equitable beneficial arrangements that I think we all would like to see.

Andrew Beal: I don't know whether there has been a lot of progress made, but there are opportunities to take it forward. Certainly when the Australian Native Bushfood Industry first met, and Colin Anderson who was the Koorie representative on that Committee, representing ATSIC on that Committee, made it plain that it was an agenda that needed to be addressed, and there was no disagreement with that. How it would be addressed - because it wasn't specifically a brief for that Committee—to this day remains a question. But one of the stumbling blocks, if you were to look at say, putting a royalty payment where you had a very clear audit trail and you could say so many tonnes of a particular product that it was either clearly dutiable or leviable with a royalty; if that could be maintained in terms of an audit, then yes, you could pay a levy on that.

As I understand it there are no legal structures in place where that could actually be introduced and in fact there are many international legal structures in place that make it extremely difficult, in that there is a free trade between nations internationally in genetic material, plants or animal. O.K. there are quarantine requirements, and each member state has their own requirements in that regard, but there's nothing to stop a plant breeder in Australia bringing in a new variety of wheat from the Middle East or whatever, and obviously the backbone of our current horticultural and agricultural systems rely on that invigoration of new genetic material and the like.

So that poses the question, well if we are going to invoke levies on our native crops, and that might well be the thing to do, then there are implications, and at the moment, implications in terms of introduction of genetic materials for the crops that sustain us generally now.

There is a mechanism in place currently under Plant Breeders Rights that, under GATT, now has international implications as well; in that someone can breed, or demonstrate that they fundamentally changed the genetic makeup of a crop, then they can gazzump it—in other words, you can put a covenant on that which is legally enforceable, which says that no one else, unless they have your express agreement, can propagate that. Now that doesn't mean that species is yours, it simply means that one genetic variant of that subset of that species, you have rights over.

David Thompson: I'd like to say something on this if I could. I canvassed this at the ANBIC Conference two years ago with some of the indigenous people and there was a variation of view. But I believe from my interaction with Koori people, the way to proceed on this matter is not on issues of royalties, but is on local agreement. It is the same as the Native Title issue and the Wik issue. We should be making local arrangements with local communities of people that include them, and respect them, in this area of the bushfoods so that, rather than look at a legislative structure to deal with this, the only way it's going to work is to include people at the local level, and we're trying very hard both as an organisation, the Southern Bushfoods Association, and as an individual enterprise, to try and make those links and include people in what we're doing—give opportunities for them to veto and have their say about the issue. Let's not look at a legislative structure. Let's look at a human structure of making agreements together.

(Speaker from audience): I'd actually like to say that might work temporarily, but I think one of the problems with farming is that it's run by multi-national corporations, and actually I think you do need legislation in place. I think that legislation is needed because companies like Monsanto have come in and genetically engineered the soybean and predict that they will control 70 per cent of the world soybean crop within the next ten years. So I actually think that legislation is very important.

David Thompson: As an umbrella I'd agree, but on the ground it has to be dealt with, with individuals and so just as the Native Title gives us an opportunity, and gives us a focus, in the end the resolution has to be at a local level and I would see that two protections are essential—and the whole Plant Rights Legislation is an anathema to the indigenous people anyway. So I think; protect peoples' rights, protect the environment, but lets do deals at a local level.

Jennifer Hillier: I just want to make a quick point. My quick point is local local. We gastronomers, you know it's a gastronomic principle—'local'. You know, a sense of place, local economy, embeddedness, it's what we're all working for with gastronomic issues.

Eric Rolls: I very much want to ask a question of Gordon Duff. There are two theories about buffaloes in the Top End and I'm wondering what you think about them. Firstly, in destroying the lily lagoons, they opened up very extensive breeding areas for barramundi and caused an astonishing increase in the number of barramundi and secondly, they kept mimosa under control, and it wasn't until they were shot out that there was the extraordinary thing that mimosa just ran wild.

Gordon Duff: The response to that is that in the first instance we don't have good enough information to say with any degree of certainty what impacts those things have. I think that what's more likely, in the case of the barramundi, is that the fish habitat generally has been in extremely good condition throughout the history of the Top End. What the buffalo did in removing a lot of the weed cover is made them more accessible to fishermen. Most people who go chasing after barramundi recreationally fish with lures, and you can't caste a lure into thick weeds and get a fish to take it. So I think it's likely, particularly given the breeding biology of barramundi that relies more on the estuarine systems than the coastal swamps; and the inland habitats, the fresh waterways, are really only a temporary habitat that they spread out into during the wet season; it's more likely an issue of accessibility. You can catch more so therefore the perception is that there are more there.

In relation to mimosa, the best evidence that I'm aware of actually goes the opposite way; in that feral animals, particularly buffalo and I think feral pigs, in creating quite substantial damage to floodplain environments, have opened up an opportunity for invasive weeds. Mimosa is one, and paragrass and a few others have also accelerated and become established quite dramatically over the last few decades. Now, most of the buffalo have been removed in the last ten years, but perhaps too little too late and those invasive species have gained a foothold. That's opinion, there isn't enough really hard information to say definitely one way or another.

Sherry Clewlow: I was just actually interested, Terry, it seems to me that the conflict, or the battle, seems to be between capitalism as Marion Maddox was saying, greed and people who ethically want to do what's right for the planet. Eight years ago I bought a CD which said we had ten years to save the planet, so the year 2000 is looking pretty scary. How long do we have to actually reverse things. Can we reverse it, can we turn it around and what's the time frame looking like?

Terry White: It's a good question and I'm glad you asked it, because Marion Maddox raised an issue early on which I think is of crucial importance, and the Multilateral Agreement mentioned is part of this package. I think we've got to redesign money. I think that there is a natural capacity for the planet to rejuvenate itself,

and I believe that money must be redesigned to echo that capacity and with the dissociation between money as a symbol system, which has vastly exceeded the capacity of the planet to rejuvenate itself, we have a fundamental imbalance which means the flood of capital or symbolised energy is devouring the continent at the moment. So I think we don't pay enough attention to money and it's basically a counterproductive system which must be totally revamped.

How long we've got to do this I don't know, but I predict a grassroots backlash against very swiftly moving agreements which are being made at the global level, by people who say "Hey, this has gone too far" and I think we'll be a redesign phase in the next century, and the sooner the better as far as I'm concerned.

Dr. Marian Maddox: I want to quickly pick up the comment made about the importance of legislation to protect local communities against a giant like Monsanto—which it's frightening to think about them controlling 70 percent of the soybean market, not only because then that's a monopoly control, but also because they control it with pesticide laden soybeans; but the difficulty, if something like the MAI is signed, is that it won't matter if we have local legislation saying Monsanto aren't allowed to operate that way in Australia, because a multinational corporation would then be able to sue the Australian Government in an International Tribunal for standing in the way of their operations—operating anti-competitively.

So, I think we have to look beyond just relying on local, we have to focus our attention locally in the way Jennifer Hillier was talking about, but not rely on just concentrating on spot issues where they come up in our own backyard but caste a cynical eye more widely, as Terry White was saying, because otherwise things like legislation will have been superseded before we enact them.

John Fitzpatrick: Just a comment about the relationship between capitalism, capital systems, and indigenous peoples and their cultural values—where cultural values tend to be equated often with spiritual values. I'm not making any comment on the discussion here, which has been great, but on the way on which this has been presented externally. I think there is a danger that the kind of relationship of indigenous peoples to the land is presented very much as if it's a spiritual relationship, and what everybody is saying here is that it's also about a material relationship—it's an economic relationship, it's about management, and one of the dangers of this money, of capitalism, is that in fact it creates a boutique industry in spiritual phenomena. Also that the Liberal State does, this is in the way the indigenous people have to play their politics which comes to be that you have to make spiritual claims We're talking about a different, another material way of behaving, like peasant agriculture.

Dr. Nancy Williams: I'd like to say that that's true. I think it does a disservice to aboriginal peoples' relationship to land and resources to focus almost exclusively on their spiritual relationship. It's very difficult for us because they are so inextricably intertwined—the spiritual, the individual, the group identity with land. I mean, literally, there is a very weak boundary between person and land and that is—I think I did make the point—that that kind of relationship is the basis of the proprietary interest. But let me tell you that aboriginal people I have spoken with, if I ask them "Where is your country?", they'll tell me and they'll almost immediately say "Oh, it's beautiful and it's so rich". So that economically it's obviously immensely important too, and quite so. We shouldn't focus on the spiritual aspect to the detriment of ignoring the economic bits.

Richard Weatherly: I want to respond to Terry's question. In response to your question I think it's very easy to get carried away with detail and lose sight of the great plan, and the one thing that is never raised is population. As a farmer I can recognise an overstocked paddock when I see one.

Jane Adams: Terry I wanted to direct this to you in particular, and I applaud your efforts in greening suburbs if you like, but are you aware of any groups lobbying to stop Melbourne growing? Brighton used to be the vegetable garden of Melbourne and we're in danger of losing Bacchus Marsh if something is not done.

Terry White: I'm not aware of that. I know there is Government policy which is leading to the densification of the city, and there is a fierce intellectual debate going on about how justifiable that densification is. There's just one point. Portland, Oregon, has had a boundary roundup for some years, since the seventies. It doesn't expand beyond that boundary. That's the only instance I know where somebody has actually set a line.

Gordon Duff: Thanks Terry. I don't know that Bacchus Marsh is such a planning consideration as it's an infrastructure problem. The way I understand it is that the capacity to get water to Bacchus Marsh growers is that it's an aging water system and needs an incredible amount of money to revitalise just the infrastructure for the water, so I think that alone might put the kibosh on many of those very viable growers in Bacchus Marsh.

Dur-é Dara: Thank you. I'm sorry we have to end this. I want to say thank you to all the presenters for sharing your knowledge, your information, your passion and your commitment to Australia and our future. Marieke has some housekeeping information and you can talk to these people all week.

Marieke Brugman: Thanks very much Dur-é. Just a few things. One of our Committee, Rosario Scarpato, who will be responsible for tonight's meal and is tomorrow presenting a paper, had an ambition early on in the piece that we ought to be connected to the Internet. We logged on a week ago. We're www.class objects.au./~ diboss. We're terribly thrilled and clearly people like Terry and Richard with his Youth Programs, the Internet is one of the pathways to the future, as long as we manage it.

Tonight in the camp there are going to be four campfire discussions. I think we've sort of set a spirit this morning. As much as possible with this Symposium we're trying to encourage people to really come together and talk and debate. There will be four moderators. Would those moderators please meet me before lunch so we can have a briefing session on that. Lois will have designed four lists and you will be nominated to participate in just one discussion but all these discussions will be reported Wednesday morning as part of our closing session.

I now want to introduce Juleigh Robbins, who very kindly came up from Melbourne, who is going to speak very briefly about today's lunch.

Juleigh Robbins: Thank you. I'm not going to talk about bushfood as such, I'm just going to talk about what we're having for lunch. We've put into practice today something I think the others probably have been talking about. We've done some Rainbow Trout and we've filleted it and wrapped it in Paperbark and that's being cooked on the barbeque now. It's seasoned with Lemon Myrtle, Mountain Pepper, Wild Lime and Lemon Aspen. There's also a Wild Lime Chilli Ginger sauce to go with the trout.

We've also got some fillet of emu that has been dusted in a spice mixture called Desert Blend, which has a base of Bush Tomato, Wattleseed, Native Thyme and some other things and that's been cooked over a Banksia fire, so it has the flavour of the banksia through it. That's served on a bed of Warrigal Greens and it's dressed with a Bush Tomato dressing and we're going to have a Bush Tomato Chutney on the side.

We've also got a salad, which is a chicken based salad, but it's also got riberries and appleberries which are a Victorian species, and it's got a Native Mint through the dressing, so you'll be able to try that. We've picked some Native Mint from just around here so you can see the fresh leaf. We've got a fresh salad with a Wild Lime dressing and we've got for dessert some little tarts, which are easy to eat. One is a Lemon Aspen Curd tart, the other is a Nut Cream Quandong, and the third one is a Brioche with Créme Patissiére and candied bushfruits, and the bushfruits are Lemon Aspen, Riberries and Wild Lime and that's it. Thank you.

Marieke Brugman: I wish you all Bon Appetit for lunch. We expect you to be prompt. I think tonight when you get to the camp, the discussions will be around campfires. They're scheduled to start at 6.15 p.m. I think it would be good if everyone gathered in the meeting tent about five past six before we hive off into the four groups and we'll be giving you some hints about gracious camping and bush etiquette. Thank you.

Sarah Stegley: If anyone is driving out to the camp in your own vehicle be very careful. We've had a lot of talk about flora, but I can tell you there's a lot of fauna out there and it can jump across the road and smash into your car—so be careful.

Bushfoods Lunch

Bushfood Lunch
BBQ Trout in Lemon Myrtle, Banksia Smoked Emu, Chicken Lillypilly Salad,
Sweet Potato & Cumbungi Tart, Water Ribbon & Dianella Salad
1997 Mount Avoca Sauvignon Blanc, 1997 Best's Riesling, 1997 Yering Station Rosé

Dessert
Lemon Aspen Curd Tarts,
Glace Bushfruit Brioche, Illawarra Plum & Lillipilly
1997 Brown Brothers Moscato

Bush Tea & Coffee

Reviewed By Sandra Alexandra: Essentially a bushfoods lunch, served in glorious sunshine in the open air on the forecourt in front of the Brambuk Centre. The soaring winged roof of the Centre sheltered us as we sat in a huge circle, and looking back beyond the roof we could see the unique sawtooth mountaintops of the Grampians.

Juleigh and her team had set up barbecues in the forecourt, and during the last sessions of the morning we were tantalised by the smells beginning to emerge. When the session concluded we took glasses of 1997 Mt Avoca Sauvignon Blanc and gathered around the barbecues to watch the final cooking of river trout which had been wrapped in damp lemon myrtle bark, and so part–steamed, part–barbecued.

The lunch was served from long trestle tables, and the first big attraction was banksia smoked emu, served on a bed of warrigal greens (tetragonia) with bush tomato chutney. The emu fillets had been rolled in a herb crust before smoking, and had attained a consistency similar to pastrami, with a deep and intense flavour. The flavour was offset by the fresh sharpness of the greens and the intense sweet-and-sour of the bush tomato chutney.

The trout were served next, and were accompanied by sweet potato and cumbungi tart, and by water ribbon and dianella salad. The fish were sweet and delicate, and contrasted well with the rustic heartiness of the tart and the freshness of the salad.

Wines to accompany the fish, tart and salad were 1997 Best's Riesling and a 1997 Yering Station Rosé. The rose was particularly appropriate to the flavours of the food, and to the crisp sunshine of the outdoor setting.

After an interval, the tables were cleared and the dessert trays appeared. At first glance, they looked quite conventionally European in their forms, but the bush ingredients lent a special kick and spin. The lemon curd aspen tarts had an unexpected depth of flavour and the glace bushfruit brioche combined the familiar comfort of brioche with intriguing new flavours. The desserts were accompanied by a 1997 Brown Brothers Moscato, a traditionally Aussie favourite label, even if not a true 'bush food'.

Modern Australian BBQ

The Modern Australian Barbeque

Aperitif
1992 Seppelt Salinger

Entree
Wrapped Food
1994 Best Pinot Meunier, 1997 St Huberts Pinot

Main
BBQ Kangaroo Sirloin, Quail, Jonathans Sausages
Baked Potatoes, Green Salad, Peperonata, Salad Rosario
1995 Mount Avoca Cabernet, 1995 Dalwhinnie Shiraz, 1995 Brown Brothers Pizzini Shiraz, 1995 Mount Langi Billi Billi Creek, 1995 Blue Pyrenees

Dessert
Wood Oven Roasted Figs, Fresh Berries, Meredith Fromage Blanc,
Timboon Petit Fleur, Macadamia Wafers
Campbells Liquid Gold

Afters
Coffee & Tea
1985 Stanton & Killeen Vintage Port, St Agnes Very Old Brandy

Reviewed by Michael Symons: Greatness in cooking is keeping it simple, or at least seeming simple.

I feel no restraint in repeating this, because people always seem tempted to go the other way. They hope that quantity might make up for other deficiencies. The novice over–caters embarrassingly. The insecure restaurateur adds the last, taste–reduced strawberry.

To be honest, by the end of Monday afternoon, after being pressure–cooked with enlightening lectures, I was a little concerned that the Symposium might also be trying to cram too much in. The eagerly–anticipated campfire discussions had to be postponed.

We also had the immediate prospect of Rosario Scarpato's 'Modern Australian Barbecue'. This was from a self–confessed advocate of global all–at–onceness. To quote from the abstract for Rosario's paper the next day: 'In New Global Cuisine anything is possible—at the same time, contingent, often incoherent and ambivalent.'

But, finally, we reached Plantation Camp. With decorative flags strung between rows of tiny tents, trucks strewn between the trees, and people readying the big show, it had the orderly excitement of a circus campsite. In place of a big top, there was a civilised little dining tent across an open field from the next day's speaking tent. A wave of simplicity swept over me.

This continued through Rosario's dinner. We helped ourselves to wine. We gathered informally along narrow tables conducive to conversation and cuddling up. We fingered tiny hand–printed serviettes and washed our own tin plates and cutlery. Most importantly, we queued quickly for an unpretentious–seeming array of interesting and satisfying flavours.

It's not every meal that, while rinsing your utensils, you chat to Phillip Searle and Cheong Liew preparing the next night's dinner at the back of a van. And it's not every night that you discuss the shape of the breakfast loaves with the Mud Brick Pizza man; one of the site's highlights was Rob Bakes'

oven–on–a–truck, and any suspicion of gimmickry was blown away by the quality of the bread.

Billed as 'wrapped food' (redolent of Don Dunstan's wrapped food lunch at the Symposium in 1990), the antipasto comprised Purrumbete buffalo mozzarella, basil and Mount Zero olive oil, along with our first experience of the bread.

The main course–listed as quail, kangaroo and sausages–threatened complication. However, these were taken seriatim. You stepped up to the barbie for a quail. You returned when they'd done the kangaroo, and finally for Jonathan's sausages. These were accompanied by potatoes also done in the brick oven, along with a range of sauces, salads, etc, which I scarcely explored, although I wondered if I shouldn't have after chancing upon a surprisingly successful salad of parmesan and cabbage.

The fresh berries and Meredith fromage blanc included the tastiest (non–home–grown) strawberry I'd had all season.

This was the best of a 'Modern Australian Barbecue', since the ingredients were good quality, cooked well and enjoyed in the great outdoors in relaxed circumstances. Frankly, it was more appropriate than I'd feared. But that was back then—I've since learned much more. For one thing, I heard from Jennifer Hillier that she had agreed to differ with Rosario about global cuisine because we're all victims of our history and he's Neapolitan. She's right: for Rosario, born under the weight of tradition, global cuisine would seem liberating.

And it gets still more complicated, because Rosario has now sent the 'script' for the night. His original idea (dated August 1997) was for a Marinetti–like 'Dining Opera'. He intended to include: fresh, real relishes and salads 'mixed/confused' with commercial condiments; desserts served in 'objects of the future' such as pieces of computers and toy robots; taped interviews with the recipes' authors; and clues provided in empty wine bottles. This was to fit his overall plan to 'highlight the contradictions of the Australian way of eating and the struggle of contemporary gastronomy'.

In the event, he still achieved a more muted version by him and the team cooking, as he had planned, from recipes published only within the past few months. It didn't matter, he had recognised, that the reproduced recipes might generate different flavours than the authors' because the 'purpose is to cook the published recipes, which are available to all.'Also as he had originally intended, symposiasts were free to decided which extras accompanied what.

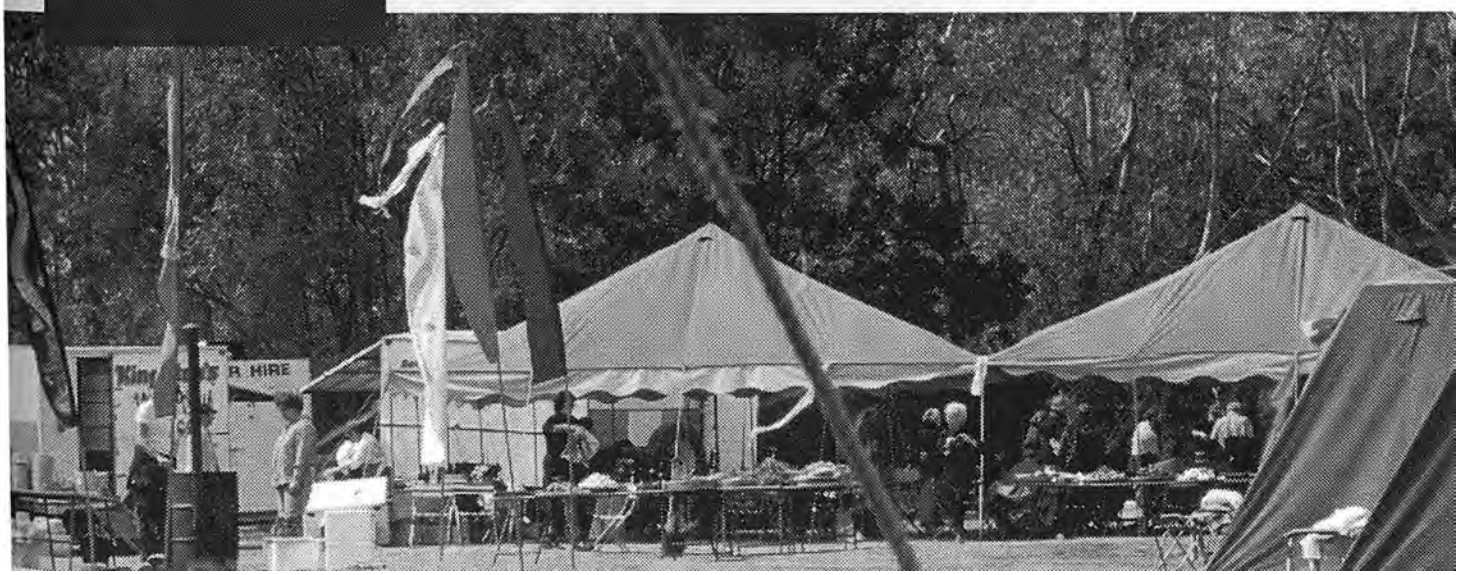
So Rosario supplied a green salad with palm sugar vinaigrette by Neil Perry, a peperonata by Stefan Manfredi and a coriander pesto by Allan Campion. Four salsas and similar came from recent issues of Australian Gourmet Traveller. And the recipe for the salad I'd liked of prosciutto, parmesan and cabbage came from Vogue, October 1997.

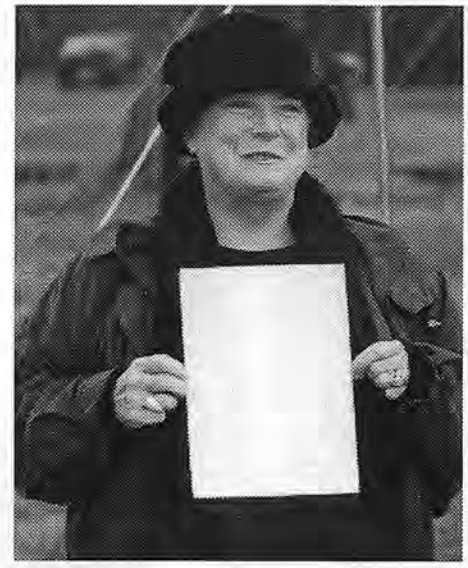
Rosario's theatrically ambitious manifesto of six pages had produced a simple result. Greatness in cooking? I suspect that just as the Ern Malley hoax proved that poets can't deliberately write bad poetry, Rosario probably proved that no chef can intentionally spoil a meal.

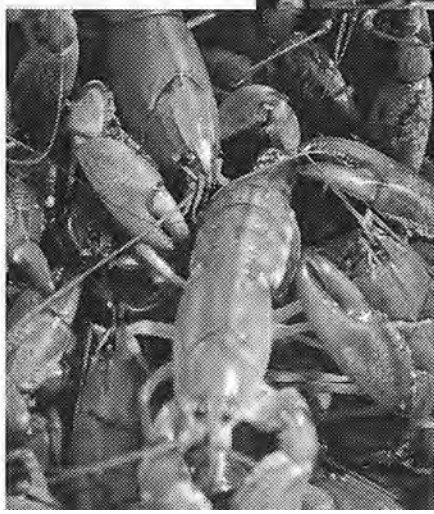
Under his plan, the diners also 'participated' by having to choose, so that if you didn't like some of your selections, that was your problem. Almost unconsciously, a boring, anti–chilli Italophile like me had stuck to simple grills, simply adorned. Additionally, I must ask Rosario a question (borrowed from my late, lamented friend Marlis Thiersch, no fan of postmodernism): how do I know when you're being ironic?

A similar story with the wines. I accept that, in wine terms, 'simplicity' is a fault. By contrast, a good wine is 'complex'. But the terms are misleading. A complex wine that seems coherent, together and balanced is actually closer to what I mean by 'simplicity'. This is the wine that you could keep drinking, that is a gestalt, not all over the place. I'm still waiting for the Symposium that can find one wine complex enough to sustain three whole days.

Gratifying, the choice was not a postmodern mishmash of global wines but local. They were excellent, too, and I appreciated the sense of abundance. Nonetheless, I am left wondering about having no fewer than eleven wine to choose between. Goodness me, Andrew Wood, eleven wines for a simple barbecue on a camping trip to the Grampians!





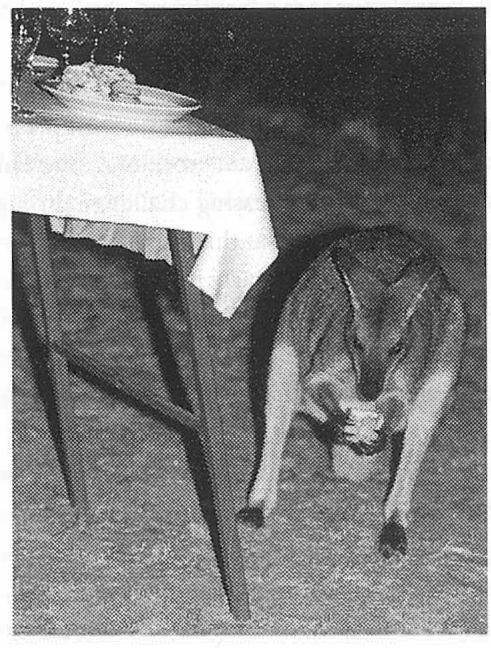


Tenth Symposium of Australian Gastronomy

Day 3

Beyond the Tuckerbox

Securing the Future



Securing the Future

Securing the Future—History + Food Policy Session

Moderator – Rosemary Stanton: My name is Rosemary Stanton and this session is called 'Securing the Future—History and Food Policy'. Now I think we could probably spend the entire morning talking about history and talking about food policy and we'd all end up with very high blood pressure at what's happened for food policy—or rather, what's not happening and some of our speakers will address each of these issues.

Our first speaker is John Fitzpatrick who is going to look at the history side of it more than anything else I gather. Later speakers will look more at food policy. John Fitzpatrick is from Flinders University in South Australia and I think he probably needs no further introduction. He is usually worth listening to, so John, thank you very much.

Transport Logistics

Transport Logistics, Trade Cycles and the Political Economy of Food in Southeast Australia, 1850s – 1920s

John Fitzpatrick: What I have to say today is not about frameworks for current or future food policy, but about the long term relationship of food, and domestic and international markets for food, to the formation of the political framework that has shaped Australian political and social life through most of the twentieth century. This was a very specific political framework, though not one encapsulated in any specific document like the Constitution—rather a broader ideological and institutional complex, which, following Paul Kelly, I will call the 'Australian Settlement' (Kelly, pp 1-2).

According to Kelly—and many other writers have said pretty much the same thing—there were five key planks to the Australian Settlement complex:

- White Australia
- Industry Protection (in practice 'all round protection', not just for manufacturing industry, but over time the explicit or implicit protection of growing areas of primary industry)
- State Paternalism
- Wage Arbitration
- Imperial Benevolence (where that meant a largely unquestioned acceptance of the benefits of both economic and military/political links with Britain)

Kelly argues that the most of the Australian Settlement complex was in place by the first decade or so after Federation, and that it remained a largely bipartisan framework of Australian political life and socio–economic policy till the late 1960s. It began to come under increasing challenge through the 1970s and reached a point of general crisis by the early 1980s, being repudiated at this stage by both the Hawke Labor government and the then conservative opposition. If you asked which party in Australia stands for the full Australian Settlement complex today, the most plausible answer would probably be One Nation. But in the early 1900s, it formed the basis for cross– party consensus among the major political forces at both federal and state levels, and the framework for a kind of social democracy which was in many respects quite advanced by contemporary global standards—despite obvious flaws, most obviously in its racist assumptions.

My paper here is an offshoot—a more specifically food related offshoot—of something broader I'm trying to work on about the geopolitics and political economy of 'state–making' and 'nation–building' in Australia. As it stands, it is a cut and paste arrangement of several elements: some edited text from the transcript of my extremely hurried talk at the symposium session; most of the capsule definitions and some of the tables and figures I presented as a handout and tried to speak to in that session; and a large slab of a draft final paper

which still bears rather too many marks of the broader agenda and doesn't fit wholly comfortably with the other two elements.

I should also emphasise that the argument is still fairly provisional. I have stated my big picture historical claims without too many qualifications, as it seems more useful here to make a fairly specific and identifiable argument than to smother it with a lot of caveats and qualifications. But in reality I'm still at the stage of thinking through ways of framing questions, rather than providing definitive answers.

Finally, in regard to the exercise of framing big– picture questions about food and Australian social history, I must acknowledge my debt to Michael Symons' pioneering work in this area. Anyone who knows Michael's work will recognise two major themes of his which inform the argument here. First, his inversion of Geoffrey Blainey's 'tyranny of distance' formulation to highlight the negative impact of the industrial–era 'tyranny of transport' on early food culture. And second, his emphasis on the importance of major climactic regions in thinking about the prospects for sustainable multicultural complexity in Australian food today. I think I am differing somewhat from Michael in my claims about the lateness of the full 'incorporation' of Australian agriculture in the global economy, and on my related arguments about the balance between the importance of local and global or 'metropolitan' markets for Australian agriculture around the time of Federation. But without the stimulus of his work, now almost twenty years old, I would not have had the questions behind this paper.

Before moving to the broader argument, I should clarify this basic point about timing and Australian agricultural exports upfront. Essentially I'm arguing that, in relation to very extensive bulk food exports, Australia's full articulation to the late–nineteenth century global economy probably came around 30 – 40 years later than people might commonly think. We tend to think of this, the first real era of economic 'globalisation', as being pretty much in full swing by the 1870s, and if you focus on the Atlantic seaboard region—on the relationship between industrialising northwest Europe and European settler colonial states in the Americas—that's pretty accurate. What I'm suggesting is that the degree of economic articulation experienced by the Americas in the 1870s or even earlier doesn't really take hold in Australia's case till the early 1900s—first, because of serious problems of global transport logistics which persisted well into the 1880s, and second because of a very long and severe period of economic depression and overlapping drought which lasted through the 1890s and up to around 1904.

That allowed an ad hoc coalition of forces between urban/industrial/service sector interests who wanted industrial protection and a substantial proportion of agriculturalists, who, around the turn of the century, still had a sufficiently strong interest in local urban markets to also support protectionism. This ad hoc coalition increasingly came apart in later decades, as global food markets progressively became the primary interest of most agriculturalists. But by that stage it had already helped to lay the foundations of the Australian Settlement complex.

Settler Colonial Economies, Export Staples and the Coast–Interior–Metropolis Relationship

The principal analytical concepts underpinning the historical argument of the paper are concerned with 'European settler colonialism' and the political economy of class, regional and sectoral relations in settler colonial economies dominated by 'staple' exports. These concepts are elaborated via a series of capsule definitions in this section.

General Features of European Settler Colonialism

European settler colonialism resulted from the interaction of the decisive globalisation of the European capitalist economy around the mid 19th century with the massive European migration overseas which hit floodtide around the same time, though especially in the Americas it built on earlier structures of European dominance overseas. It occurred in various locations in the Americas, Southern Africa and Australasia, but was marked to a greater or less degree by a common 'syndrome' of characteristics.

The political and economic appropriation of extensive territories with vast natural resources but relatively sparsely populated by indigenous hunter–gatherer and/or farming populations. The dispossession and rapid reduction of these indigenous populations through war and disease, to the extent that 'their indigenous

economy and society had little permanent effect on the development of capitalism in the new regions'

The establishment of transplanted capitalist economies characterised by highly specialised 'staple' exports of primary products to the developed European core, extensive imports of capital and labour from the core and—over time and to varying degrees—the growth of protected local manufacturing sectors.

Several states deriving from this form of colonial expansion remained clearly or even overwhelmingly European in ethnicity into the post-World War II era: in others Europeans were demographically a minority but economically and politically dominant. The first category would include the United States, Canada, Argentina, Uruguay, Australia and New Zealand: the second South Africa and 'southern Rhodesia' (now Zimbabwe), Brazil, Chile and Colombia.

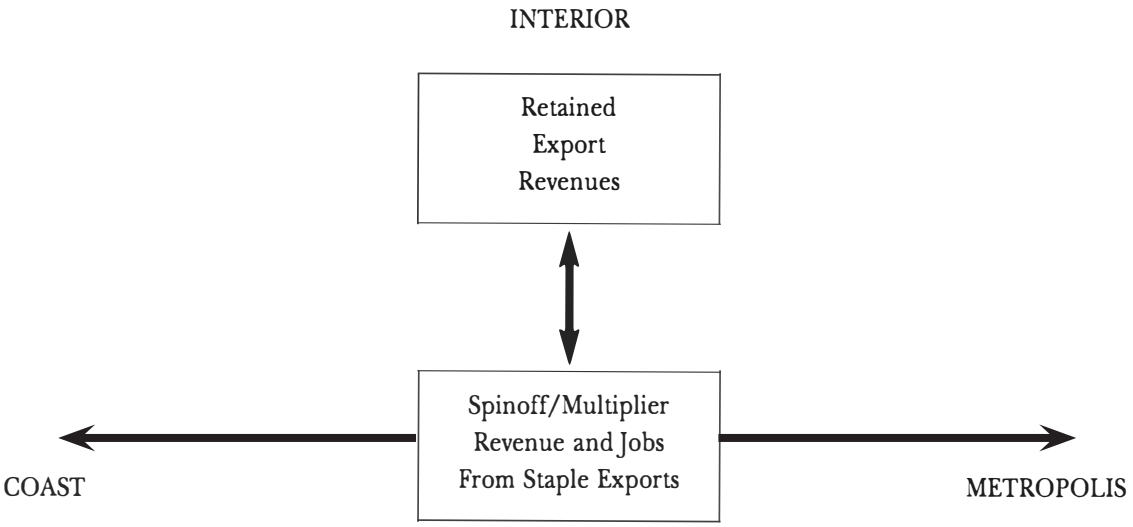
General Features of Export Staple Economies

1/ Domination of international trade of settler colonial economies by export of a few, major staple exports in high demand in metropolitan centres (primarily reflection of world demand patterns established by industrial revolution in Europe and other industrial regions). Note that the idea of an export staple here is not the same as that of a staple food. Non-food items (gold, wool) can be staples in this sense. Among food staples, 'luxury' foodstuffs like pineapples might figure as well as wheat, since the defining issue is not the nature of the foodstuff, but the relationship between colonial production and 'metropolitan' or 'core' demand.

2/ Very high profits (in high demand periods) and very large 'multiplier', 'spinoff' or 'linkage' effects in services/processing activities beyond the original stage of production or extraction. Ratio between services/processing and production/extraction jobs associated with staples like wool and gold in late nineteenth century Australia has been estimated at up to 10:1

3/ As represented in Figure 1, triangular conflict of interests over distribution of these multiplier benefits between: (a) the settler's main centres of population and urbanisation—the 'Coast', (b) the main regions of staple production, with relatively thin European populations—the 'Interior'; and (c) the dominant urban market overseas—the 'Metropolis'. (Despite the convenience of the spatial metaphor, this notion of a Coast-Interior-Metropolis dynamic refers not so much to the relationship between geographical regions as such, but to the relationship between classes, races and economic sectors typically associated with such regions. A rough correspondence between the geographical labels and the socio-economic relationships is certainly intended, but the correspondence should not be taken too literally).

Figure 1: Staple Exports and the Interior-Coast-Metropolis Relationship



4/ Conflict between Metropolis and Coast to capture bulk of multiplier revenue and jobs associated with staple export process, plus other revenue and jobs generated by Interior demand for urban manufactures. Coast initially needs 'Protection' against competitive advantages of larger and more developed Metropolis in services/processing/manufactures.

5/ Mostly convergence of interest between Interior and Metropolis (against Coast) on same issue. Interior normally more interested in cheaper goods and services from Metropolis than in promoting populous and wealthy Coast as market for its own production.

6/ Further conflict between Interior and Coast regarding former's desire for cheap (often coerced) non–European labour where staple export depends on tropical agriculture, deep seam mining, etc.

Specific Features of Temperature Agriculture/Foodstuffs as Staple Exports

1/ Lower overall profit levels, and lower value to weight ratio, in comparison to wool, gold etc

2/ Larger populations supported on land than with pastoralism. Family farm pattern, at least to begin with, though industrialised farming from relatively early stage.

3/ Coast urban/industrial markets as potential alternative to Metropolis markets for temperate foodstuffs.

4/ Lower value to weight ratio requires extensive development of industrialised transport infrastructure (steamships, railways) to make these food exports profitable. This applies particularly to the economics of food exports to global markets, but industrialised transport obviously important in regard to local urban markets as well. Where revolutionary impact of such transport on local market access substantially predates real impact on access to global markets, it can temporarily increase the importance of the former over the latter in the calculations of colonial farmers.

5/ Crucial importance of other industrial technologies, like refrigeration, resulting from the relatively high degree of perishability of many food exports. (Same comments as for previous point regarding relative impacts of industrial technologies on local and global market access).

6/ Profitable export staple role (i.e. staple exports to global markets) for temperate agriculture dependent on:

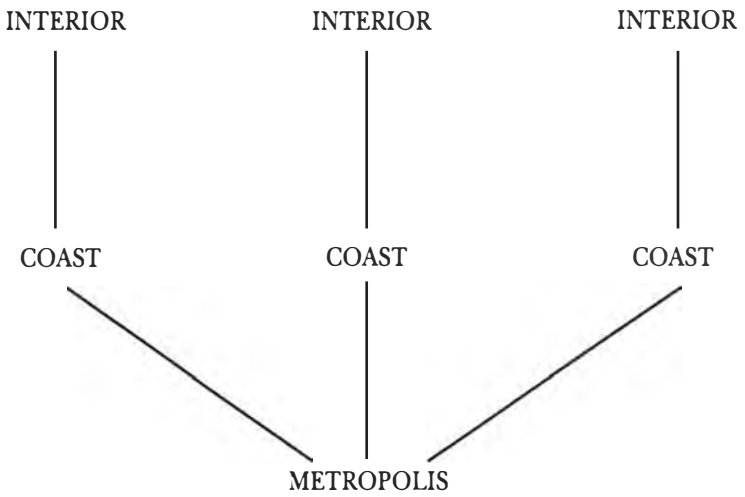
a) large–scale urbanisation and demand for cheap food in industrial Metropolis centres

a) victory of 'cheap food' coalition for agricultural Free Trade in Metropolis (usually urban–labour interests) over agricultural protection coalition (landlords, peasant farmers). This occurred in Britain, but mostly not in continental Europe or Japan, while US, another emerging centre of Metropolitan demand, was itself the greatest cheap food producer of all settler colonial regions.

Variant Power Relations in the Coast– Interior–Metropolis Relationship

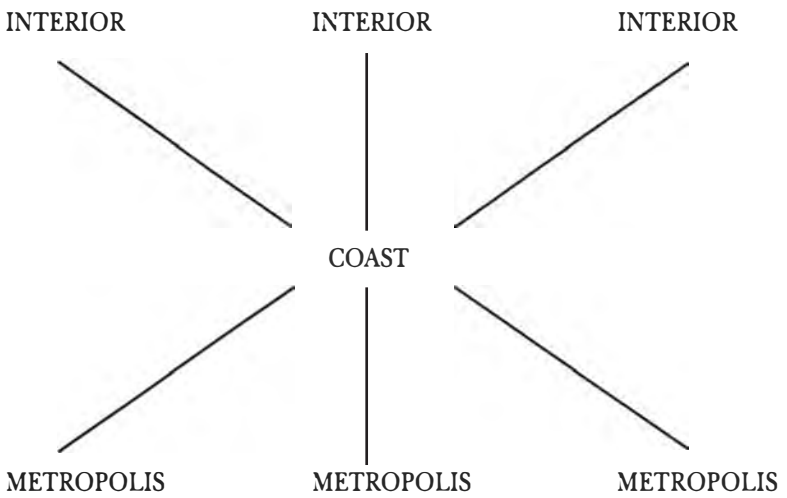
Finally, it is evident that the relative balance of political and economic forces, and the practical potential for coalition formation over major policy conflicts such as 'Protection' versus 'Free Trade', may vary greatly among different settler colonial societies, and also—at least potentially—among different periods in the development of the same settler colonial society. Figures 2a and 2b attempt to present schematically the main spectrum of possibilities for the practical working out of the Coast–Interior–Metropolis relationship.

Figure 2a: Balance of Interior–Coast–Metropolis Forces: A 'Dependency' Pattern



At one end of the spectrum, represented by Figure 2(a) above, a number of scattered Coastal enclaves individually perform weak and subordinate ëliaison' roles in the pre– eminent relationship between their respective Interiors and a strong, concentrated Metropolitan centre. This is the classic ëdependency' situation, exemplified by many aspects of settler colonial development in Latin America.

Figure 2b: Balance of Interior–Coast–Metropolis Forces: An 'Autonomous Development' Pattern



At the other end of this spectrum, represented by Figure 2(b) above, is the situation in which the colonial economy increasingly breaks away from its early heavy dependence on the urban–industrial capacities of the metropolitan economy. In this situation, a concentrated and expansive Coast progressively captures more and more of the services, processing and manufacturing spinoffs from its various Interiors, while at the same time developing a growing capacity to play various established Metropolis regions off against each other. Such a Coast, on the way to becoming a Metropolis in its own right, finds its classic historical form in the development of the US Northeast–Midwest complex in the 50 years or so after the American Civil War.

Ecological Frameworks and Transport Logistics

On the basis of the above general points about the broad range of the European settler colonial phenomenon, it is now possible to state the central paradox of the 'Australian Settlement' more clearly. In terms of its conformity to the stereotype of a European migrant 'workingman's [or middle class] paradise', early twentieth century Australia was virtually unique among European settler colonial societies: an ethnically homogeneous, highly-urbanised, high-income society, a precocious social democracy, with a substantial protected industrial sector, a substantial middle class and a well organised and politically influential labour movement. Yet this European migrant paradise was erected on a territorial platform which was arguably the least 'European' of all the major settler colonial territories, both in its geographical location and in its predominant ecologies.

As regards the former, Australia lay further from Europe than other settler colonial territory, except New Zealand, and closer to Asia than any other, including New Zealand. As regards the latter, the dominant territorial feature was the the prevalence of regions which are markedly non-European in ecology: namely the extensive stretches of tropical savannah and rainforest around the northern and northeastern rim of the continent and the truly vast expanse of deserts, semi-deserts and dry steppes in the arid interior. Together, these regions constitute the great majority of Australian territory—leaving more 'European' ecologies a smaller proportion of the total than perhaps in any other European settler state. They have also provided the bulk of Australian export revenues for much of the 20th century. Had there been extensive exploitation of them in the 19th century, this would presumably have involved heavy reliance on labour—repressive and racially—based labour systems of the kind which distorted the development of democratic social orders in most settler colonial states.

Returning to the 'spectrum' model of variant possibilities in the Coast-Interior-Metropolis relationship which ended the previous section, one might at first glance presume that Australian ecological conditions were strongly biased in favour of the dependency version of the settler colonial pattern. Continental Australia is notorious as the quintessential 'big man's frontier', with none of the conditions which favoured the widespread advance of family farms in the United States. No significant area of the 'humid continental' climate type which forms the basis of the great inland wheat producing belts in both north American and northern Eurasia; no great internal waterway system; no ecological or economic basis for genuinely trans-continental railways, etc.

As Blainey's work makes clear, the 'tyranny of distance' in Australian settler colonial history was a double-sided phenomenon, referring to exceptional transport and communications problems not just between Australia and the British metropolis, but also between the essentially coastal fringe of substantial European settlement and the vast, largely unpopulated continental interior. If one argues for a determinate causal relationship between geographical/ecological conditions and socio-political outcomes in Australian settler colonial development, the implication must be that Australia's precocious (if flawed) social democracy emerged not in spite of the 'tyranny of distance' and the 'big man's frontier', but because of them. That, in fact, is the argument of this paper.

The Boomerang Coast Versus the Southern Temperate Zone

The most useful starting point for exploring this paradox remains Blainey's own account of the 'tyranny of distance'. Not only does Blainey explore in depth both 'global' and 'local' dimensions of the tyranny of distance: he does so in an historical narrative which resonates strongly with the more formal Coast-Interior-Metropolis model outlined in the previous section. His recurrent theme in this regard is the need to distinguish between the 'Australia of the Map' and Australia a concentration of relatively dense settlement and urban-industrial activity. His central motif in regard to the latter is the concept of the 'Boomerang Coast': the Southeastern coastal crescent of mainland Australia bounded by Adelaide and its hinterland at one extreme and Brisbane and its hinterland at the other.

The distance between this Southeastern region and 'that part of the Australian coast which faces Asia', he argues, gives the lie to any simple notion of Australia's closeness to Asia. Thus Darwin is as close, by air, to Manila as to Canberra and closer to Singapore than to Melbourne. By sea, a much more relevant dimension of transport logistics for most of Australian history, 'Darwin is even more remote from the main Australian cities. Its sea route

to Sydney or Melbourne is longer than its sea route to mainland China'. Moreover, Blainey suggests, these internal geographical and demographic contrasts also account for the ultimate failure of labour repressive systems in Australia. Such systems indeed played an important role in such European exploitation of the arid interior and tropical North as occurred in the 19th century. But their consolidation and extension was politically blocked by the pre-existing demographic and political dominance of the 'temperate South' at the time of Federation.

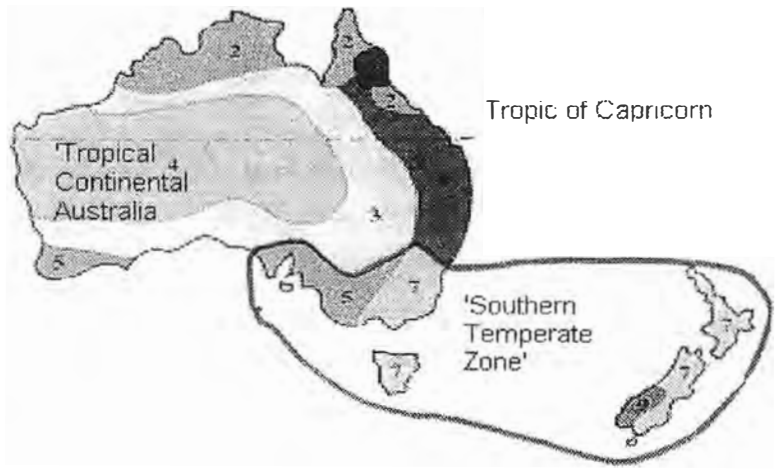
This is an illuminating analysis: but two reservations about the lack of ecological and geographical precision in the Boomerang Coast metaphor are important here. First, by confining his version of the 'temperate South' to the Australian mainland, Blainey passes over Tasmania and New Zealand—the only two territories in the South Pacific wholly dominated by the 'West coast marine' climate type characteristic of the British isles and Northwest Europe. From a late 20th century perspective, these omissions are hardly surprising: New Zealand did not join the Australian federation and Tasmania's relative demographic and economic significance declined throughout the century. But I will argue that their significance in the lead-up to Federation was far from inconsiderable.

Second, by treating the Boomerang Coast as a relatively uniform temperate zone amenable to European-style settlement and economic exploitation, Blainey obscures the importance of the ecological break marked by the onset of the 'humid subtropical' climate pattern on the coast North of Sydney. Around the inland slopes of the coastal 'Dividing Range', the West coast marine pattern extended from Tasmania and Victoria well North into NSW—through the Southern tablelands (the hinterland of the contemporary ACT today) roughly as far as Armidale, Glen Innes and Tenterfield in the New England tablelands. On the coast itself, however, the humid subtropical pattern began further South, extending North from Sydney to around Bundaberg in Southern Queensland.

This humid subtropical coastal strip had much in common with the tropical and fully monsoonal climate patterns of the coast further North. In a broader comparison of global climate types, as Symons points out, it should be seen as roughly similar to southern China or the plantation economy regions of the American South. It was always relatively resistant to imported European practices in the 19th century. Significant small farming activity did not really occur until dairying began to replace sugar in the 1890s, while transport links long remained fragmented by the coastal ranges and multiple river valleys. There was no rail link even between Sydney and Newcastle until 1888, and then only as a belated by-product of the establishment of a through rail service between Sydney and Brisbane.

Taken together, these two qualifications suggest that the southeast coastal enclave dimension of Australian demographic and economic development in the late 19th and early 20th centuries was even more pronounced than Blainey's Boomerang Coast formulation suggests. Moreover within this enclave—which I shall call for convenience the Southern temperate zone—Australia developed as a remarkably European society not so much in spite of, but because of the essentially non-European character of the ecology of the continent as a whole. I will attempt below to show that this pattern was powerfully reinforced by the nature of transport logistics between Atlantic Europe and the Southern oceans in the period in question.

Figure 3: Climactic and Transport Divisions in Colonial Australasia: Tropical Australia and the Southern Temperate Zone



Global Transport Logistics and the Rise of the Southern Temperate Zone

There was little in the overall pattern of Australian development in the first fifty years of European settlement which prefigured the structural importance which I claim for the southern temperate zone by the end of the nineteenth century. Rather, the early trend involved the establishment of a series of widely dispersed coastal enclaves around the perimeter of the continent and outlying islands Norfolk Island in 1788, Hobart in 1804, Moreton Bay in 1924, Albany in 1826 and three unsuccessful attempts in the Darwin region: Melville Island, Raffles Bay and Port Essington, in 1826, 1827 and 1838 respectively. By 1829, this process had led the British Crown finally to annex the whole of the continent: but Blainey suggests that the claim to the continent should be seen as a derivative of the British interest in the security of the scattering of 'limpet ports' clinging to its rim, rather than the other way around. "Ironically, Britain claimed the whole continent simply to claim a few isolated harbours astride trade routes."

The most critical external trade routes in the in the early colonial period were undoubtedly those leading North, for it was precisely the pre–existing vitality of the South and East Asian trade which attracted the European empires to the region in the first place. Even at its 19th century peak the British empire in the East was so closely bound up with Indian economic, bureaucratic and military resources that it has been described critical ways as much Indian as English'; and the growing British role in East Asia, culminating in the forcible and definitive 'opening up' of China to Indian opium and British manufactures in the 1840s, was in many respects a direct outgrowth of this Indian connection.

Moreover, this trade connection was a priority not merely for the tiny limpet ports of the far north. Sydney was the leading South Pacific entrepot for the major Asian trade circuits, re–exporting Pacific products like 'sandalwood, pearl shells. seal skins, whale oil and timber'; and even distant Hobart benefited from its supporting role in the sealing and whaling trades. The direct shipping connections with Asian ports overlapped those with Britain itself; the supply line from the latter being made 'stronger and cheaper by all those ships which detoured to Sydney on their way to Indian and Chinese ports'. The sea route towards the major Asian ports, past New Guinea and the Solomon islands, was the colony's busiest external sea route in the early decades—a fact [that] has been so long forgotten that one's first impression, on hearing it, is incredulity'. (Blainey, 1967, pp. 51– 2)

Blainey judges that the main era of importance for the Asian trade was finished by 1830, with exports of wool and whale oil to Britain assuming centre stage in the colonial economies from then on. In the 1830s, moreover, substantial private colonisation began around the Victorian and South Australian coasts, an area effectively by–passed by the strategic and trading preoccupations of official settlement policy. Together with the precocious spread of both pastoralism and agriculture in Tasmania—whose European population around 1830 was over one third of the Australian total—these developments began the rise the Southern temperate zone.

However, the watershed in this respect came with the 1850s gold rushes, which was arguably the true foundation period of European settlement in Australia. The European population jumped from 400,000 to 1.2 million in little more than a decade, with the great majority of this increase concentrated in the temperate Southeast. But equally significant was the development of a revolutionary new shipping route, which linked the Southern temperate zone to the British metropolis like a very distant segment of the Atlantic seaboard, without any mediating impact from the Asian trade links which had been so central to the economic and social life of Sydney and more Northerly ports in the first fifty years after European settlement.

This was a revolution still emphatically bounded by the climactic limits of sail, and its basis lay in the Atlantic winds and currents which had forced European sailors seeking to enter the Indian Ocean by circumnavigating Africa into a huge arc through the South Atlantic. This had brought them in turn into the path of the 'Roaring Forties' route through the Southern ocean—a route which also represented a much shorter line between Atlantic Europe and Australia than that via the Cape of Good Hope. Up to the mid–19th century, Australia's economic insignificance made such a radical divorce of the Australian from the Asian routes impracticable for regular traffic. But the premium paid during the gold rush era for rapid transit from Europe to southeastern Australia made possible the Great Circle route and the heyday of the clipper ships which dominated it. As

Figure 4 indicates, this route made sea connections between Australia and Britain—in both directions—a direct, if greatly extended, variant of seafaring in the Atlantic. Even the landfall at the tip of Africa disappeared, let alone any connection with Asia on the voyage back to Britain, so that many immigrants in these critical years would have experienced their transit across the world's oceans as a direct, unmediated relationship between Britain and Australia's Southern temperate zone.

Figure 4: The Great Circle Route

By the later 1860s and 1870s, the economics of shipping between Australia and Britain were no longer governed primarily by very high demand for passenger and goods transport on the passage out. Iron clippers, slower but with better cargo carrying capacity, increasingly replaced their wooden predecessors and the Great Circle route was somewhat modified. Ships retreated from the subarctic 'Roaring Fifties'—which had commonly been breached in the gold rush decade—back into the more traditional territory of the 'Roaring Forties', and generally not beyond 45 degrees South. With these modifications, however, sailing ships and the geographical pattern of linkages they sponsored continued to dominate trade between Australia and Europe into the 1880s. Limitations on early steamship technology, and the steamers heavy dependence on routes defined by the availability of coaling stations, left them a minority factor on the long and complex Britain–Australia run well after they had come to dominate the trans-Atlantic routes.

A similar laggard in the business of shortening and cheapening the maritime links between Britain and Australia was the Suez canal, both because of the rearguard role of sailing ships for which the route was climactically unsatisfactory and because very high canal tolls tended to concentrate even steamers on the luxury passenger trade or on cargoes such as gold and wool with a high value to weight ratio. 'Even on the eve of the First World War, [the Suez route] was much less important, for both passengers and cargo, than the other main route past the Southern tip of Africa'. On the other hand, the impact of the canal on Britain's links with its major Asian possessions and spheres of influence was truly revolutionary: distances saved on journeys between London and Bombay, Calcutta, Singapore and Hong Kong were respectively 41%, 32%, 29%, and 26% of the previous shortest route. When one considers these contrasting implications of the canal for Britain's links between the two arms of its eastern empire in Asia and Australasia, it seems likely that the overall impact of the canal was to further the growing divorce between the two.

Industrialised Transport and Local Transport Links in the Southern Temperate Zone

The pattern argued for above—whereby the early impact of industrial transport worked itself out largely within the parameters of pre–existing ecological constraints, reinforcing in the process the growing relative weight of the southern temperate zone in the Australian social formation—appears also to hold good in the area of internal transport logistics in the later nineteenth century. The first major development here—predating any significant development of railways and determining much of the early direction of the latter—was the realisation by paddle steamers of the inland transport potential of the Murray–Darling river system. This represented almost the only major potential for riverborne transport in southern Australia. It was a limited system by world standards: shallow, meandering, with major fluctuations in water flow and effectively accessible only to steamers of light draft. But precisely because of this, the technical limitations which retarded the impact of steam ships on the ocean traffic between Europe and Australia had no similar constraining effects on the Murray trade.

The first steamers began operation in 1853 and soon covered over a total distance of some four thousand miles, for around seven months of each year depending on water flow. With bulk freight charges less than a tenth those of horse or bullock teams, they played a critical if temporary role in re–orienting much New South Wales pastoral production towards marketing outlets in the South. (Blainey, 1967) From the later 1850s, railways to tap the river system were also built: first by Victoria and New South Wales to challenge what, as a river only trade, was a virtual South Australian monopoly, then by South Australia in turn to shore up its own weakening position. Ultimately the railways came to dominate the traffic. But the river steamers held an important role into the 1890s. And while river and railway still interacted as roughly equal partners, the attraction of the former—combined with the distribution of early gold fields and of new agricultural development stemming from the gold boom—encouraged a relative thickening of railways in the Southern temperate zone.

The final major component of the 'internal' transport network was coastal shipping. A particularly striking example of this was in the Adelaide hinterland, which contained not just the mouth of the entire Murray–Darling system but also its own regional system of /inland' water transport centred on the St. Vincent and Spencer gulfs. This system, in combination with local rail routes, retained its integrative importance for even longer than the Murray river system: its /golden age' persisted into the 1920s, with around sixty outports dotted around the regional coastline. However, the South Australian case merely displays in very concentrated fashion the general integrative role of coastal shipping in Southeast Australia (and New Zealand) around the turn of the century. Shipping costs were under one–fifth those of rail for bulk goods transport and around one–third for personal travel. Indeed, a salon class ticket between New Zealand and Sydney could cost as little as $2. (10s: around 85% of the cost of a second class rail fare between Sydney and Melbourne.)

One in twenty of New Zealand's European population in the late 1880s was Australian born, and much of its finance and external trade was in Australian hands. It 'seemed a natural member of an Australasian group of colonies' until political differences emerged over Federation in the 1890s—having much closer links in

practice to the developed southeast than had the isolated and underpopulated North and West of the Australian continent. The European population Western Australia (where resistance to Federation was also marked) was just 49,078 1891—slightly over one–third of the contemporary Tasmanian total and less than one sixth of the South Australian one. The Queensland mining centre of Charters Towers, whose European population appears never to have passed 20,000, was at this stage the second largest town in Queensland and the largest in the entire Northern third of the continent.

Of course New Zealand did not join the Federation, while Queensland and Western Australia not only joined but recorded higher rates of population growth than the developed Southeastern states from the 1890s onwards. However, the relative concentration of Australian population in the temperate Southeast during these politically crucial decades remained striking nonetheless. Victoria, South Australia and Tasmania alone made up almost two thirds of the European population of colonial Australia at the start of the 1860–1890 long boom, and still had marginally more than half at the onset of the 1890s depression—from which point their share declined to around 40% of the Australian total in the Great Depression of the 1930s.

These figures provide a rough 'quick fix' on the relative demographic importance of the Southern temperate zone over this extended period of Australian nation–building. But they still seriously understate the importance of this region. For New South Wales alone accounted for over 70% of the remaining Australian population throughout, and the conventional statistical aggregation of all NSW figures under the one heading obscures the fact that Sydney's temperate hinterland to the South and near West was much more developed and populous in this period than its subtropical and semi–arid hinterland to the North and further West. If this latter point is taken into account, it seems fair to say that the Southern temperate zone contained a clear majority of the Australian population throughout the period and a very large majority around the time of Federation.

The 1890s Crisis and the Political Economy of the Australian Settlement

The relative balance of global and 'internal', localised transport links sketched above was untypical in the longer history of European Australia. I have already noted the trend towards scattered coastal enclaves during the first fifty years, and a much more developed version of this pattern seems to have returned over the course of the 20th century. A contemporary transport map would reveal an ad hoc collection of internal transport routes leading to ports widely dispersed around the rim of the continent, with both internal routes and coastal ports in many cases having almost no rationale other than servicing the transfer of resources from remote areas of Australia to the centres of world demand. As noted in the introductory discussion, this is often seen as a classic 'dependency' pattern in primary exporting economies, whereby industrialised transport infrastructures facilitate direct and powerful links between the 'Metropolis' and the large capitalist, extractive enterprises of the sparsely settled 'Interior', with the urbanised 'Coast' being reduced to a subordinate, service role in the relations between these two dominant partners.

However, in the critical decades before Federation, the pre–industrial 'tyranny of distance' seems in Australia to have staged something of a holding operation against the industrial–era 'tyranny of transport'. In this transitional era, the first major deployment of industrial means of transport operated primarily to increase the relative density and efficiency of transport networks which still conformed to pre–industrial constraints on the long distance movement of bulk goods, rather than effectively over–riding those constraints. In regard to both global transport links between Atlantic Europe and Australia and local transport links within and around the Australian landmass, this transitional process evidently worked to increase the economic, demographic and political weight of the Southern temperate zone. On the one hand, the global links remained less significant than the dependency image suggests: on the other, there was a much higher degree of internal articulation of local transport networks over an important and productive region than the dependency image suggests.

Thus the fortuitous role of ecological and geographical constraints helped to ensure that the two great staple exports of the period—gold and wool—generated much more substantial spinoffs for the rest of the economy than might have otherwise have been the case . Blainey rightly emphasises the multiplier effects flowing from the location of the early gold fields in productive temperate regions relatively close to the coast. I have tried to

show that the peculiarities of transport infrastructure in southeast Australia drew wool into this multiplier process as well. Indeed the two multiplier effects seem to have notably reinforced each other. As noted earlier, it has been estimated that the multiplier effects of these two great staples were exceptionally powerful—with ratios as high as 10:1. Moreover, as Table 1 demonstrates, their importance to the Australian economy over the 'long boom' period was overwhelming, with their combined export values never falling below 70% of total exports, and at times rising above 80%.

Table 1: Wool and Gold Exports from Australia 1861–65 to 1886–90

	Wool		Gold		
Annual average	£ million	% of total exports	£ million	% of total exports	Wool plus gold as % of total exports
1861–65	5.4	30	8.7	48	78
1866–70	7.3	41	7.5	42	83
1871–75	11.0	44	7.2	29	73
1876–80	13.0	51	5.1	20	71
1881–85	15.7	56	4.8	17	73
1886–90	17.5	64	5.0	18	82

Source: N.G. Butlin, *Australian Domestic Product, Investment and Foreign Borrowing 1861– 1938/39* (Cambridge University Press, 1962) p. 410.

The foregoing argument about transport logistics seems to me persuasive in accounting for the relatively late articulation of Australian food producing sectors to the global economy, at least till around the mid–1880s. However, the argument from transport logistics alone becomes less plausible from this point on. The impact of steamship transport on Europe–Australia routes became increasingly important, as did that of longer–distance rail transport in the Australian continent outside the limits of the Southern temperate zone. In New South Wales, the rail link from Sydney to Bourke was completed in 1885; in Queensland, government railway mileage increased from 633 miles in 1880 to 2,142 in 1890, while in Western Australia, government railway mileage jumped from zero in 1890 to 3,910 in 1900. At this point however, the second 'holding action' mentioned in the introduction comes into play—the period of prolonged and overlapping depression and drought which severely disrupted Australian economic life from the late 1880s to the early 1900s.

The great depression of the 1890s opened with a major drought in 1888 (though it had much broader causes in a cyclical downturn in the pastoral industry and a general drying up of British investment), and in the more developed Eastern states prospects for recovery were in turn seriously compromised by a still more devastating period of drought which began in the mid–1890s.

"The dry years began in 1895 and did not break until 1903. Not all parts of the country suffered for the duration of the drought... But right down the fertile crescent of eastern Australia—from Queensland, though New South Wales, Victoria and into South Australia, the grass had disappeared... By 1903 the number of sheep and cattle had been reduced to little more than half. The wheat crop planted in 1902 was a disaster... most farmers counted themselves lucky if they harvested enough grain to sow in the following year." (Bolton, 1993, pp 25– 6).

This great period of economic upheaval appears to have worked against the prospects for a general alliance of rural interests against protected manufacturing and in favour of free trade—the kind of alliance suggested by the analysis of the Coast–Interior–Metropolis dynamic in the first section of the paper—in two important ways.

First, it seriously weakened the social and political power of the large pastoralists, the principal beneficiaries of Australia's leading staple export for over half a century. The squatters' power had already survived the limited political attempts to break up their large landholdings in favour of smaller scale farming, enshrined in various colonial Land Acts enacted in the wake of the mid-century gold rushes. Several decades later, they also decisively defeated the widespread rural strike movement provoked by their moves to cut labour costs in the 1890s depression. Moreover, as Herman Schwartz argues, it seems implausible to attribute their subsequent political defeats to the effectiveness of the new colonial Labor parties, formed precisely in response to the failure of direct strike action in the 1890s. Rather, they seem to have succumbed to the economic power of their class allies, the British capitalists, to whom they were heavily indebted and on whose support they initially drew to break the shearers' strikes.

The buildup of major squatter debt had it roots back in their rearguard action against the mid-century land acts, when they had been forced to borrow heavily to purchase land on which they had previously 'squatted'; and they progressively added further borrowings for massive fencing operations and other measures to improve the productivity of their runs. The heaviest borrowings were contracted in the 1870s and early 1880s, when wool prices were at their height. British wool consumption then began to slow in the later 1880s, with prices falling by 1894 to 63% of the 1870 level. Despite their defeat of the strikes, the graziers were unable to repay their debts and the their foreign creditors ultimately foreclosed on a large scale.

However, the creditors were now saddled in turn with much overvalued properties in a period of sustained slump. And foreign capital was itself divided between Scottish interests, who were mainly exposed to the debt of the pastoralists and therefore wanted colonial governments to establish funds to assist the purchase of pastoral land for agriculture, and English interests, whose primary lending had been to the colonial governments and were concerned that any further financial burdens might cause the governments themselves to default.

"In the absence of a clearly dominant domestic class able to guarantee their various loans... and unable to come to any agreement on whose loans should be sacrificed, foreign creditors threw their weight behind efforts to federate the six Australian colonies. They hoped that the new dominion would be simultaneously able to guarantee foreign loans and to contain the increasingly powerful Labor parties." (Schwartz, 1989,pp286-288).

Second, while food-producing agricultural interests generally gained ground out of the 1890s depression—in part directly at the expense of the pastoralists as discussed above—it was still not clear that their primary interests lay with overseas markets and the promotion of free trade, rather than with local markets and the support of protection. Temperate agriculture had also been a major beneficiary of the 1860-1890 boom, but unlike wool had continued to find its markets primarily in Australia, being a relatively late entrant to the movement for food exports to Britain and Europe. This was substantially because of the continuing constraints on long distance bulk transport, as discussed at length above. But it also reflected the importance of the local market opportunities available to temperate agriculture as a result of its primary concentration at this point in the southeastern temperate regions, where local transport networks were relatively overdeveloped.

Tasmania had been the first major granary among the Australian colonies, and still accounted for 30% of total production in 1850. It was replaced by South Australia from the late 1850s to the late 1890s, and then by Victoria. Not until 1911-12—well after the great depression and the sell-off of pastoral properties it occasioned—did New South Wales emerge as the leading wheat state. Perhaps the most graphic example of the relative lateness of major agricultural growth outside the temperate Southeast is Western Australia, which eventually replaced New South Wales as the leading wheat producer in the 1970s. It 'harvested little more than 1% of the Australian wheat crop in 1900, but was on the threshold of expansion', which would take it to 14% of the total by 1920.

Aggregate food exports hovered around 7% of the total value of Australian exports through the 1870s and early 1880s, still relatively insignificant in comparison to the 70% plus sustained by wool and gold combined over these years. Food's share of total exports actually fell to 5% in the late-1880s, when wool alone reached 64% of the total; and though its share climbed quite sharply to 13% by the end of the 1890s, this was in part a reflection of the drastic relative decline in the share of wool (a fall of 22%) in this depression decade. It was

above all with the recovery from the overlapping depression and drought around 1904 that Australian agriculture began to gain a major share of the new export markets in grain, meat and dairy products in Britain and Atlantic Europe. Aggregate food exports reached 28% by value of the Australian total by 1911–13, and this in the context of a world wide increase in agricultural prices.

The scale and profitability of food exports at this point "encouraged the rural sector to diversify... resulting in a boom in (protected) manufacturing that continued until World War I". (Butlin, 1987, p127) However, as Schwartz points out, there might well have been a powerful agriculturalist–pastoralist alliance against protectionism if participation in world agricultural markets on such a scale had begun a couple of decades earlier.

"By 1911, 64 percent of Victorian and 33.9 percent of New South Wales agricultural production was exported, compared to about 3 percent and 2.7 percent respectively in 1890... Large landowners were thus politically isolated in the early years of the 1900s' (and).only when export markets for wheat and dairy became more important than domestic markets did small farmers begin to ally with the remaining graziers." (Schwartz, 1989, p292)

Finally, there is the related issue of the potential challenge posed to the Australian Settlement complex by labour repressive systems, based on non–European labour, associated with the late–nineteenth century agricultural expansion into the Northern tropical regions of the continent. Once again, economic constraints grounded in the 'tyranny of distance' provide the most plausible reason why such systems did not develop on a large scale in Australia, as they did in settler colonial territories elsewhere. If transport logistics had favoured much closer links between Australia and early industrial Britain, the resultant colonial economies would presumably have included important sectors and regions dominated by exports of tropical and sub–tropical agriculture, and these would presumably have developed along labour–repressive and racial lines similar to those obtaining in the Americas.

The Australian wool industry, for instance, had originally developed on a labour–repressive, convict base; sugar planters made strenuous efforts to move in this direction in the late nineteenth century; and the outback pastoral industry continued to exploit aboriginal populations in a kind of rural apartheid through to the post–World War II era. There was no special social or political virtue behind the broader failure of labour repressive systems in Australia: just the luck of the lateness of Australian incorporation into the global economy.

However, against the background of the conflicts discussed above between the two major sets of rural interests in the more densely settled Southern states, the Northern challenge of tropical agriculture based on labour–repressive practices and imported coloured labour was in a notably weak position by the time it finally raised its head in the late 19th century. Moreover, technological developments in the sugar industry were now moving against self–sufficient plantation units and in favour of a system of many small growers supplying specialist processing mills. Rather than tropical agriculture becoming an area of major challenge to the assumptions of the Australian Settlement, it functioned in practice as a bridgehead for the conversion of agricultural interests to the cause of 'protection all round', prefiguring the more general pattern flowing from the emergence of an official Country party in the 1920s.

Conclusion

In *One Continuous Picnic*, in the course of his critique of the impact of the 'tyranny of transport' on Australian agriculture and Australian food culture, Michael Symons paints an eloquent picture of the impact of the industrial transport revolution at the level of the family farm: "The farm of our imagination, the farm of the children's picture books, is a self–contained unit reaping the sun's energy, with its fowls picking up spilled grain, pigs welcoming skim–milk from cows, manure enriching the garden, trees providing fruit successively through the year, willows by the stream used for baskets, flax stripped to tie vines and vegetables. And so on".

All this changed with the large–scale industrialisation of agriculture, Symons argues, not just in the narrow sense of the increasing dominance of industrial transport links between farms and distant urban markets, but in the broader sense that the underlying logic of those links required the progressive and systematic industrialisation of the farms themselves: "Railways disconnected internal links and plugged factory farmsteads

into cities. Efficient farms required special machinery and factory–made feeds and fertilisers. They tended to specialise in a single commodity, which made work boring and opened the overcrowded crop to plagues, which meant more chemicals with every season. Loose connections led to environmental degradation—and the irony of the pig factory dumping manure into creeks while the fertiliser factory poisoned the air. And the new links made the farm dependent on markets and the providers of equipment, feeds, fertiliser, chemicals and capital, which centralised control". (Symons, p 88)

As foreshadowed in the introduction, this paper broadly follows the lead of Symons' 'tyranny of transport' motif, in the sense of emphasising positive potentials in Australian socio–economic development which were held open while the 'tyranny of distance' kept the pervasive pressures of the global market at bay, and were progressively foreclosed as the global market and global industrial transport networks finally broke through. I differ from Symons in two main respects. First, in suggesting that the 'holding action' by the tyranny of distance against the tyranny of transport kept Australia out of full participation in global food markets for significantly longer than he appears to believe. And second, in taking a more positive view than he appears to do of the contribution of industrial transport to the intensification of 'local/internal' transport links in the 'Southern temperate zone'.

At most, the paper claims that the full articulation of the Australian agricultural sector to global food markets was held at bay until the first decade of the 1900s. By contrast, it suggests local transport links had been revolutionised decades before this, with the result that Southeastern Australia entered the early 1900s—and thus the first years of Federation—not just with the overwhelming majority of the Australian population but also with a more balanced, integrated set of socio–economic relationships between capital cities, provincial cities and towns, and rural hinterlands than is sometimes suggested.

This may have made no great long–term difference to the development of Australian food culture. Incorporation into the global food economy proceeded very rapidly from this point, with all the negative implications for the development of regional food cultures analysed by Symons. But it had major long–term significance for Australian political development, by advancing the victory of the ideological and institutional complex of the Australian Settlement.

Emerging in the early post–Federation years, and supported by the substantial (though fortuitous) convergence of urban and rural interests still prevailing at that point, this settlement continued to shape Australian political life well into the 1960s, and the strains involved in its crisis since that point are all too apparent in the 'Hanson debate' today.

Rosemary Stanton: Thank you John. This was definitely well worth hearing. In fact I've never heard you speak when what you said wasn't worth hearing and we could have had another hour. Unfortunately we do have to move on, but fortunately our next speaker is someone it gives me great pleasure to introduce.

I've been an Eric Rolls fan for some years and I really like something that's actually written in our program that came from the University of Canberra, who I think should be praised for having said it, saying "He writes in order to learn; and he learns in order to write," and he does both with distinction. I don't think I could introduce him with any better words, so moving on from some of the past to perhaps some of the future, Eric Rolls.

Ensuring we Have a Future

Ensuring we Have a Future

Eric Rolls:

I've just begun writing a two-volume book called *The Growth of Australia.* It begins about seventeen billion years ago—with an infinite series of little bangs not one Big Bang—and comes up to the present day with the land,

plants, animals and people. One early animal had enormous potential, a three-segmented beetle known as a trilobite. There were many species—fossils of more than 3000 have been found in central Australia alone—ranging in size from one millimetre to seventy centimetres. For 380 million years they were the dominant animals, the Earth swarmed with them, then conditions changed and they died out.

So they were relatively unsuccessful—some bacteria have lasted the 2000 million years since they first evolved. Well so far we have lasted about two million years. Are we going to make it for another 378 million to equal the trilobites? We are the only animals to have evolved with sufficient intelligence to influence our own future. And the way we are going we seem more likely to destroy it than ensure it.

It is impossible to make certain of a future because the Earth is subject to massive disruption by giant meteorites or by equally massive eruptions from under the sea. They are outer and inner catastrophes we can do noting about. But it is not too late to ensure that our own actions improve the Earth instead of destroying it. Good farming is the main solution. Soil and water are the foundation of all life, especially water. No life of any kind anywhere is possible without it. If soil and water are healthy, everything depending on them is healthy. Absurdly, it has become imperative to state and restate their importance. No manufacturer can replace them. The last census carried out in the United States did not count farmers. Companies have taken over so much land that farmers are too few to matter. Care of the soil, the production of food, is becoming the concern of urban accountants.

To make a recommendation for any area of Australia, it is imperative to know its history. Without the history it impossible to know what the land ought to be. What it is now gives no indication whatever of what it was. A few years ago Hugh Spencer, the scientist who established the Austrop Foundation at Cape Tribulation on the far North coast of Queensland, took me into a patch of thick, beautiful rainforest. There were a few huge figs, many trees fifty centimetres in diameter. All were so thickly laced together with vines it was hard to walk through. The ground was so spongy I seemed to be walking on thousands of years of mulch. "A few months ago" said Hugh, "I had a party of conservationists up from Sydney. When I brought them in here they were saying 'What magnificent primeval forest, this will have to be preserved—there aren't many places like this'. When I told them that only forty years ago the whole area was a run–down dairy farm they didn't want to know."

It is the best example of rejuvenated land that I have seen anywhere, a marvel to give anybody heart and hope. Because they will not learn any history, too many present–day environmentalists are a danger to the environment. They do not understand what Australia was so they advise the wrong cures.

By intelligence and minute observation Aboriginal Australians modified the land to suit themselves. And they made a wondrous job of it. For 120,000 years, perhaps longer, fire was their general agricultural tool. They established a mosaic of growth varying from months to years after the last fire until every animal and plant came to terms with fire, either to depend on it or to avoid it. Eucalypts, the dominant species of plant, even came to welcome it as a rejuvenating event providing minerals from the ashes of competing growth and triggering a flush growth of acacia or casuarina to restore nitrogen. So a eucalypt forest strings itself with flammable hanging bark, it fills its green leaves with volatile flammable oils and drops its dead leaves thickly on the ground. Low in minerals they burn well. Then the forest sings to fire, 'Come in! Come in !' It insulates itself with heavy bark, it holds naked buds and epicormic buds in readiness for fire of different intensities, it grows a lignotuber to survive even complete destruction of the trunk. In the hottest fire a eucalyptus forest risks no more than five per cent of its growth.

Contrary to general opinion, Australia now has more trees than at the time of European settlement. But the growth is deranged, there is dense forest where there ought to be open grassland, there is salting and eroding farmland where there ought to be dense growth. Generally, it is not trees that are missing in Australia, it is shrubs and grass. Fly over any area of Australia and look down at the trees. There seem to be plenty everywhere. But come down and walk among them. The understorey has been completely destroyed. Far from being a wildflower garden, as first observers described Australia, it is a desert of hard ground and exotic weeds.

One hears often how much rainforest has been cleared in Australia and how precious is the remnant that is

left. Rainforest is inordinately precious but its present area is by far the biggest remnant of native flora, there is a bit more than ten per cent of it left. The smallest, an area so small that every plant is vulnerable, is of native grasses, especially the millet-seeded perennials. In the whole of Australia native grasses cover an area little more than four per cent of the original. In a land where grass was the dominant feature, that is a catastrophe.

We are now in the country that Thomas Mitchell called 'Australia Felix' on his marvellous exploratory journey of 1836. As he moved down the Glenelg River on the Western side of the Grampians, he noted that "forest land... now opened into grassy and level plains, variegated with belts and clumps of lofty trees," the country resembled "a nobleman's park on a gigantic scale," it "gladdened every heart". On his return journey he found hill slopes covered with Silver Banksias and a day's walk farther north Black Wattle, *Acacia mearnsii*, 25 metres high with a 10 metre spread. These trees and shrubs protected the recharge areas on the hillsides—those places where water runs underground—and followed the channels down onto the grassy plains, mopping up water all the way. Every lake had a fringe of trees, shrubs and reeds to monitor what ran into it.

This country still looks beautiful. After all, it is difficult to take one's eyes off the Grampians. "A truly sublime scene," Mitchell said of them. They are a sudden magnificent lift off the low country, and volcanic upheavals have left green layers tumbled and jumbled one on the other. Farm paddocks still look good doffed with huge River Red Gums. But a close look reveals them as 400 years old, 500, some are older, they were huge trees when Mitchell came through, and they are now showing their age, their leaves are small and reduced in number. Two to five per cent die each year and that rate is compounding. There is no regrowth, there are no shrubs, no flowers, no extent of native grasses. In particularly rich areas these trees grew more thickly, up to 25 to the hectare. Industrious early farmers ring-barked the lot, worse they cleared the shrubs, their sheep trampled out the perennial grasses. Most of the plants that kept the watertable at a safe level were eradicated. The watertable was ten metres down when Mitchell came through, now it is on the surface or perilously near it; and wherever watertables rise in Australia, salt comes up with the water.

Huge areas of Australia are now salting, 30,000 hectares of the great Liverpool Plains, once some of the richest soil in the world, are white with salt. Another 20,000 hectares are under immediate threat. And the Liverpool Plains are just one small section of the great Murray Darling Basin; almost all of it is in trouble, and it is the chief producer of Australia's food.

Something like sixty per cent of Western Australia's wheatlands are likely to go out of production in the next fifty years. I recently spoke to a former member of the Western Australian Government who prepared a report on salting and erosion about twenty years ago. He foresaw what would happen and advised immediate remedies. He was accused of gross exaggeration and of writing alarmist nonsense. The report was shelved.

No government has ever taken soil degradation seriously enough to do anything about it. The cures are easy but they require great courage. There can be no more flood irrigation, not for cotton, not for sugarcane. Australian soil has been trying to tell us for fifty years that it can not accept flood irrigation. Serious salting began on irrigated farms in the Lachlan-Murray-Murrumbidgee area in the late 1920s—there is a remarkable old film showing a family loading a few pieces of furniture onto a dray with hens slung in a cage under it. Then the camera pans on their dead fruit trees standing on a bed of salt.

It does not make environmental sense, it does not make economic sense that cotton and sugar growers should be allowed to destroy rivers. Sugar is in gross oversupply throughout the world, the cotton crop is worth exactly the same as the fish and shellfish threatened by polluted rivers and seas. And seafood requires harvesting only, it produces itself.

Rivers can not function as irrigation canals. They must be allowed to fall to low levels for weeks and months at a time to drain salt. The natural system for draining salt was brilliant engineering on somebody's part. Salt filtered into the rivers, the next flood swept it out to sea.

The Moree watercourse country has been destroyed by irrational, and so far unprofitable, irrigation. West of Moree some of the world's richest land was laid out naturally to be irrigated by floods every few years. Perhaps the Nile Valley equalled it before it, too, was destroyed by incompetent government. In a high flood an extent of country 80 kilometres long and 80 kilometres broad received gentle flooding varying in depth from a few

centimetres to a metre. The growth of pasture after such a flood was prodigious and long-lasting. It cost nothing to produce. That country no longer floods so it no longer produces the former numbers of grass-fed came now so much in demand, it produces cotton whose chemicals repeatedly poison the river.

Some form of irrigation is vital. We cannot produce enough food for what will eventually be a huge population without it. Most of it will have to be drip irrigation. Spray irrigation is tolerable provided not a drop more water is applied than the crop can handle. Composting toilets will have to replace water closets, we can no longer afford either the waste of water or the waste of nutrients. All run-off from bitumen surfaces will have to be regarded as an enormously valuable resource, not waste. Every building in city and country must collect water from its roof.

Increasing urbanisation in all countries means that more and more natural systems of growing plants and animals are giving way to artificial production. People are losing track of where they come from and food is being regarded as the product of a factory not of the soil. That atmosphere allows health police all over the world to insist on absurd standards of cleanliness. If we try to live in a sterile world we will become subject to all manner of bacterial infections that should never trouble us. Recently the small fishermen's co-op at Laurieton, our home town, was forced to put glass walls in front of the trays of fish lying on ice so that customers can not help themselves. It will not stop anybody getting sick, nobody has been made sick by fish from the old open trays during 60 years of serving them that way. All it has done is create needless expense, slow down service noticeably, and divorce people from their food. I enjoyed taking tongs and selecting fish for myself.

All markets, those exciting communions of food and people, are meeting unnatural assessment by people divorced from life. They worship sterility not fertility. As in the United States, every open market in Australia is in danger. As well, town after town is moving its saleyards out of the urban area lest people be offended by natural noise and healthy smell.

Some years ago—the stated reason was hygienic—butchers were prevented from killing their own meat. I do not know of any case where meat from a country butcher made anybody sick, even if it did the number of people affected would have been very small. People get so accustomed to the bacteria, viruses, moulds, fungi and yeasts always in their locality that they can grow to need them, as indicated by very healthy people in some far European pockets who thrive on cheese that would be dangerous to outsiders.

This ban on butchers' killing yards was a social, economic, environmental and inhumane disaster which increased any danger from meat products. Centralised factory food is always more dangerous than local produce: hundreds or thousands of tonnes have greater exposure to bacteria than a tonne or two, and any contamination affects so many more people. If a butcher spilt a bit of gut when dressing an animal—that can always happen—he took out his knife and cut the stained piece of flesh off. So the ever present salmonella and other bacteria were at once disposed of. In the big abattoirs where much water means much supposed cleanliness, out comes the hose and the bacteria get spread all over the offending carcass and the ones next to it as well. If there is even a short hold-up in the chain leading into the chillers the bacteria have a wonderful time. Farmers killing their own meat know that if they want a carcass to keep they must not wash it.

But far more serious than the increased ask of contamination is the cost in injury to the animals, in the quality of the meat and in the extreme monetary cost of getting animals to distant abattoirs and bringing the meat back. Instead of a farmer quietly loading half a dozen fat steers and running them 20 kilometres to the butcher, those fat steers now travel from farm to farm until a double-decker float has its load of sixty, whereupon they all set out for the abattoir two or tree hundred kilometres away.

Much to the consternation of autocratic health inspectors in Britain, a body called the Humane Slaughter Association set up in 1993 to kill sheep, cattle and pigs in mobile abattoirs. They can handle 40 cattle, 400 sheep or 200 pigs a day, ideal plants for Australian country towns and cities, especially since they are cheaper to run than the big fixed abattoirs and much more profitable. The unit pulls up at the town yards, showground stalls would be suitable, kills what stock are penned them moves on to the next town. Local butchers can see the meat they want on the hoof, neither live animal or its carcass has to travel far, the ever present smell of

blood which terrifies animals in abattoir slaughteryards is absent.

A vital factor in ensuing our future is in treasuring genes. And what sounds a rather lame argument—we ought to keep them because we never know when we'll need them—is legitimate. In 1993 Dr Tony Brown, leader in genetic research at CSIRO's Division of Plant Industry in Canberra, succeeded in crossing farmed soya beans, Glycine max, with wild Australian members of the genus to give immunity to fungal rust diseases. It was a difficult project. Separated for something like fifteen million years, the plants had forgotten that they were closely related. Such examples are turning up with increasing frequency.

This sort of work is slow and expensive, but it is far safer than engineering genes, especially when bacteria are used as a multiplying and transmitting agent. The dream of chemical companies, and too many of them are now also producers of seed, is to engineer plants seed suitable for the sprays and fertilisers that they produce. Monsanto has already engineered (or is it "engened"?) a soybean with the blatant name of Roundup Ready to be resistant to glyphosate, the weedicide that the company sells under the name Roundup.

The power of such companies is frightening, they buy governments and tell them what to grow. They did so with ace in Indonesia, they were partly successful in India, but violent opposition there has so far saved ancient and valuable species. Because chemicals do not have a consistent effect on people, what affects one seriously has no affect on another, companies can take a cavalier attitude to the danger.

So hardened is their attitude I feel sure that they see the future as Roundup Ready people. Survive the chemicals we produce or goodbye.

Rosemary Stanton: Thank you Eric. For those of you who are interested in what Eric was just finishing up on, there's an excellent book called *Eat Your Genes* by somebody called Ted Nottingham from the U.K. It is going to be published in Australia shortly by the Australian Consumers Association. It's not a ratbag book; it's not even a single–sided book, but it has a great deal of information, particularly in that whole area of gene technology and some of you may be interested in it. So, thank you very much Eric. I didn't even have to hold up the time thing. You finished absolutely on time—what a professional!

One of the great things about these Gastronomy Symposia is the very strange backgrounds of all the people who come to them and I think, you know we could almost have a Symposia on why does such an eclectic collection of people come together. When I first heard of our next speaker, Gae Pincus, was when she was the first Chairperson of the National Food Authority, and to think that we had someone with a legal background working in food seemed very strange to me. Then I met Gae and I was absolutely thrilled that here we had somebody who was prepared to stand up to the food industry.

The food industry didn't actually like Gae very much, because she was a women of principle who thought that you should look at moral and ethical issues, as well as the very vast issues of food and nutrition, from the point of view of the consumer as well as the industry. So they were somewhat unkind to her, I think. But you can't keep a good woman down, and so Gae has sort of had this abiding interest in food, and it was a great thrill to me to discover that we had someone with this keen legal mind who also had this wonderful way of looking at the world. She's going to talk to us this morning about some regulatory issues and consumer issues and I'm sure you'll find her talk very worthwhile. Thank you.

Nuts to You

Nuts to You—International & National Regulation and Consumer Issues

Gae Pincus: A lawyer learning to be a scientist! When I worked at OTC the engineers called me an honorary engineer, so I guess I must like the little funny technical bits. It really did worry me, being a lawyer without any science background, setting up the National Food Authority, because within a month I was correcting the

spelling of scientific words, and after three months I was sending back toxic reports asking "what about the effects on rats' thymuses?" And then I got really scared—I thought, "This is terrifying".

I've got lots of things that I'd love to talk about, though I don't have a prepared paper—I actually had my arm twisted to speak in this session when I was hoping I was just going to have a warm camp-fire chat! However, I'm really pleased at the opportunity to talk to you about some aspects of globalisation because, and this is following on from what John Fitzpatrick said, it is really the new buzzword—everybody talks about globalisation. Of course some people talk about it with enthusiasm, but others talk about it with rising anxiety.

Just a couple of statistics really opened my eyes and made me think about it all in a different way. Globalisation is, of course, all about world trade, and that seems in concept a reasonable thing. Two- thirds of all world trade, however, is between interrelated entities; more than sixty percent of world trade is actually engaged in by multinational enterprises. I'm not opposed to multinationals, but if you realise their significance, their absolute dominance in terms of world trade, you realise how much they are involved in every area, every regulatory arena where world trade issues and rules are being developed.

Of the top one hundred economic entities in the world, fifty percent of them are companies, not countries. This certainly does raise the issue of the power of the multinational viz. the sovereignty of the nation-state. And it also raises questions—particularly looking at the new global trade order—about the fear that is rising as to what opportunity nation-states will have to continue to be able to regulate their food industry, or protect their consumers, or meet their consumers' demands vis-a-vis the rules that are developed in the international arena.

Between the 1940s and the 1980s, whilst there obviously was increasing emphasis on international trade, it did seem that governments still had an ability to control markets and, if they chose, to have strong public policy positions and be able to limit inequalities in their communities. Now we're seeing that financial markets are actually dominating the international arena, and we know that many countries seem unable to control their public policy in relation to financial markets, and international financial institutions are having more and more impact and control. We're seeing that of course very clearly at the moment in our neighbourhood.

In looking at how globalisation is redefining the role of the nation-state, some people are starting to ask, what is the strength of the international institutions that we have now, what is the role in the future of the sovereign state and do we need new international institutions or even some form of world government?

I am going to look quickly at an aspect of globalisation that's touching on, and being affected by, the food industry, and that's international regulation through the Codex Alimentarius Commission. The Codex is a joint FAO-WHO body, made up of member governments, which sets international standards, guidelines and recommendations for the use of governments in their domestic regulation of food. It was set up in 1962 and has the objectives of protecting the health of consumers and ensuring fair practices in the food trade.

This story is but a tiny glimpse of a few elements of a complex web of structures, interests, issues and influence. It is a story about power and meaning, and about policies, politics, action and inaction. Much of it of course is being engaged in by governments and government representatives, but one doesn't have to look very far to see the significant multinational industry influences, although most of it is happening almost invisibly to Australian consumers.

The issue that I want to touch on is the control of the use of added natural and synthetic hormones—steroids—for promoting growth and fattening cattle for meat production. This is a very big economic and trade issue with more twists and turns than a thriller.

It was a very big issue in Codex which, up until this issue, operated more like a friendly club—developed countries that were preparing standards, mostly for the use of developing countries which didn't have their own well established food regulatory mechanisms—meetings all around the world, very good people, mostly coming out of member governments' agriculture environments, who worked very hard, made a lot of good contributions. However, if they couldn't reach agreement about the standards nobody worried much—they did their best efforts, but there wasn't too much politics involved because at the end of the day it couldn't really hurt you as the standards couldn't have an impact in your domestic standard setting processes.

In the 1980s there was a push within Codex to set Maximum Residue Limits (MRLs) for the growth

promoting hormones that were used in beef production, as the mechanism to permit their use. Draft MRLs were coming through the Codex processes from the US based Codex Committee on Residues of Veterinary Drugs in Foods (CCRVDF). The use of such hormones was permitted in the US whereas the Europeans had banned them for about a decade, and this ban was an increasing area of trade conflict between the US and the EC.

Cut to the GATT Uruguay round and the developing new trade disciplines. In the late 80s and early 90s there was a new trade agreement being developed called the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement) which was about the recognition that health regulations—plant, animal and human—were often being used as disguised trade barriers.

The objectives of the new agreement included getting some scientific and procedural discipline into member countries' health based regulations by further harmonising members' SPS measures on the basis of international standards, and ensuring that such measures are based on scientific principles and sufficient scientific evidence, to break down their use as arbitrary and unjustifiable trade barriers.

The main people who were drafting the new agreement were developed country representatives—a more or less self-selected group, six to ten nations, key players were of course the U.S. and Europe.

To cut a long story short, the two things were happening in parallel. In the GATT negotiations on the SPS Agreement the push was to require members to base their health standards on science and risk assessment and, in relation to human health and food safety, to establish Codex food standards as the benchmarks in international trade disputes. Whilst in Codex the push was to establish a standard permitting the use of growth hormones in cattle.

The whole of the sub-text throughout the drafting of the SPS Agreement was about getting hormones into Europe. So much of the disputed drafting was the US and their supporters, including Australia, New Zealand, Canada, trying to draft an agreement which they could later use in the World Trade Organization to break down the European regulations. Europe was trying to protect itself by including a wider range of relevant factors than just safety risk, in particular, animal welfare and consumer acceptability.

The Europeans were in a bind because the whole thrust of the SPS Agreement was about basing standards on consistent risk assessment, and about scientific justification. In some of their moments the Europeans admitted that maintaining the hormone ban wasn't really about food safety, it was about animal welfare and about consumer acceptability, it being a really big political issue in Europe. But mostly they said it was about food safety. Sometimes different players in the different fora had a bob each way. So it came to a head in the Codex Alimentarius Commission Meeting in 1991. The CCRVDF recommendations on MRLs for a number of the natural and synthetic hormones were before the Commission for final approval.

The proposed way of regulating the hormones, setting Maximum Residue Limits, is really about end product testing. But of course if you're adding natural hormones like oestradiol, progesterone, testosterone, it's very hard to test at the end, because you're not necessarily going to know what has been added and what is naturally occurring.

The fights in Codex were pretty amazing and it was looking like it was going to destroy this sleepy, nice, friendly, reasonably effective international organisation. People had started to realise that, with the development of the SPS Agreement the Codex standards could have more potential impact domestically.

Under the SPS Agreement countries won't be obliged to apply the Codex Standards—I think that this is a misunderstanding that is occurring in some communities—but if you don't apply the relevant Codex standard you've really got to have reasons, you've got to be able to justify it. That actually seems to be not a bad discipline—first to start with the international standard and then be able to say, on the basis of your own public policy objectives and scientific justification, why you might want a higher or a more demanding standard.

So what happened was in 1991 when the first proposals for MRLs for one synthetic and three natural hormones in beef, came to the Codex Alimentarius Commission for final adoption, it lead to major debate, much drama and eventually, for the first time as I understand it, a roll-call vote. So this consensual kind of friendly club really then turned into your ordinary heavy duty international political environment.

At that stage most developing countries supported Europe or abstained and Europe won, with no decision

taken on the MRLs. The Commission referred the results of the discussions back to the next meeting of the CCRVDF. The US spat the dummy and for that Committee meeting prepared a paper on the role of science in Codex, suggesting that all Codex standards should be based on science and science alone, narrowly defined—a ludicrous position which is inconsistent with much of the FDA's own standards.

By 1993 the SPS Agreement was virtually finalised, but everybody was worried about the potential of the hormones issue to destroy Codex and you saw a sort of truce. Although the draft MRLs for the first four hormones were still waiting at Step 8, the final step of the Codex processes before adoption, and the Vet Drugs Committee had recommended a further MRL for another synthetic hormone, the debate was muted. The Commission decided that the draft MRLs should be held at Step 8 until such time as guidance was obtained from the General Principles Committee (the lawyers' committee) on the status of science in Codex policies and procedures. The key players were also working behind the scenes to try to solve the issue.

If you are beginning to think that the whole thing is verging on the surreal, you are not wrong!

By the next Codex Commission meeting in 1995 the Americans had done a lot more work. They'd whipped around the world and done a few trade–offs, so you saw them supporting a number of developing country issues to which they had previously been opposed. They supported an Asian candidate for Chairman of Codex when it wasn't Asia's turn. They'd just very quietly gone around the scene and one way or another got a lot more support.

The Europeans were in chaos. They behaved badly on the floor of the meeting; they didn't know the rules; they were fighting with each other and with the EC bureaucrats. They engaged in heavy lobbying of developing country representatives including, it was said, threatening to cut off their aid. So at that meeting the ground shifted, the US side won and the hormone MRLs were approved.

Meantime the draft SPS Agreement was causing other ructions in Codex because now some countries, particularly some Europeans, were trying to stop other less controversial standards from being finalised because they could see them coming back to bite them in the WTO, whereas before they could just ignore them.

Now I think that's wrong because countries should let the international processes proceed. The Codex process certainly should be opened up more—it should be much more transparent to the constituencies that it affects, and there should be much more involvement of consumer and independent professional organisations. But at the end of the day the organisation won't be any use at all if everybody fights just on the basis of their own domestic standards. It isn't a bad discipline to say governments, when standard setting, should look at any international standard first, because greater international harmonisation will facilitate trade. However, if they're going to implement a different more stringent standard they should be able to justify it.

The SPS Agreement was formally adopted in 1994 under the Marrakesh Declaration, along with the other new trade agreements which were the result of the GATT Uruguay round, including the establishment of the World Trade Organization (WTO). The first major case that went to the WTO under the SPS Agreement was the attack on the European hormone ban. The process was commenced by Canada in 1996 and the US, Australia and New Zealand joined in.

Last year the dispute progressed to a WTO Panel hearing with the US and Canada claiming that the European hormone ban breached the SPS Agreement on a number of counts. The Europeans justified the import ban on the basis that meat from animals treated with any of the hormones might pose a risk to human health and safety. They maintained that their position was based on sound science.

Basically the European case was that all hormones are carcinogenic and probably genotoxic. They claimed that it is not arbitrary and unjustifiable to regulate (by banning) the added hormones when they do not regulate those which are naturally occurring.

Now it's so obvious to ordinary folks, like me, that there is a difference between the ones that you can't avoid and the ones that people are adding for another purpose. But the panel accepted the claim that it is an arbitrary or unjustifiable distinction in the level of sanitary protection in different situations, resulting in discrimination inconsistent with the requirements in the SPS Agreement—the Europeans aren't regulating the natural hormones in broccoli, or in cabbage, or in meat, for example, so therefore it's an unfair discrimination

to regulate added natural or even synthetic hormones in cattle for meat production.

The Panel also found that the European measures were not based on a risk assessment, and that they were not based on existing international standards without justification. Further, the Panel made some odd decisions on the burden of proof in the proceedings, placing the burden on Europe on many issues rather than the parties making the claims.

The Europeans appealed on certain issues of law and legal interpretation and the case came before a WTO Appellate Body in 1997. The Appellate Body reversed or modified some of the Panel's interpretations of the SPS Agreement, and reversed some of the Panel's findings. Although both sides claimed victory, the Appellate Body did affirm the main conclusions of the Panel that the EC import ban was not based on a risk assessment within the terms of the Agreement.

Rosemary has been so patient, so the last thing I'll say is that I think that a whole lot of this is happening in Europe because there's a very strong consumer movement. I don't think that we have such a strong consumer movement here. One of the things I noticed in Europe is that there's a group called the European Community of Chefs, known as Eurotoques, and it's got something like three thousand of Europe's best chefs working inside, and some of them outside, Europe. Some of them are three star chefs.

They're working together as a lobbying body and they're lobbying the EU regulators. The last thing I saw of theirs was about raw milk based products and the issue in Europe and potentially—courtesy of US action in Codex—the world, of banning cheese products made from unpasteurised milk. They are also lobbying about genetically manipulated organisms (GMOs) in food.

I think that we must all encourage and contribute to informed communities of people who care about the issues, who understand about real food and nutrition and the pleasure of it, as well as the essential role the whole gamut of food production plays in our lives and environments. We must get out on the trail, making sure that we're contributing to the important food debates that are happening in this country and overseas. In Australia at the moment, for example, there is a Howard Government Food Regulation Review primarily directed at reducing the regulatory burden on the food industry whilst still protecting public health and safety—but no mention of any of the wider issues around food control like consumer information, informed choice, fair trade, etc.

And the last thing—because the industry push in food control is to take it all back to safety, and to take quality out of the standards—somebody told me recently that they're now saying that an issue like whether or not there's a cockroach in a meat pie is not a safety issue, because the cockroach is sterilised in the cooking—so it's only a quality issue, therefore it shouldn't be regulated by the food regulators under the Food Standards Code. If anyone regulates it at all, it should the ACCC under the Trade Practices Act, presumably as misleading labeling!

They seem to have no understanding of the fact that the consumer doesn't know that getting the crunchy, but well cooked, cockroach in the pie is not bad for them, and is therefore not an issue for the Health Inspectors. For me certainly, the psychological response would be to put me off pies forever, not just the brand I was eating—you know, the market mechanism—but every pie!

So I fear that a whole lot of the stuff that's happening to undermine the policies behind existing standards, by limiting their scope, excluding relevant quality issues, reducing resources devoted to enforcement, without better labeling and consumer education, will tend to undermine consumer confidence in the food supply. Also adding to this is the increasing perception that countries are losing control of their own standards and appropriate levels of protection through the international trade environment.

At the end of the day, lack of consumer confidence in the food supply is going to be more damaging for industry than having an appropriate, strong, integrated, open and transparent, food regulatory system.

Rosemary Stanton: Thank you, Gae. I did say you can't keep a good woman down, but I do think that the one thing that's important is, the days of us sitting around here and discussing these things, and feeling quite strongly within ourselves, may well be ending. It may well be coming to a time when each of us has a duty to

actually speak out and to say things, and as well as the chefs in Europe there's the chef's collaborative in the United States that's looking at similar sorts of issues. It may well be that it's from people such as the people here today that some of the talk has to come. You certainly don't get it from within my scientific group; most of whom are in the pay of the processed food industry and won't say boo, so that becomes a problem.

Our next speaker is Barbara Santich, who I think probably, almost everybody here would know. Certainly you'd know if you've been to any of these Symposia before, because she has been to all of them, and Barbara is someone who, I think, speaks plainly, so that you really can always have something that inspires you to actually get up to some action, and today she's going to be talking to you about some of the important issues that a modern food policy should address, and perhaps one of the things that Barbara does is sometimes not give only her own opinion, but also look to the opinion of other people and she's very good at summarizing that too, so thank you Barbara.

Food Policy

Food Policy for the Twenty First Century

Barbara Santich: Australia has had a Food and Nutrition Policy since 1992. Its goal is simple and straightforward: 'to improve health and reduce the preventable burden of diet–related early death, illness and disability among Australians'. Underlying this single goal were five 'key considerations': social justice, food quality (interpreted in terms of freedom from pesticide residues and chemical contaminants), community participation and accountability, the food and nutrition system, and ecologically sustainable development (maintaining the quality and integrity of the environment).

This paper is concerned with food policy, which is not necessarily the same as a food and nutrition policy. Food and nutrition policy takes into account the relationship between diet and health; in my opinion, it would be more correct to name it food and health policy, health being the goal and nutrition the intended means. A food policy, as I envisage it, should take into account the interests of producers as much as consumers, the health of the environment and the economy as much as the health of the population. The aims and objectives of food policy should not, strictly speaking, be compared with the aims and objectives of food and nutrition policy. Nevertheless, the relatively large area of overlap provides justification for such a comparison.

In *What the Doctors Ordered: 150 years of dietary advice in Australia*, I have summarised the development of food policy in overseas countries and in Australia and commented on these processes as well as on the concept of food and nutrition policy generally. In this paper, however, I thought it more useful and informative to find out what other people thought were priorities for food policy for Australia. The paper presents a general overview of food policy without delving into specifics nor necessarily delivering answers; it serves as an introduction to food policy and reflects on various issues to be taken into account.

In its weakest interpretation, 'policy' is considered a decision–making guide ('What's our policy on...?'). In a more positive sense, policy is a plan for a course of action—the objectives and goals to be achieved, the methods for achieving them and their rationale. This general concept has been refined in specific terms in one definition of food policy: 'the aims and decisions which affect who eats what, when, where, how, on what terms and with what effect on health, the environment and consumer choice'.

Accepting the general definition, the first logical step is to identify the aims and objectives—which at first sight would seem to be the least complicated of all the processes involved in policy development. Deciding on particular objectives, however, has to be accompanied by a rationale, the reasons for choosing these and not others. The list of possible objectives may be based on 'indisputable' scientific evidence (a high rate of mortality from diet–related disease, for example) but it must be remembered that this is not exactly value–free; research results come from research funded, and funding itself can reflect other priorities and values. More

importantly, value judgments influence which objectives are finally identified as the basis of policy and the measures selected as the means of achieving them. Value judgments have been present in past decisions, and still are; it is important to recognise them as such. Examples include deciding that health benefits are worth the hedonic cost; that future benefit compensates for present restraints; or that targeting the whole population, despite possible dangers to a few, is more effective than focusing on specific at–risk populations.

The subject of this paper is aims and priorities rather than implementation measures. In order to find out which were the most important issues an Australian food policy for the twenty–first century should address, I conducted a survey of key informants (informally known as a 'straw poll'). Although comparisons with the aims and priorities of the present food and nutrition policy are, strictly speaking, not valid, the results of the survey might also indicate whether any changes have occurred (reflecting either a change in the balance of evidence or in values and beliefs) since the time of framing the current policy, introduced in September 1992.

The 48 individuals whose opinions were sought represented a very broad field of interest. Some had a particular interest in food policy or had previously advised or written on aspects of food policy; others represented particular interest groups (primary producers, consumers, food processors and manufacturers); some had expertise in agriculture and agricultural issues while a few might be assumed to reflect current government opinion. All the first–mentioned group were classified as representing a public health and nutrition viewpoint, and most were academics; not all, however, were medicine—or nutrition—oriented. More of this group than any other returned survey forms, which could lend a certain bias to the results. An analysis of the survey group and of replies received is shown in Table 1.

Table 1

	Informants	Surveys Returned
Public Health/Nutrition	19	11
Agriculture/Food Production	22	7
Food Industry	6	1
Consumer interests	1	
Social Policy interests	1	
Total	49	19

The questionnaire proposed ten relevant topics and asked individuals 'to consider some of the issues such a policy should address and rank them in order of priority'. Informants were also asked to suggest other concerns which a food policy might or should take into account. The ten points for consideration were:

- food safety (from potentially toxic residues to food–borne pathogens)
- rural economy
- food processing and manufacturing (as industries employing significant numbers of Australians, and increasingly producing 'value–added' foodstuffs for export)
- priorities of agriculture—to produce food for Australians or export dollars
- sustainability of agricultural (and marine) production and long–term environmental implications
- the possible deterioration of food traditions in Asian countries consequent on exports of Australian manufactured foods
- social justice—ensuring adequate supplies of nutritious, culturally appropriate foods are accessible, available and affordable to the whole population
- the cost of diet–related illness and mortality
- the implications of trade deregulation (such as allowing imports of foodstuffs so long as these do not pose any health threat to the Australian industry)
- the encouragement of diversity (bio–diversity, avoidance of mono–cultures)

Results

The survey emphasised that the ten–point plan related to a food policy rather than a food and nutrition policy. The methodology can be criticised on many grounds: the selection of informants, the subjectivity of the 'ten point plan'; the arbitrariness of ranking method; the lack of an appropriate method of analysis. Despite these shortcomings, the survey was still a valuable exercise.

Given the ad hoc nature of the survey, the lack of clear directives on ranking and a small proportion of incomplete returns, results have to be interpreted with a certain degree of flexibility. As the most appropriate way of making some sense of the surveys returned I decided to focus on those issues rated as first, second and third priority by those who ranked the ten topics 1–10, from highest to lowest priority, or who ranked at least the first three priorities. I also included a few replies where some issues were rated as of equal importance. In total, sixteen completed surveys were analysed, and the results shown in Table 2.

Table 2

Concern	No. Times Ranked in Top Three Priorities
Sustainability	14
Social Justice	9
Cost of Diet–related Illness and Mortality	8
Food Safety	7
Encouragement of Diversity	7
Food Processing & Manufacturing	6
Priorities of Agriculture	4
Implications of Trade Deregulation	4
Rural Economy	3
Impact on Other Countries' Traditions	2
Total (15 respondents)	64

It is important to repeat that this survey related to a food policy, not a food and nutrition policy, yet the cost of (and prevention of) diet–related illness was still considered a very high priority. However, only one respondent rated it top priority, one other ranking it equal with food safety, sustainability and social justice. Perhaps predictably, it was more often ranked in the top three by those representing 'public health and nutrition' interests than those representing food producers (though four of the former group ranked it lower than third).

The most significant result, however, is the general recognition of the importance of sustainability, even more crucial since the recent Kyoto conference on global warming emphasised the need for Australians to husband their resources and reduce exploitation of the environment.

Nevertheless, it is somewhat disturbing that among the first six top–ranked concerns, the interests of the food producer (as represented by the importance of the rural economy) are given virtually no consideration. Not surprisingly, the rural economy and agricultural priorities featured rather higher in the rankings of those respondents representing primary industries. The nexus between agriculture and rural economy was underlined by a spokesman for a farmers' association who stressed the need for government to encourage value–adding 'in order to create 'product' from commodities', which would in turn encourage growth in regional employment.

Many additional topics for consideration were suggested, including:

- food skills (of individuals);
- food research ('How can we set policy in an information vacuum?');
- ownership of the food industry ('at least 51% Australian ownership in all companies');

- recognition of sensory aspects of food ('food should be as delicious as possible', 'choosing quality food, celebrating its flavour');
- the threat to diversity of big brand names with their market power;
- the impact of Australian exports on the food habits of Pacific Island communities;
- maintenance of supplies of traditional Aboriginal bush foods, especially for Aboriginal communities, but also for other Australians;
- facilitating the maintenance of migrant food cultures in Australia, so long as these do not conflict with health objectives;
- research and development of new products;
- emphasis on quality and consistency of product;
- training at all levels, including management;
- animal rights, and humane methods of production, transport and slaughter.

In addition, there were numerous comments on the 'ten–point plan', including references to the potential for conflict—for example, promoting the consumption of fish could conflict with maintaining sustainability of marine resources; the encouragement of 'efficient' agriculture (especially for export markets) could conflict with the desirability of encouraging bio–diversity and avoiding mono–cultures; concentration on producing foods for export could conflict with promoting the health and well–being of Australians; the interests of food processors and manufacturers could conflict with health and social justice.

Several respondents pointed out that the 'cost of diet–related illness' should not be seen in simple economic terms but also in social terms, taking into account 'quality of life'. It was also noted that food safety is not only important for the health of Australians but is vital for the continuance of food exports; in the interests of consumers, new food technologies should only allowed with maximum precaution and full disclosure.

Discussion

Can any meaningful conclusions be drawn from these imperfect results? It seems possible that today there is greater acknowledgment that factors other than diet are important for health, and that diet—while not denying its influence—might be relatively unimportant, since the best estimates of the contribution of diet to the predisposition to various cancers, for example, are around 35%, or within a range of 15–50%. Even so, a degree of error surrounds these 'best estimates', resulting from the difficulty of assessing the contribution of any one factor to multifactorial diseases or conditions, and the very real problems of accurately measuring, in nutritional terms, the diets of any population.

There also seems to be a greater realisation that health and illness cannot be considered in isolation, and that social and environmental issues are vitally relevant; the health of the individual is also related to the health of the society and the environment. But the health of the economy also has a part in the whole, and this in turn means that the rural economy and the priorities for agriculture are deserving of attention.

Reaching agreeing on a policy which satisfies all interests would appear to be frustratingly difficult. The health and well–being of society implies an obligation to ensure a reasonable and adequate return for food producers, whether wheatgrowers or orchardists or tuna fishermen in Port Lincoln, while the health of the population means ensuring a safe, adequate, nutritious, affordable, accessible and culturally appropriate food supply for the people of Australia. An adequate return to food producers can sometimes mean pursuing and giving priority to export markets, which implies government approval of free market access, and deregulation of trade in turn means Australian acceptance of food imports from other countries. The logical end to this sequence is quite absurd; there is no justification whatsoever for allowing imports of canned pork and chicken when Australia already produces more than enough pork and chicken to satisfy domestic demand, and especially when the only merit of these imported products is their cheapness. Clearly, the balance of priorities is delicate.

If food policy priorities today are somewhat at variance with the goal and key considerations of the 1992 Food

and Nutrition policy, this has implications for the implementation measures adopted. The implementation objectives of the 1992 policy were:

- to improve the knowledge and skills necessary for Australians to choose a healthy diet;
- to incorporate food and nutrition objectives into a broad range of policy areas and sectors;
- to support community–based initiatives to improve the diet of people with special needs;
- to regularly monitor the food and nutrition system.

Assuming sustainability (of production, of resources) to be the first goal of a food policy for the twenty–first century, the measures to achieve this would be very different to those listed above. And in the light of a broader interpretation of health and recognition of a less direct diet–disease link, there might be some difficulty in deciding what constitutes a 'healthy' diet if the first of the above objectives were to be included. While there might be general and near–universal agreement on principles—less fat, less alcohol, less salt and sugar, more complex carbohydrate, more fibre—there are differences from country to country in quantifying recommended allowances, as the ARISE (Associates for Research Into the Science of Enjoyment) survey of recommendations demonstrated (for example, eggs: recommendations range from one to ten per week; alcohol: recommended safe maximum intakes for men, from 5 to 42 standard drinks per week). Often, too, advice and recommendations based on analytical data are also influenced by subjective value judgments; while promoting the message 'Eat Less Fat' most people would condemn a McDonald's hamburger while favouring the healthier alternative of a cheese salad sandwich on wholemeal bread. There may well be health advantages in the latter, but it is interesting to note that a hamburger and a cheese salad sandwich of approximately equal weight have virtually identical fat contents.

As I indicated at the start, this paper is merely an introduction to some of the many and varied issues surrounding the development of food policy, but it is probably only fair to conclude by stating my own opinion as to food policy priorities. I believe the prime objective of food policy should be to ensure adequate supplies of flavourful, safe, nutritious, culturally appropriate foods are available, accessible and affordable to the whole population, both present and future generations. All other issues are secondary and devolve from this (thus the question of agricultural priorities is settled), or fall within the scope of measures for achieving the objective—for example, education about food (food choice, cooking skills, taste, etc), sustainability of food production, adequate returns to food producers, the health of the economy. Setting this as the primary goal sets the framework for all other decisions.

Rosemary Stanton: Thank you Barbara. I like the way you were able to put your final view in one sentence and all those of us who filled out your questionnaire were forced to give them a rating, even if we didn't want to. Look, we started very late and I'm conscious of the time, but if we could have just a very brief discussion. If the speakers could come out, joined by Jennifer Hillier and Sylvia Roughan. Sylvia, did you want to actually say something for a couple of minutes.

Panel Discussion

Sylvia Roughan: I've got so much so say, mine won't actually fit into a couple of minutes.

Rosemary Stanton: Yours won't fit into a couple of minutes?. Well Sylvia did have a paper within the material we had in our little bags. So, if we could have all the speakers just come out and perhaps if we make them all stand up, it means they won't talk for too long in the answers—only because I'm very conscious of the fact that we have to go and do a bit of walking so we can fit in some lunch, which is really quite important. So if anyone

has questions, if you'd like to direct your questions to a particular speaker that's fine, otherwise we'll ask either of the speakers to answer. There's been so many issues raised this morning on a great range of topics

Pam Gillespie: I'd just like to thank Eric particularly for an excellent paper, because in just the short period of time that I've been in the country, those issues have become just so passionate to me, because I just can't see how we can not be realising what's been happening.

What I wanted to ask is really a question between Gae and yourself. There's huge money being spent by the beef industry at the moment to fulfill standards of quality of beef going into the U.S. markets, because they recognise that unless they address this quality issue, they're not going to get any competitive markets over in the U.S.A. Yet quality doesn't come up in these international standards. And the other issue, which comes back with Eric, is that most of the abattoirs in our region have closed down because they can't export meat to America because of quality and E.E.C. quality standards—you know hygiene and everything—and they're actually still using that as trade barrier blocks, particularly in deer slaughtering and things like that, so there just seems to be these enormous anomalies between what's happening there and what's happening at the grassroots. Would you like to comment?

Gae Pincus: The real issue about trade is that your exports have to meet the demands of the importing country and I guess in Australia we've had two levels of that. You've got the standards generally that you might have to meet say in the US, but you've also got AQIS (Australian Quarantine & Inspection Service), which has a general interest in the quality of the Australian product that goes anywhere, because if one is bad then it reflects on the whole country. So AQIS has had separate export standards which can be different, and higher than domestic standards. So we often hear that a product might fail the export inspection but then it's sold back into the domestic market, and I think that's an issue for people.

In relation to the U.S. there's a really significant issue going on at the moment because AQIS is changing the way that it does it's standards enforcement export inspection, and that's by moving away from Government paid inspectors toward internal quality control and inspectors who may be paid by the company that's producing the meat. That's causing a big stir internationally and it's being argued out too in Codex—whether the new draft standards on import/export inspection and certification should include only government inspectors, or an audited mechanism of private inspectors. Certainly there are some people who don't have faith in companies inspecting themselves.

But one issue that I'd just like to add, is that we do export beef to Europe and it has to be hormone free. By and large farmers have to choose—it's hard to run the two, so they're either hormone free or they're not. The Europeans have inspected and approved the system established by AQIS. There is a very heavy certification, ear–tagging, audit control, paperwork at every step along the process, and that's hormone free beef going to Europe. Where in Australia do we know about that? What if we wanted to buy it? I mean maybe we could buy organic beef, but it seems to me that if there is something we are producing here for another market, it would be nice to know about it so that if we were rightly concerned about what we ate, or even neurotic, we could purchase it and I don't think that we easily can. It's a production that's specifically for export to Europe.

Eric Rolls: Yes, there's no provision for selling meat like that in Australia. I've exported old sheep to Italy when I was farming. You had to sign a declaration that you had not drenched them, had not dipped them. I think you had to also say where they were bought and check with the farmer who'd previously owned them, but there's no provision for selling like that in Australia. The general standard of the big abattoirs is fairly atrocious. You find that the manager of the abattoir knows nothing whatever about hygiene, but also a lot of the American concerns are concerns about meat going there, not about the health of the meat; so apart from the fact that sometimes our standards are atrocious, what the Americans are saying is not honest at all—they're using it as an excuse to refuse meat.

Barbara Santich: I was just going to say, picking up from what Gae said, was that that's an example of

production that's entirely for export and, as you said, we're not aware of it being produced even, which is not what I don't think should happen. That's why when I said, the goal of the food policy—the big framework—should be to produce food etc., for Australians first of all; and exports might be a secondary consideration.

Di Holuigue: Unfortunately even if they tipped it over into domestic sales, because let's say they didn't sell it all, or any producer had specific things to offer, it isn't Coles and the Safeway/Woolworth chains and the people who actually get it to us, who are ever going to write on it exactly what it is anyway, let alone it's provenance. But certainly nobody even knows if they're eating Angus versus Murray–Greys—there's so little information given out to us anyway.

Sylvia Roughan: Amongst the many other roles I've had over the past few years working for agriculture, I spent six memorable months working on the hormonal growth promotant control system in South Australia, and I can say that largely if you eat grass–fed beef, you'll be safe because very few hormonal growth promotants are used on those cattle because it's not economically viable. They tend to be used only on feedlot cattle, so in South Australia and Victoria basically the grass–fed beef is fine, the further north you go, the more feedlots there are and the more likely it is that your beef will be HGP treated.

Di Holuigue: They don't put things like that on the label though.

Pam Gillespie: They'll only start writing these things if we start demanding it.

Sylvia Roughan: Also a great deal of domestic beef is grass–fed

Rosemary Stanton: It's absolutely amazing how much you can achieve if you write letters to people. Three letters equals public opinion in most food companies' terms, so don't give up on writing.

Barbara Santich: I've been trying since, well I started in 1980, to get the Meat Board, as it was then, to have area of origin, or some sort of labeling, on meat. I'd just come back from living in America and Europe and that sort of thing happens there. They just thought I was a stupid little girl, didn't answer.

Cath Kerry: What the four of you have said, I found so distressing, that I'm close to tears. I mean, seriously. Don't laugh, Gae. I suppose I'm asking can we really do anything? Because I think that the rights of the individual versus the rights of the big multinational company stand for nothing, so, for example—I mean lots of these things I'll talk to you about individually—but say nothing goes by rail anymore, so we've got trucks on our roads that we don't need; that wreck our roads, because some big transport company is more powerful and can push transport that way.

Gae, I wonder why we need all these standards internationally? Why do we have to have a universal name so we all know what a certain banana is? Why can't we say it's an Indian banana as opposed to an Australian banana and we'll gradually learn to know what that is? I think it's frightening that people are bothering to waste time to discuss all these things that are controlling our lives. And Eric, I was just delighted—well not delighted, depressed really—when you spoke about this absurd cleanliness. I can assure you that things like this Symposium will soon not be allowed to happen, because I know that I do events where I think I'm providing healthy food because it's cooked fresh, or chopped fresh, there and then on the spot, and now more and more, we have people coming through with little laser thermometers shoving it into the food, and they're not interested that we have chosen a certain sort of oil, they're more interested in all these absurd health things. But as an individual; O.K. I can write letters, but really I have absolutely no power against all these other people.

I wish I could, a group of us, could wear signs that say "We will take responsibility for our own lives, and if we choose to have our food handed to us by someone's hand, not one of those gloved condoms, that you know

that should be my choice", but I'm soon not—or the rest of us aren't—going to have a choice about what we eat and I find these health things in particular horrendous, because there's social implications and it's cutting out human interaction in the producing of our food. I mean do you honestly think there's any hope?

Rosemary Stanton: We might have to be brief on the answers to this. Who wants to go first?

Eric Rolls: I'll go first. Yes, there is great hope. Go among all the schools in the Murray–Darling Basin area and talk to the children and you'll find that they're so much aware of the sort of life they want to lead. Yes, those coming on are really going to do something; it's a joyful experience to go around those schools. But with labeling and things like that, we have to take action very quickly. In Texas, it's now both a social and criminal action to state that a vegetable, or meat, might be unhealthy to eat because it's been treated with hormones.

John Fitzpatrick: On a different level—I suppose I'm pessimistic because of the focussing on the international level—but in regard to the kinds of things I was saying, a lot of people have said, now with the collapse of Communism and all this rot, that in fact the real divisions in the world are between different types of capitalism and Michel Albere, the French person who talked about this, talked about the Rhine model of capitalism; and some people would say the same sort of thing about Japan, I suppose, and then there's the Anglo–American model of capitalism.

For instance, the Anglo–American model is dominated by lawyers. The Rhine model is dominated more by bureaucrats; but more protectionist, more social market—this is the sort of Rhine model protection of industry to some degree, certainly protection of agriculture, or it was. Relatively close relationships, and this is very characteristic of West Germany; lots of towns; lots of cities but no huge metropolises, and the kinds of close rural–urban connections that I was suggesting were maybe there at the turn of the century in Australia, as well.

What's seems to me to be striking about Australia's trajectory in the 20th Century is, first of all we've been associated with two declining, well one declining economic hegemony in Britain, and then with the United States, which was in fact a replica of Australia in many respects in that it was this incredible agricultural pastoral producer and so on.

What I find enormously distressing at the moment, is that Australia's international politics, say the Cairns Group and the Uruguay round and so on, is precisely connected with forcing open these markets of Europe and Japan and so on, where in fact some kind of integral connection between urban and rural development and so on, still exists, and forcing them open in the interests of this kind of globalised food production. The United States has destroyed its industry; a lot of its basic industrial base. Its strengths are food of a certain sort; biotech; arms, and software. These sorts of issues of intellectual property rights and sort of food assaults and so on, they are quite central in a real struggle that's going on in the world today, and it seems to me that Australia is, unfortunately, lining up on the wrong side.

Barbara Santich: You're asking a final question of what hope is there in a way—sometimes you don't even know what's happening and you probably don't know this little document called *Food for the Future,* which comes out of South Australia—other states have done something similar—but I don't think that anything like this has been widely disseminated, and I don't think people who are concerned about food like you.

Cath Kerry: What I do know about *Food for the Future* is, they're having a launch—there's a piece of paper there—but they're having a launch, but they don't want to spend any money on launching it.

Barbara Santich: No, well they've spent all the money on the publication.

Cath Kerry: So they're not putting their mouths where their pennies are.

Barbara Santich: Mmm. But this little thing which is *Towards 2010—South Australia's Food Plan*, as I said there are similar ones for other States, is mostly concerned with exporting, with lengthening the runway so we can get planes off to Asia, and the word sustainability is mentioned in the Ten Point Plan or whatever it is—Eight Point Strategy.

Gae Pincus: Just in response to Cath and whether we do need the names. I think it is about trying to get an agreed lexicon so that it's not just *caveat emptor* every time. It would facilitate trade if buyers and sellers on either side of the world were using common terminology. Certainly in the past the naming and the trade standard setting has been used as well as a trade barrier. The Europeans have a mechanism that's UN sponsored that sets quality standards for fruits and vegetables and they've actually been using those to stop tropical products coming in because, for example, asparagus had to be a certain size, so the little skinny tropical asparagus couldn't get in. It wasn't that it was not a good product, but if you have a name for everything and you know that it is not an immature product, but rather a different product, then it should be able to be traded.

Similarly they banned oranges that are green when they're ripe. They also ban the baby bananas because they're not big enough. So yes, some of that trade quality standard setting, can be a trade barrier; but on the other hand, if you've got over a threshold of something being a safe product, then it seems to me that there is utility in having agreed names for everything, so that you can make your own choice and you can buy skinny asparagus or the tiny bananas, or whatever, if you choose.

On the food safety issue, I understand what you're saying that some of it seems to be very intrusive, but I think that we've got to a point where a lot of people have lost a basic understanding about food hygiene and food. I think some of the biggest issues that are happening, like Mad Cow, are related to agricultural practices, veterinary practices, and food safety, and I personally do want someone to worry about that.

If you look now at the whole issue of vancomycin resistant entereococci (VRE)—the strongest antibiotic we've got now, our last defence, is vancomycin—all of a sudden people are turning up in hospitals with vancomycin resistant bugs. They're getting fed antibiotics prophylacticly in hospital, which kill everything except the VREs which then colonise without competition, and now the unfortunate host has got no defence. They're having to shut these people away in isolation, like in pre–penicillin days and their bodies might or might not survive. Now what seems to be happening is that one of the antibiotics that's being fed to pigs in Australia for growth promotion is avoparcin which is vancomycin. So the very strongest human antibiotic we've got, the last level antibiotic we've got, is being fed to pigs—not sick pigs, but healthy pigs—as a growth promotant. It knocks off all the other bacteria so therefore they grow faster, and now the resistance to vancomycin which is developing in the pigs is jumping from animals to humans.

In Scandinavia, they think this is true, they're now starting to look at banning vancomycin for use in animals. In Australia, I checked, and nobody has asked AQIS or the Agriculture Department to start looking at this. That I'm aware no Health Department in Australia has asked for it to be looked at.

Rosemary Stanton: And the sad thing is that all they've been doing is producing tasteless pork, which is the ultimate irony.

This conversation I hope, will keep going throughout the day informally, because we have to unfortunately draw it to a close, but it's not a topic that we can end. It's a topic that I think we have simply opened, and hopefully the people here will continue to interact with each other—not only here, but after we go home as well because these are important topics and I think that many of us feel exactly the same way as you do, Cath.

I was heartened by what Terry White said yesterday—I'm always heartened by this, I always have the feeling that pendulums have the habit of swinging and when the pendulum goes too far in one direction people become so irate that they actually get off their bottoms and do something. Perhaps we all have to do that, rather than thinking all the time that isn't it terrible that they are doing this. If we all start making some sort of action, even a small action individually, we may just be able to effect some change. So I think that this has been

a very interesting opening discussion, which I hope we'll keep going throughout this conference and well beyond, when this Symposium ends.

Cath Kerry: People might like to speak to Michelle Garnaut who has a very interesting article on organic food and how Americans and others are going to try and change the definition of organic. It's a very interesting piece from *The Guardian* newspaper.

Marieke Brugman: Thanks very much to our speakers. That was a terrific session. The Committee, on your behalf, has slightly rearranged today. We're going to hold back on judgment in terms of the weather and our bushwalking until later on. I'm proposing that the four Moderators who were meant to have their campfire conversations last night, in fact have their conversations now, and we're going to bring lunch forward to about 12.30p.m. so that we've got some provision later on in the afternoon to still do the bushwalks if the weather holds off.

I guess the purpose, the reason we originally designed the campfire conversations—I think this morning's section of papers really pointed to the underlying question, so what? Will it actually have made a difference that this Tenth Symposium gathered? And, is something able to be done for the future by us and not by them? It's 'not in my backyard' syndrome—we don't want any of that here, and I think that each of the moderators has been asked to think of a guiding subject area to focus the conversation. Each group will have a scribe. These conversations both from today and from this evening will be reported tomorrow and it will be very interesting to see what emerges.

A Yabby Boil

A Yabby Boil

Yabbies with Saffron Aioli or Asian Dressing,
Green Salad, Mt Emu Fetta, Timboon Washed Rind
1995 St Huberts Roussanne, 1996 Mitchelton Goulburn Valley Marsanne
1996 Dalwhinnie Chardonnay, 1995 Brown Brothers Family Reserve Chardonnay

Dessert
Melon, Plums, Strawberries

Reviewed by Jean Duruz: I remember as a kid, during the spring holidays, heading west by train to Young, NSW. After another ten miles—this time down the road by ute—and we'd arrive at my uncle's farm, a sheep property of about 400 acres. In imagination, we seemed thousands of miles from our suburban Sydney backyard with its Hill's Hoist, lemon tree, choko vine and chooks. Instead, the farm and all its mundane tasks were to become intense adventures in meaning.

I remember the pattern of the day... feeding orphan lambs, riding on the tractor, doggedly following my uncle and the dogs on their rounds, fishing for yabbies in the dam. Here, after setting the lines (strings with pieces of meat attached), we'd crouch in the freezing water at the edge waiting for signs of movement. As the light faded, we'd arrive, cold, muddy and virtuous, at the kitchen door with our catch. I could never bear to watch the live boiling that followed, but I feasted on yabby meat with an appetite sharpened by the ritual pleasures of childhood and of country afternoons.

I had completely forgotten about yabbies—other than their occasional mention, along with oysters, bugs and

other shellfish, on smart restaurant menus. Tuesday lunch at the Symposium, however, acted as a powerful reminder of those stored-away childhood moments and of iconic meanings of rural life. To set the scene: imagine trestle tables, heaped with salad greens and tomatoes still in their tangle of vines, positioned in the pale autumn sunlight at the Plantation Camp; beyond the camp site is a ring of tall trees, and beyond again, craggy mountain peaks. A fire has been lit at the base of a large boiler, ingeniously constructed from a 44 gallon drum by Dick Umbers, Principal of Croxton Special School. Inside the drum a copper boiler holds the yabbies, while on the outside a small chimney has been attached to divert the smoke. The overall effect is quaint and homely - echoes of bush life and making do.

Soon the yabbies inside the drum are a delicate pink. We line up with tin pans (a whimsical touch that extends the camping motif), and greedily fill these. Now the serious business of cracking shells and chewing the sweet flesh takes place. A gorgeous thick, yellow Saffron Aioli, together with a Chilli Sambal prepared by Noel Quinn, provides piquancy—sophisticated touches to a meal otherwise notable in its simplicity. In addition to the green salad, for accompaniments Jeanette has chosen two white cheeses (Mt Emu Fetta and Timboon Washed Rind—delicious but fortunately not overwhelming) and for dessert, fresh fruit—melon, strawberries and plums. The wines complement the lunch well. They are: 1995 St Huberts Roussanne, 1996 Mitchelton Goulburn Valley Marsanne, 1996 Dalwhinnie Chardonnay and 1995 Brown Brothers Reserve Chardonnay.

Fishing for yabbies... camping... bush picnics—Jeanette's lunch referenced all of these familiar images in our cultural imaginary. Taking the Symposium's theme seriously and the evocative potential of its site, Jeanette offered us a meal that I consider was one of its highlights—certainly, a lunch to remember. So, when I think of yabbies now, I'll not only be reminded of wading in the dam, but equally of the nostalgic pleasures of the Plantation Camp—the smell of the bush... the pinkish colour of a cooked yabby shell... and the unforgettable taste of Saffron Aioli.

Securing the Future

Securing the Future: Values + Philosophical Issues

Moderator – Barbara Santich: Well I think we've got a quorum here—ninety per cent of the people—so I think we'll start, particularly because Marieke would like to finish around four o'clock, so that if the weather's nice there's time for people to do a little bit of bushwalking before the afternoon tea at five o'clock. So we'll try to finish by four o'clock with discussion as well.

I think this afternoon's session is going to continue on what we were talking about this morning, and especially starting with Michael Symons' paper, which I think is going to start to suggest alternative ways of looking at things. I think everyone knows Michael—he's the one with the baby—and Michael has a new book coming out in the middle of the year—*The Pudding That Took a Thousand Cooks*—which I have been privileged to see in draft form, and I'm looking forward to seeing in it's final form. Michael is going to deliver a critique of something that needs a very strong critique—economic rationalism.

The Money or the Tuckerbox?

The Money or the Tuckerbox? Securing an Economic Future

Michael Symons: First things first—so Happy Birthday, Gae! I don't know whether we still are running on time,

or if it's a bit early. But if it's a bit early, it's about the first time I've been a bit early in my whole life, so you should think that this is wonderful. Now what I wanted to do—the last time I spoke at the Symposium I performed the world's simplest magic trick and I thought I should try to do the world's second—you know moving ahead I'm going to try to do the world's next simplest one. Now would you all be kind and just believe what you don't see, or whatever you have to do. O.K. so I get from the audience a genuine twenty cent piece—(Michael demonstrated with the twenty cent piece)—just to illustrate the theme of my talk which is, "You can't eat money".

I have titled my paper "The Money or the Tuckerbox? Securing an Economic Future" because it plays on the title of the Symposium, or the subtitle of the Symposium, and it also refers to this issue which is brought out brilliantly by quiz shows, which are very gladiatorial and very money oriented, you know—here's this great commercial product. Do you really want this thing or do you want a lot of money? In the old *Pick A Box*, Bob Dyer used to say "The money or the box?", and fortunately the crowds always, with any amount of money, would always prefer the box. So I thought that to show that people didn't really believe in money, that was perhaps a good example—an exception—in a genre which is all about money.

Money has become life's primary consideration. The point is to maximise income and profit. And so the Treasurer boasts a 'good set of numbers'. The big news is interest rates. Ozzie Dollar rises against The Greenback. Dinner-table gossip is property prices.

The great god money drags us into a maelstrom of competition. Wages are trimmed to foreign levels. Workers market not just their labour but their image. The push to commercialise strips us of other cultural values, decorating the world with the dread glitter of a casino. Instead of playing sport, people watch it among the logos. The 'religion' of money disciplines us through public relations, science and the courts. The seemingly inexorable penetration of commercial firms into our lives shows up in increasingly frantic work and spending (at least for those in jobs). The idea of economic 'rationalism' might sound attractive, but it actually spells superstition. Social repercussions are treated as incidental to profits. The natural environment comes a poor second to the 'bottom line'.

US futurist, Thom Blischock, also known as 'Dr Tomorrow', advises marketers that their 'greatest challenge is the impending battleground for the home. I believe it is going to be one of the greatest fights we're going to see in the next 10 years. Who owns the home? The telephone company? The satellite? The retailer?' His answer suggests that the home has become a distraction machine. He believes that the 'battleground for the home is going to be fought by giants like Disney, MCI, Bell Atlantic—the entertainment companies'.

When the interactive Generation T (children brought up on computers) plug into the Twisties web site, they submit themselves to a 'tongue-in-cheek psychiatric evaluation', giving the company an 'inexpensive, on-line research mechanism into its target audience'. (Burbury, 1997)

The money whirl reaches a gladiatorial peak in the quiz show. Contenders grasp for commercial products, to the howls of the studio audience. This is Juvenal's *panem et circenses* (Satire X: 80). In Bob and Dolly Dyer's *BP Pick a Box*, a petrol company turned the *Encyclopedia Britannica* into entertainment. The brainiest person had to choose between increasingly tempting amounts of money and a numbered box, representing one of the sponsors' prizes.

'What do you say, customers: The money or the box?' The audience cried for the box over any amount of money. At least the 'customers' preferred solidity and surprise. The money or the box? The money-box or the tucker-box?

Criticisms

The primary intellectual justification for according priority to profit is 'neo-classical economics'. Known elsewhere as 'Reagonomics' and 'Thatcherism', in Australia, it came to be called very appropriately 'economic rationalism'. Economic rationalism restores capitalism's *laissez-faire* defence that it is in the community's interest to leave the economy to the self-interest of producers and consumers. Keeping government small also safeguards personal liberty.

But this argument can also sound just too self–interested. When I say 'self–interested', this ideology might support wealthy individuals but really favours business corporations. It's a rationale for stripping away impediments to money–making. The simple economic fiction is that all players have total knowledge, can move freely from place to place and are completely rational. However, in this 'free market', the poorest person competes on the same footing as the most powerful corporation. As demonstrated by the Multilateral Agreement on Investment (MAI), many transnational corporations are not just more economically powerful than many nation–states (and organisationally much more totalitarian), but they are now being granted super–national legal rights. (Rowan, 1998)

Standard criticisms of capitalism are that:

1/ it enshrines greed as the motivating force of economic life;
2/ its mode of decision–making is non–democratic, marked by commercial secrecy and hierarchical organisations;
3/ its monopolistic character leads to concentrations of economic power that distort government policies;
4/ it is ecologically destructive;
5/ it generates cultural vulgarity and commercialism;
6/ in the absence of other constraints, the rich get richer,
7/ it leads to intolerable inequalities of wealth and income
8/ the centres drain regions; and
9/ similarly, it impoverishes the developing world (based on Benne, 1986).

What is to be Done?

Arguing that owners of private property extracted surplus from labour and that ruling ideas reflected ruling interests, Marx thought the solution lay in communist revolution. But mixed economies (employing both state and private capital) have proved more resilient.

In the crash year of 1929, John Maynard Keynes led economic opinion against the totally free economy, endorsing public works to promote employment. His theories gained widespread acceptance, most notably with Roosevelt's New Deal of agricultural and business regulation, inflation, price stabilisation, emergency intervention and social security.

While still claiming that the capitalist system has raised living standards, many mainstream economists accept that governments must install anti–monopoly measures, take an active role in monetary and fiscal policy, as well as provide minimum welfare for all.

Among further suggested corrections, economic scores might be adjusted to respond to genuine costs and benefits. Feminist critics have pointed out that housework is not just unpaid but neglected in national accounts (e.g. Waring 1988). Environmentalists have argued that measures like Gross National Product only look better with pollution, social breakdown and sickness.

Other reforms lie beyond the realm of economics. Contrary to the fiction, even firms rely on a host of non–reducible factors. They depend on the rule of law, property rights, the state provision of infrastructure, financial incentives, common storehouses of knowledge and even the maintenance of values like 'trust'.

Would an economist seriously suggest that price is the 'near–perfect' way to organise a love affair, for instance. Should we appoint Prime Ministers by some kind of tender process, as this model might suggest? What about families—are they doomed as imperfect and inefficient? How do we pay Van Gogh for his paintings, or Brillat–Savarin for his meditations? How do we repay those generations who domesticated the tomato? No, the real world is endlessly more complicated than even the most comprehensive economic model.

Beyond extra–economic calls for 'social justice', 'heritage protection', 'cultural development' and so on, the truly philosophical objection is that economic rationalism is reductionist, subordinating crucial natural, social and cultural concerns.

Before I make two or three particularly gastronomic points about this, I stress that I don't object to economics as one of a battery of means, but as a principal end.

Grounding Policy

Money is often condemned as grubby or 'materialistic' and said to conflict with 'higher', more 'cultural' or more 'spiritual' values. Thus high-minded critics say that the worldly nature of competitive capitalism has eroded traditional moral foundations. (Bell, 1997: 136)

The Green Senator from Tasmania Bob Brown traces current ills to 'materialism'. We live in "an age of gross materialism, consumption and extravagance", he told the Senate (Senate Hansard, 15 May, 1997). He spoke again of a 'heightened age of materialism where there are 358 billionaires who own between them the same as 2 billion of the poorest people on the planet' (*Senate Hansard*, 17 June 1997). This antagonism to 'materialism' is not limited to Bob Brown. In his first speech to the House of Representatives, the present Primary Industry Minister, John Anderson, complained of the "narrow and selfish pursuit of material well being... In seeking our freedom and fulfillment in shallow materialism we have in fact become enmeshed and enslaved". (*House Hansard*, 17 August 1989)

Economic commentators only appear to endorse this by writing as if they are cynical realists—Robert L. Heilbroner's famous introduction is entitled *The Worldly Philosophers* (1980). Even the student of market ideology Karl Polanyi speaks of its 'crass materialism'. (1944: 30)

However, this characterisation is doubly mistaken. Firstly, economic reasoning is, in fact, airy-fairy. Adam Smith persuaded economists to put their faith in an 'invisible hand'.

Shipping tonnages, the production of motor-cars... the numbers have only some highly abstract relationship to concrete realities. You might have to work much harder when your borrowings cost 17.5%; in economic terms you're obeying a mere number. Examining a graph of, say, 'output', you have difficulty imagining the actual world of actual people hard at work.

Economics is far removed from our everyday reality. Economics is numbers. It's mathematical fictions. It's rationalistic. It's idealistic, even Pythagorean. Rather than worldly men of action, economists are little boys lost in wonderland. Spin doctors have snuck economic fundamentalism past our guard, selling blind faith as hard realism. Money might bring worldly power, but finally it is a false or vaporous god. The cash nexus substitutes the 'fetish' of money for authentic life process and relationship. In other language, money is an 'idol'. How could this happen?

The Politics of Representation

Talk about something long enough and it gains in solidity. Write enough textbooks, and it appears real and authoritative. An obvious instance is the media 'construction' of Diana, Princess of Wales. We never met her. We probably never even saw her in person. Her actual significance is somewhat hazy—a rich and beautiful woman caught up in a royal divorce and charity causes. Yet her funeral drew a television audience of billions. Where did she get such power? Marrying into the hard-won magnificence of kings and queens, she was set in cathedrals, angled on royal balconies and posed with victims. Day after day, she was worshiped by cameras. This is how propaganda works: tell the 'big lie' often enough.

Diana's image, which was in a way bigger than she was, was shaped by political processes. She re-positioned herself as the 'queen of hearts'. She was said to have the 'common touch'. That is, she understood mass media better than the court, who thought it preferable for royals to sit on high thrones, to be depicted on coins and postage stamps, to be lauded by royal photographers and Poet Laureates, to make annual addresses to the nation and to be driven in carriages. Immediately upon her death, Labour Prime Minister Tony Blair re-named her the 'people's princess'. Of course, Diana was an actual, living, breathing human-being; but a similar idolisation occurs with much less demonstrable realities.

People used to believe in the Devil as a personification of negative forces and values. Deliver enough sermons and the Devil gains a reality; he seems actually to operate in our lives. A similar example is 'Mammon'.

Serve not Mammon

'No man can serve two masters:... Ye cannot serve God and mammon.' This is the King James translation of a familiar dichotomy. (Matthew 6:24; Luke 16:13) Christians viewed 'Mammon' as an active player and so took the word to be the Aramaic name of an idol or demon challenging God for human allegiance.

The personification of this 'god of this world' was popularised by Milton in *Paradise Lost*:

> Mammon led them on—
> Mammon the least erected Spirit that fell
> From heav'n; for ev'n in heav'n his looks and thoughts
> Were always downwards bent; admiring more
> The riches of heav'n's pavement, trodden gold,
> Than aught divine or holy else enjoyed
> In vision beatific (Milton, *Paradise Lost*, I: 678–684)

However, it turns out that 'mammon' is simply the Aramaic word meaning 'wealth, gain or possessions', and so the more recent translation is: 'No slave can serve two masters;... You cannot serve God and wealth.' Wealth was personified; it became an active player. The choice between 'God and mammon' or 'Good and wealth' has often been presented as between the 'higher' and 'lower'. However, as we have seen, the pursuit of wealth should never be regarded as 'materialistic'. Rather, it is other–worldly escape.

Unfortunately, even among Christians, the choice between 'God and Mammon' has often been presented upside–down. People have thought it worldly to choose Mammon. Quite the reverse: it is to pursue a chimera.

Return to the Real Market

Karl Polanyi's classic *The Great Transformation* is a history of the invention of the market economy early last century in Britain. He sees the self–regulating market system as uniquely derived from the principle of gain. 'The mechanism which the motive of gain set in motion was comparable in effectiveness only to the most violent outburst of religious fervor in history. Within a generation the whole human world was subjected to its undiluted influence'. (1944: 30)

Listen to economists on the news, and The Market makes decisions. The Market anticipates the retail statistics. The Market engages in profit–taking. The Market welcomes Clinton's announcement. It displays 'market sentiment'. Just like the Devil or 'Mammon', the Market is an active being, given human (even god–like) characteristics.

In particular, the money Market—in which trillions of dollars are ridden daily by 'screen jockeys' like Nick Gleeson—is an abstraction, if not caricature, of the real market. At the real market, growers and cooks meet face to face, exerting quality control. They deal in solid, scented, edible goods.

As well as markets, real people engage in all sorts of other food–oriented exchanges, such as gift, potlatch, temple redistribution, euergetism (good works), charity, communism and bush rations. Even more ironically than idealising the market, political economists have usurped 'economics'. In Greek, *oikos* means 'household', which made 'economics' the study of household management. Just as the original market was the food marketplace, the original economics is Mrs Beeton's *Household Management* rather than Smith's *Wealth of Nations*. Unfortunately, from the eighteenth century, political economists stole the term, to speak metaphorically of a national 'household'. The economic is now some notional monolith, when it was a domestic kitchen.

Money is such a powerful fiction that governments need no longer hold equivalent amounts of gold—the so–called gold standard was the old 'faith of the age'. (Polanyi, 1944: 25) It is a set of concepts with idealistic punch. Economics–driven public policy has turned gastronomic realities upside–down. To paraphrase Socrates, economists eat to make money, not make money to eat. As a clear instance, think how often good food and

drink are not presented as desirable for their own sake but for earning 'export' and 'tourist' dollars.

Given that our entire system of representation and meaning is socially constructed, the art is to minimise distortions, and so avoid undue mystification and alienation. Some entities and concepts are more readily demonstrated, more useful, more desirable. The concept of 'love' is pretty nebulous, but presumably few people complained when Tony Blair and Diana's sisters extolled 'love' at Westminster Abbey (led by Tony Blair reading 1 Corinthians).

I promised two, complementary reasons why Bob Brown and others are wrong to complain of the modern age as 'materialist'. As I have said, the committed pursuit of money is hardly materialist. The economy needs pricking as an overblown fantasy. Please introduce me to the 'economy'!

Secondly, there's nothing sinful about down–to–earth matters. To the contrary, we need to place greater store by our entire physical reality. The Greens should be the first to want more emphasis on the natural, the material world. Modern economists are dreamers, far elevated from the real market, far elevated from the real *oikos*. Realism is re–introduced to economics once meals are restored as its basis. We know the real market and the real *oikos*.

The Gastronomic Basics

The ancient Greek philosopher Epicurus (341–270 BCE) declared: "The beginning and the root of all good is the pleasure of the stomach: even wisdom and culture must be referred to this". In his preliminary Aphorisms, Brillat–Savarin finds that meals are "what life is all about". (Symons, *Proceedings*, First Symposium, p64)

Meals are where we share food. Because we share food, we can share the chores. In other words, meals are the basis of society. We share food and chores according to recipes. In other words, meals are also the basis of culture. Our sights ought to be set on ensuring everyone's belly is full, and then on a whole range of physical, social and cultural concomitants, not the least hedonistic. If we aim at good meals, then we will more realistically contribute in practical, creative and democratic.

From a gastronomic viewpoint, money is a mere tool, serving a healthy environment, supportive community, rich culture and agriculture and happy dining. Against money, food has genuine substance; we only survive on authentic bread. In any choice between 'the money or the tucker–box', the tucker–box must come first.

Economics only gains any importance as one of the institutions for the provision of meals. Money is just one of the cultural instruments we use in feeding each other. Taken alone, money is disastrously distracting. 'Does this make financial sense?' should only come after 'Will we all eat better?' Think of your own decision–making: price is only one among innumerable factors. In choosing a restaurant, we take into account the setting, the service, the cooking, the entire approach, certainly not necessarily choosing the cheapest option. In fact, price can be counter indicative: local, seasonal produce is often cheaper. Like all aspects of a meal, cost comes into it. But it is an incidental worry, not our main preoccupation.

Cooking is Generous

"Greed is good," declares Gordon Gekko in *Wall Street* (1987). Greed is promoted by stock markets, casinos and quiz shows like *Pick a Box*. Our economic system 'motivates' people to make money above all. Given basic decency (and the advantages of sharing), that takes a lot of training.

As one the great 'cultural contradictions' of capitalism, sociologist Daniel Bell points to the "Protestant ethic in the area of production," and the "demand for pleasure and play in the area of consumption". (1976: 75) The successful person is meant to both 'work hard and play hard', to seek 'best practice' and 'lifestyle'. For the individual, this means working gainfully and spending excessively. That is, greed works in perhaps anomalous ways—a person is meant to maximise both income and expenditure. Note that this is unlike business corporations (and, in neo–classical theory, even governments), which must boost production and slash consumption.

Beyond such contradictions, the narrow pursuit of self–interest is nasty, and often short–sighted (Sen, 1987). Moreover, in stimulating greed, economic rationalism destroys hope and inculcates cynicism. Ironically, gastronomy is said to encourage greed. This charge has been the despair of our forebears, notably

Brillat–Savarin. Nevertheless, as Epicurus pointed out, unlike the false 'hunger' for money and power, actual appetites have limits.

Instead, sharing meals encourages entirely different values, especially generosity. Even the most demented economist presumably doesn't charge friends coming around to dinner. For a gastronomic philosopher, the whole point of society is to collaborate on dining. The sharing of food is at the physical and spiritual heart of human togetherness, human creativity and human embeddedness in nature. When people think about inequality, they typically think about food. Public policy needs to forsake economic naivety for fuller concerns. Good political decision–making needs to be based on gastronomy. Just as individuals tend to follow gastronomic principles in running their life, so too ought public policy–makers. Gastronomy promises a wide–ranging critique of economic rationalist ideology and proves, more positively, to be the sounder guide.

A Manifesto

Writing one hundred years ago in her *Cottage Cookery (Hygienic and Economic)*, the Social Editress of the Melbourne *Herald* and *Weekly Times*, Rita Vaile called for the establishment of a Chair of Gastronomy or a Minister of Gastronomy, when the 'first of the sciences' would receive the attention of which it was worthy. If that proposal sounded 'too fantastic... just remember that when a Minister for Labor was first mooted, it was thought fantastic too.'

Rita Vaile's professor or Minister might commission gastronomic indicators like the old 'Standard of Living'. The office might track the number of good restaurants, which (I guess) reached a peak in the 1980s, to decline in the 1990s. The backyard indicator of home–grown produce hovers around dangerously low levels. According to the tomato taste test, the quality of tomatoes has been on a steady decline, from still being quite good in Adelaide in the early 1980s until the cruel parody of 'vine–ripened' varieties with stems but no taste. As to basic gastronomic knowledge, I would not be optimistic about survey results if we were to ask: Can you identify a tomato plant? What is the best season for oranges? What country does the Big Mac come from?

The idea of the six–hour day has been explored by Scandinavian feminists as giving more gender–equal time in both the domestic and the market economies. The paid worker gets more time for family and community work, while more people can have jobs. (Bryson 1996) The old trade union goal of '8 hours labour, 8 hours recreation, 8 hours rest' was fine for the male worker able to rely on his wife to provide meals, a tidy house and contented children. The new, perhaps less gainly slogan could be something like '1 hour housework, 2 hours cooking, 3 hours lunch, 4 hours dinner, 6 hours labour, 8 hours rest'.

Unlike mainstream economics, gastronomy does not remain quantitative. Money's cruel anonymity (commensurability) is purchased at the expense of complexity, richness, depth. Meals have much more substance. In place of rarefied ideology, we need to focus on the many–layered reality.

As a starting place, the gastronomic lobby might advocate:

- A return to real economics.
- A return to real markets.
- A preference for small business over big.
- Money as a mere instrument of dining.
- Meals as their own indicators.

For a glimpse of what more gastronomic government might bring, think of Don Dunstan's successes in South Australia. He took local licensing laws from the country's most restrictive to the most liberal. He launched Regency catering college. He even tried to gear local industry up to manufacture in–bench food processors.

My personal response

On a personal note, I must confess that I've changed my mind about how to deal with economic rationalism. In 1990, my decision was that if the 'user pays', then I was going to be paid. Why should we work just for the love of it. Why, to be specific, should we organise symposiums? Various experiences encouraged this. In

particular, organisers of the Rostrevor Symposium had suggested, and helped with, the State Library of SA's menu exhibition. Afterwards, I suggested to a senior librarian that we should pool information for a short article on menu collections around the world for publication in *Petits Propos Culinaires*, whose readers had provided certain help. It would have taken a librarian a couple of hours. The response was: "What funding have you got?"

Particularly since I'd written (gratis) an introduction to the exhibition catalogue, I decided never to engage in community–spirited activity again. (For other reasons, I'd already opted out of the Symposium.) Of course, that was a totally incorrect response. I'd fallen for economic rationalist nonsense. I was behaving like some economic simpleton. A year or so ago I returned to deliberate voluntary activity. Not that I am overly optimistic. I am still tempted to remain at the table, where, in any case, the revolution is conducted. This is where we sustain ourselves, not just physically but also socially and culturally. This is the focus of our political existence, too.

But against this reclusive urge, I also must engage in public life. In particular, I must shun Mammon's cynicism. I must not let economic ideology destroy other values, especially hope. Philosophically, we can take heart that the world is in on our side. The world is not numbers. The real world is highly resistant to economic theories. Physically, nothing can actually levitate into price. The virtual reality of Rupert Murdoch's communications mega–corporation cannot finally triumph. We are not merely ideological beings, but very much remain living, breathing, eating people.

With gastronomy, we rejoin radicalism. We focus on important things, like people being well–fed, like community, like a healthy ecology, like the nature of the 'good life' and achieving it. Gastronomy is the world's most difficult discipline. It involves practical things, clever things, spiritual things, everyday things and, yes, even economics. But that is no reason not to try.

Bibliographic Note

This paper develops ideas raised in others of my papers and books, notably Australian worship of the 'Great God Cheap' in *One Continuous Picnic* (1982), the reforming proclivities of gastronomic authors in my contribution at the First Symposium of Australian Gastronomy (1984), affinities with materialist philosophers at the Second Symposium (1986), the qualities of communion at the Fifth Symposium (1990), the critique of economic rationalism and the need for authenticity in *The Shared Table: Ideas for Australian Cuisine* (1993), the culinary focus on food sharing, distribution or 'exchange' and its social evolution in *The Pudding that Took a Thousand Cooks* (1998), and the gastronomic origins of Christianity (forthcoming).

For general information, and not only in this article, I am forever turning to the *Concise Columbia Encyclopedia*, *Oxford Dictionary* and *Brewer's*.

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Barbara Santich: We'll have questions at the end of the session when all the speakers can come up here and you can ask questions to any of them. I must admit Michael, you make me feel like a little bit of an interloper in here because I still have idealistic leanings and I'm not going to give them up, so there!

Our next speaker is Rosario Scarpato. I really haven't had a chance to properly meet Rosario. I guess I can say I met him materially last night through the barbecue and we had a brief chat this morning. Rosario thinks that the culinary future, as somebody from Naples—a proud Neopolitan—thinks that the culinary future of the world is in this nation, so I'm interested to hear what he has to say.

New Global Cuisine

New Global Cuisine: Australian Gastronomy at the End of History

Rosario Scarpato: I guess that I'm taking the risk to appear a bit naive but I would like to invite you to accept my paper as the contribution of a cook and a diner. I don't believe in an Australian gastronomy or cuisine in conventional geographic terms. Geography belongs to the past. Certainly idioms, local traditions, religious affiliations, political idealogies, traditional sexual roles, continue to play a role in the new consumer zones. However, cultural factors have ousted the traditional territorial aggregations of people. A new cartography of the world can be drawn only according to the characteristics of different lifestyles, consumption patterns, television ratings, musical tastes, fashion, film and concert attendances, home video rentals, and all these kind of things.

Today there are no lands to be discovered, nor cargoes to sail. Great discoveries in the third millennium will be limited to unexplored abstract spaces—extra geographical dimensions rather than lands and will likely be made by crossing the Internet ocean. The kitchen is one of the spaces that will soon appear in the new cartographies of our increasingly borderless world; a world typified by global circulation of images, sounds, goods and population. Other spaces have undergone the same process. Something similar happened to the cinema. From the panorama and the cosmorama to nature-max, cinema has amplified the mutual gaze of photography; bringing past into present, distant to near.

Similarly the kitchen has enlarged its horizons and will never again be the gloomy room set aside for the preparation of food; it's original definition. There are already reports of ethnographic exploration of the space kitchen, like that of Gary Alan. Fine an occupational sociologist from the University of Georgia. Indeed what else are the people on the usernet list or ourselves here for, if not as explorers of this new dimension?

It has been against this background that globalism in cuisine has expanded. Dishes in what I call 'New Global

Cuisine', although often depicted as frightening culinary mish-mashes, are shaped by the unprecedented progress in technological communications, the fall of territorial boundaries, and the influence of transnational imaginary—exactly like food consumption trends and eating habits.

The time when ties to the soil, to seasons of the land, of fishermen and peasants, generated the first traditional bouillabaisse, parmigiana, sukiyaki, or Chinese stir-fry is long past. Globalism in cuisine is a complex cultural phenomenon; it should be seen as a reflection of general globalisation—intended as the process whereby the world is increasingly seen as one place; including the ways in which we are made conscious of the process itself. This is just one of the possible definitions according to the English sociologist, Mike Featherstone; a respected globalism scholar who probably never expected to see his words used within a gastronomic context.

Globalisation, and clearly I refer here to its 'euphoric version', has generated its own global culture, even if we can legitimately refer only to its restricted sense of third cultures. I refer to sets of practices, bodies of knowledge, conventions, and lifestyles which have developed in ways increasingly independent of nation-states.

Television, modern music, advertising and fashion, have established their third culture. Hundreds of television mini-series are viewed in opposite corners of the globe, without fear of cultural rejection. Advertising agencies plan global television campaigns. Film producers, advertisers, actors fashion designers and musicians no longer share the culture of a specific nation; alongside corporate tax accountants, financial planners and management consultants who deal with the problems of cultural communications in the global village.

And what have the trans-ethnic chefs working in London, United States, Australia, Hong Kong and Singapore established, if not a culinary global culture? Independent from, and parallel to the others, this culture inherently assumes the globe as its one and finite territory. What in London is called Modern British is Australian in Australia, and New American cuisine in the United States. In addition, Americans believe Australian chefs are like Californian chefs, yet at the same time Australian chefs are requested to shape the Modern British or Modern European style in London restaurants.

From this, the global culinary equation is evident. Behind these different names there is one, and only one, emerging style. Globalisation in its euphoric version signifies technological advance; progress in communications, innovations, enlargement of origins and use; the modern versus the past. It also confronts localism, which in the world of the kitchen is vested as resistance to the New Cuisine and defends traditional ways of cooking and eating. Some argue however, that in cuisine the norm around the world has been 'change—innovation' always, as Raymond Sokolov wrote. The reality is that in the past innovations in all cuisines were openly opposed, even if they were beneficial. The actual pace of change was unknown to our ancestors and the speed of innovation would have been inconceivable, even to the most visionary gastronomer of fifty years ago.

Global cuisine has permeated the kitchen with a diffused culture of change. This rarely occurred in the past. We used to be told, for example, that the new ingredients introduced by Columbus dramatically innovated European cuisines. That's correct. The point that really matters, however, is how long it took for these changes to take effect. Let's take just one example. The first written mention of the potato is dated 1519. This is in the travel chronicles of the Italian navigator, Antonio Pigafetta. Columbus had landed in America twenty-seven years earlier, but still a small time in comparison to the three hundred years that elapsed before the potato would be introduced in France. But it was only in 1789 that the stubborn pharmacist, Parmentier, was finally able to overcome entrenched eating habits and cooks' prejudices, winning the green light for the large-scale cultivation of the tuber.

Three centuries of resistance—evidence of how hard it was to introduce changes and innovations in the past. Easy to imagine how quickly learning an ingredient of the characteristics of the potato would spread around the world with the technology and communication system available in our days. A prosaic insignificant cinnamon bun baked in a remote small town of the United States with a likeness to Mother Teresa within the folds of its flaky pastry, has taken less than one month to become world news. The Associated Press Agency commented how the nun's bun stormed the Internet and was even mentioned on US television in an episode of *The Nanny*.

Certainly the ebullient 'mediascape', to use the term coined by another scholar, Appaduraj, is the main conduit for the introduction of New Global Cuisine. The media cancelled forever the time when the food of foreigners was regarded with diffidence, if not hostility. Past are the times when—for example between the Sixteenth and Nineteenth Centuries—European merchants sailed to Macau, Canton and Hong Kong, bringing back spices, tea and fabrics. They did not, however, bring back the food habits of the Chinese people. That food remained 'foreign' to them and to their homelands. The vast majority of those merchants never dined away from their ships, or quarters near the Western warehouse; only a few metres away from the kitchens of Chinese villagers. And Chinese people were not attracted to their food, with the sole exception, of course, of the wealthy.

Media in the past, in Western countries, has always laboured to keep alive the negativity of foreign food. Reay Tannahill in *Food in History* describes the situation in the Eighteenth Century, when books of reminiscence and advice began to appear in growing numbers, and the travel writer made the point that "no country, other than his own, had such superb raw materials for its food, such refinement in handling them". His descriptions of foreign food were not only defamatory, but very funny indeed. "In Europe inevitably the non-travelling man became progressively more certain that the jungle began immediately beyond his own frontiers."

Instead, today's television, with its global productions, has overtaken the concept of foreignness. Acceptance of foreign food has been greatly eased by the 'spirit' of the global community created by the media, and which transcends physical location. The most disparate people and groups, of all social and economic classes are united around the common experience of television. I believe that contemporary Australian cooking and eating practices belong to the global Third Culinary Culture with the adjective global, used in its larger meaning of comprehensive, all-embracing. This cuisine that surpasses geography, increasingly interacts and crosses other arts and disciplines—poetry and cuisine, dance and cuisine, fiction and cuisine. In other words, new global cuisine is another ethnic way of cooking and eating, being the local cuisine of the global village. As French cuisine was for France, so Chinese cuisine for China.

The theories of French gastronomers, like Ravel or Curnonsky have been buried forever by this new style of cooking. There no longer exists cuisine paysannes, bourgeois or erudite. The culinary determinism of Auguste Escoffier—the cuisine matématique—has followed the disgraced destiny of other famous determinists of this century—Freud in psychology and Marx in politics.

Whilst traditional cuisines highly respected the guardians of their traditions, this new cuisine appreciates only the creative chef and diner. New global cuisine may appear as a global homogenisation of cuisines, as if it was an international cuisine. Nothing could be further from the truth. You will never find two identical dishes in this cuisine, even produced by the same cook. And the changes that many Australian cooks and diners are carving in our times go far deeper than the mix of ingredients and techniques in the dish.

What unifies new global cooks and diners, not only in Australia but around the world, is that they cook and dine with a philosophy and an aesthetic, although sometimes unconscious, and are called to have a deep knowledge of the history behind their ingredients. Individuality and creativity however are always combined with the awareness of new emerging social, cultural and economic constraints. (If you don't believe me you can ask Cheong and Phillip who are cooking now).

The food and practices of professional cooks practising new global cuisine; or what we here in Australia call Modern Australian cuisine, contribute to a culture and lifestyle that does not belong to one nation, but to the world. Exactly like (and I know that the example is not perfect) but exactly like a suit tailored by Armani or a film by Spielberg, a poster drawn by Brodie or software packaged by Gates.

Similar to those working in the film and television, music, advertising, fashion and consumer industries, I see the global cooks, in particular many Australians, amongst the design professionals leading the world towards the 21st century. The role played by these and related professional figures, food writers, food stylists, gastronomers, is revolutionary. It would be mistaken to regard this role as limited to the indispensable, yet just technical, ability in successfully combining ingredients like garam masala and Italian parmesan or Thai fish sauce with say, New Zealand truffles.

In Australia, I believe we are showing the world that cooks are cultural specialists, and as such, reflect values, philosophies and aesthetics of their common cultures; as do architects when designing a building, or painters when painting a picture. And this common culture includes peaceful philosophies which incorporates, for example, the influence of feminist and Buddhist thinkers.

New global cuisine, contrary to all other national cuisine, is expanding in a world where for the first time; food–making is a 'thoughtful practice' involving mind and body, not just a physical activity. And the kitchen is itself a philosophical space, to the extent that cooking is presented as a model form of inquiry. Analysis like this come from feminist philosopher, Lisa Heldke, who has elaborated stimulating and revolutionary theories in regard to the kitchen.

The road to better understanding of who we are, why we think what we think and where we are going, passes for the first time through a kitchen—it never happened before. Western cuisines, for example, have historically discounted the value of womens' activities, considering food production as womens' work and/or the work of slaves or the lower classes. For this reason, Plato the king of Western philosophy, placed cooks at the bottom of his Republic, whilst the privileged rulers and guardians were not required to learn how to cook, because this subject would not improve their soul.

On a professional level—and I'm going to conclude here—the ideal of a 'cook–thinker' is very stimulating. It reminds me of the era of the ancient Romans who were probably the first globalists in history, though not capitalistic. Luxurious global meals were brought to their tables, often by Greek prisoners of war, who became slaves of aristocratic families. Some had been cooks in their motherland, but many were 'only' formerly wealthy, well–educated people. Despite being forced to embrace their new jobs, they probably did not begrudge the perspective of a life behind the stove, as cooks were very important figures in the cultural religious panorama of ancient Greece. *M geiros* in Greek means the cook, but also the priest and the butcher, and that was more than a fortuitous linguistic similarity. Furthermore, it was the cook of the Sydos' King Cadmus, who, according to the myth, invented writing.

Greek cooks infused their food with erudition and intellectual sophistication. And a model of those times was also Daedalus, the ingenious cook of Timalchio, who appears in *The Satyricon*, the Latin novel written by Petronious. In Greek mythology Daedalus was the prototype of the great inventor.

It is widely acknowledged that modern cooking began after the French Revolution, with Careme, at the beginning of the nineteenth century. Its ultimate modernisation instead grew from French cuisine nouvelle, which spread all over the world in the seventies, and then with the early American movement of East meets West in the eighties. These were times when existing definitions still made some sense, and the history of cuisine was yet to appear as a single unified stream, stemming from the West, which the rest of the world had an inevitably to flow into.

Western models of modernity and progress are no longer universal. Existing classifications are worthless. In cuisine, as in other arts, cultural syncretism and democratisation are leading us towards a unified, unidirectional history, or a plurality of histories of the 21st century.

In new global cuisine anything is possible—at the same time, contingent, often incoherent and ambivalent, like the postmodern era in which it has developed. In this sense Australian trans–ethnic cuisine is the gastronomy at the end of history, as an Italian philosopher Gianni Vattimo deemed the end of the universality of the Western modernity model.

At the beginning of this paper I said that I did not believe that an Australian gastronomy or cuisine exists in geographical terms. I think that Australian cuisine is a cuisine and a model for the gastronomy of the world in the next decades. The history of this country, for the first time, will advantage it in its leadership in the world culinary scene. Australians have been among the first to roam the globe in culinary senses. It's time to enter the second phase of the Australian gastronomic revolution. Its time to widely acknowledge this identity and spread the values of the philosophies behind our kitchens; researching the direction of Australian global culinary culture and educating our youth, and young people overseas, professional and amateurs alike, to the positive values of this gastronomy.

This alone will make Australians unique; and provide a market for our produce. Italian, Greek and French products conquered the world thanks to the Mediterranean culture they carried with them; and the same happened to Chinese, Middle Eastern and Japanese products. Australian produce might find a commensurable space in the world, thanks to this 'positive' global culture. Thank you.

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Barbara Santich: Thank you Rosario. I think there are a lot of provocative ideas in your paper, and certainly I don't agree with all of them, but I hope that there is a good opportunity for debate. You mention Jean Francois Ravel in your paper. We were talking about some of his ideas in the discussion group we had and you might not agree with one of his ideas—I think its quite a good way of looking at things. Michelle said we don't have in Australia a base cuisine, and I was reminded of what Ravel had written when he said that there are no more national cuisines in the world now. What there are, are international and regional, and I think that that is a very good way of looking at things at the end of the twentieth century. Perhaps we can go on about that later.

I'd now like to introduce Jean Duruz, who is a Senior Lecturer in Cultural Studies at the University of South Australia, but has spent eighteen months or so in Sydney at UTS. Jean has spoken at Symposia before. She has given Seminars in Adelaide, so I know a little bit about her way of thinking about things, which seems to me always to have a certain ironic touch—what Marion Halligan used to call self-reflective, I think. She is going to talk about Cuisine Nostalgie—Tourism's Romance with The Rural, which is I think particularly appropriate in

Cuisine Nostalgie?

Cuisine Nostalgie? Tourism's Romance with the Rural

Jean Duruz: Immersed in her garden bed, a pregnant woman in a polo–necked jumper and denim overalls breaks off rocket, silver beet and sage for dinner. Her partner watches over her, taking in air that is tangy with eucalyptus and wild ferns. If they stand on their tiptoes they can see the gold leaving the sandstone cliffs of the Jamieson Valley and the early moon rising.

It's been two years since Nicola Robinson, 32, and Bernard Cohen, 33, fled to the mountains.[1]

You can see your life as a straight line from birth to death... Or you can see it as a series of loops, turning back on itself... Part of our tuning back from Compostela is the desire to revisit places we have been happy in. A dangerous business, quite possibly, because you might not like it there this next time, you might spoil the old memories. Well, life is a risk at the best of times.[2]

Two Hours' Drive From Sydney

Nicola Robinson and Bernard Cohen—whose story appears in *The Sydney Morning Herald* as a 'Postcard from the Edge'—are not the only refugees from urban life, and its mythic cultures of escalating material costs, fragmented identities and heavy–duty stress.[3] Recent lifestyle writing in Australian newspapers presents numerous exemplary narratives of escape.[4] of course, despite the seductions of these, not everyone wants to leave. Nevertheless, the pastoral image of a pregnant woman harvesting herbs and greens at the magical hour of sunset and moonrise, is a poignant one for our 1990s cultural and culinary imaginary. As Hugh Mackay says, "increasingly, the goal seems to be to create the impression that one's heart is in the country, even if one's life is firmly based in an urban environment."[5]

Certainly, the rural romance has a persistent presence in white Australia's dreaming—a presence to be traced in nineteenth century folk figures of the bushman and the drover's wife, for example, or in early twentieth century model garden suburbs, or in the back to the land political movements of the 1970s.[6] Indeed, as the owner of a hobby farm in the Ballarat district, and again in the Barossa Valley, during the 1970s, I can trace strong echoes of this romance in my own history. So, conscious of the pleasures of performing some of the rituals of rural life (rituals of jam–making and fruit–preserving, feeding chooks, watching the sun set behind the date palms), I would be the last to criticise engagements with this romance. Nonetheless, I suggest it is interesting to reflect on the fashionableness of country in some of its contemporary manifestations—to explore which of its meanings are selected for our scripts of country, and, correspondingly, which are notable for their absence.

Of course, it is tempting to construct what Mackay sees as our growing obsession with the symbols of 'the country' purely in touristic terms?[7] After all, according to Bell and Valentine, much everyday consumption is now marked by its touristic quality. This is a self–conscious consumption informed by, as well as productive of, globalisation, where cultural snapshots can be experienced, grazed upon and collected in a stroll around the supermarket or lunch at a restaurant... and where 'kitchen table tourism' is facilitated by the provision not only of foodstuffs but also recipes and inspirations from the proliferating food media.[8] So, as tourists, then, we can raid iconic meanings of country, savouring the 'natural' through the fabrics of Country Road, referencing the 'homely' through Formica's excursions into 'country style', and tasting the nostalgic pleasures of slow cooking and sensual landscapes offered by cookbooks such as *Maggie's Farm* or *Stephanie's Recipes My Mother Gave Me.*[9]

Needless to say, metaphors of travel and tour imply returns, whether the journey involves moments of transformation, or those of confirmation, of identity.[10] For Mackay, the imagined country escape via cottage architecture, cooking pots or cookbooks, has a conservative function, operating as a safety–valve—a release of psychic pressure that, in its turn, enables a healthy re–positioning within the normal of urban life.[11] However, this assumption, as I have argued elsewhere, tends to leave unexamined the question of why those fictional landscapes of country, in particular, are so compelling.[12] How and why has country emerged as a distinct tourist venue, as a ubiquitous commodity style, for Australians in the '90s? Furthermore, how are its meanings actually negotiated in the mundane practices of everyday life? I suspect we need analyses that move beyond

straightforward diagnoses of the problem (city pressure), together with their comfortingly neat prescriptions (rural release). As well, I am interested in the interpolation of memory in these journeys of escape and return—in memories of loss, in powerful imprints of personal and cultural longings, and in (as Halligan says) that "desire to revisit places we have been happy in."

Much of my own research has involved a focus on women's memories of the suburban dream of the 1950s and 1960s in Australia. As women remember their dream homes, actual homes, gardens and suburbs during interviews, occasional images of rural life and landscapes appear. Helen Edwards, for example, describing her country childhood in the 1930s in a farming community in north–western New South Wales constructs her dream home in reference to her actual childhood home. The dream home, like the first house of childhood, is "one with verandahs all round with lots of trees and shade".[13] This fragment of memory incorporated in Helen's narrative provides a stark contrast to its dominant figure—the modest war service bungalow on a weed–covered, treeless, suburban block, in which Helen was to begin married life in the late 1950s.[14]

Together with memories of a 'house with verandahs' come other fleeting images, this time of rural activities. Although Helen, as suburban housewife, feels that her cooking always fell short of standards set by the local tennis club ("I couldn't arrive with the pavlovas brimming over [with] everything, and it used to get on my nerves"), as country child grown to woman, she is able to reclaim the traditional skills and identities associated with her past: "I feel able there [at church fetes]. I make jam, chutney and stuff. I can use an axe too... but I've given up chopping heads of chooks!"[15] So, despite the struggles of Helen's father and uncle to support two families from the land during the Depression, Helen remembers the childhood home—its tank water, oil lamps and drip safe, its domestic rituals and rhythms—with wistful affection: "I wouldn't wish to go back... I realise... you can't go backwards, but... I could happily be in that situation and not die of frustration."[16]

Cultures commodified as tourist 'snapshots'... or memories of 'being there' captured for the moment, as in a box of assorted family photographs? In this paper, I do not want to have to make this choice. Whether adopting the identity of tourist, grazing on exotic cultural products of the global supermarket, or the identity of local, treading 'a series of loops' through time to remembered moments of bitter–sweet intensity, I am interested in teasing out the phenomenon of country for the practice of everyday life. Furthermore, bearing in mind that we all derive pleasure from play with meanings in contexts of fantasy, I intend this account to be a sympathetic and affectionate one, particularly in terms of its key figures. So, my project is not directed at criticising individual hosts or guests. Instead, my aim is to raise a number of issues for ways to think about food in contemporary Australian culture. Primarily, I want to indicate country as a point of intersection for meanings of food, place, memory and identity. As well, I want to explore, in country discourse, resonances of escape/return, home/away, tourist/local... and, possibly, to unpick some of these distinctions and question their power inscriptions.

So, this paper is to be something of a country ramble, on the lookout for nostalgic traces of the rural in examples of tourist and travel writing. Specifically, I am concerned with the imaginative possibilities of the 'short break' (the short holiday, not far from home) as a locus for home itself in 1990s' cultural remembering, as well as a site for diverse identity performances.[17] In taking this route, I shall be arguing that, for analysis of our food cultures, these everyday experiences of tasting the country have particular cogency. They issue a challenge to re–think cultural memory's nostalgic appropriations by acknowledging contingent positions for remembering. Furthermore, they hint at forms of selective eating—a judicious consumption of imaginary landscapes and symbolic produce, and a consumption in which both personal histories and public memory are enmeshed.

And now to set out on this journey, drawn by its customary lure. Only two hours' drive from Sydney (or Melbourne, or Canberra, or Adelaide), we are assured, the romance of country awaits, together with countless settings and scripts for its enactment.[18] In this paper, I shall examine accounts of two potential destinations, as symptomatic of differing ways to map 'the rural' in everyday imaginaries.

On Our Selection?

"The Settlers Hut is no less than a living museum piece of Australia's colonial past. It has that feel of grandma's place—of slower times, of shelled peas, baked scones, freshly brewed tea and of quiet fireside chats."[19]

Our first 'short break' occurs in a bushman's timber slab cottage, relocated from Crookwell near Goulburn to a site near the banks of the Wingecarribee River in the historic township of Berrima. Restoration of this rustic retreat, says the reviewing journalist, has involved "an almost obsessional quest for authenticity" that includes curtains literally strung across the windows, an original Early Kooka, a meat–safe, and crockery with crazing. Furthermore, the reviewer notes with some irony, "even the blowies buzzing at the kitchen window seemed integral to the pioneering pleasure". This is the set, then, for a nostalgic re–play of the Anglo–Celtic colonial bush romance, aided by a bricolage of props—copies of Mary Durack's books and *Brent of the Bin Bin*, "shelves piled with bric–a–brac bought from country antique auctions".[20]

Meanwhile, an iconic presence hovers amongst the sets for this performance. This is the figure of grandma—the ghostly feminine of comfort, who nourishes, cares and, significantly (in both the mythic past of slower times, and the mythic present of ageing femininity) always has time to listen. The spirit of grandma, of course, has many manifestations, whether it pervades marketing discourse for country–style furniture, or restaurant menus offering nursery stalwarts such as bread–and–butter pudding, re–invented (fortunately, in my experience) as smart cuisine. Likewise, grandma, displacing her Anglo–Celtic heritage for a more interesting ethnic one, might transform into Alan Saunders' image of the 'ultimate peasant cook' with her cooking pot and single knife[21]—a fantasy figure and commodity style that haunts the popular search for that authentic ethnic restaurant.[22] Alternatively, grandma might re–appear as the familiar kitchen matriarch in those tributes paid to mothers and grandmothers by grateful chefs. As Stephanie Alexander, remembering her childhood in the late 1940s and adolescence in the 1950s, says: "Banksia Park was a summer wonderland and we ran wild... In winter we wandered happily through the green tea–tree of the foreshore. I searched out clearings where the dainty native orchids grew in spring, and won maternal approval by gathering the mushrooms that pushed up through the thick layers of tea–tree leaves in autumn. But we always came home for Mum's food".[23]

So, in spite of adventures and wandering at large, following the rhythms of the seasons inevitably the traveller returns. In both Alexander's remembering and the reviewer conjuring up grandma, woman, food and home together form powerful connections exerting a magnetic attraction. Only two hours' drive (or so) from Sydney (or Melbourne etc), a symbolic home and a beguiling ensemble of identities (Country/Woman/Grandma/Mum) await our nostalgic investment.

It is no wonder the 'short break' beckons. Simultaneously, we can taste the other in time and space while ingesting the homely mother. In the Settlers Hut, in particular, opportunities for transgressing the boundaries of strange and familiar seem endless.[24] For example, here it is possible to time–travel in curiosities such as a claw–footed bath or a high four–poster bed, yet acknowledge their comforting familiarity. Bath, bed, meat–safe, crockery—all of these are recognised signs of the rural and of the past in public memory, whether displayed as family heirlooms, museum pieces or market commodities.

Likewise, in this 'short break', sensory pleasures can satisfy longings for other spaces. No longer hidebound by the contemporary, the urban, the visitor is invited to sample exotic, but instantly recognisable, meanings of romance in moments of evening firelight and morning mist over the river. Furthermore, in this complex consumption of strange and familiar, mythic national identities and landscapes of country can be pursued without leaving home. Here, meanings of home are condensed into its pivotal figure—the mother of shelled peas, baked scones and freshly–brewed tea. Of course, this is the mother who is always there, shelling, baking, brewing, and ensuring food is fresh, hot and ever ready. Nurturing Mother transcends the landscape of country to become figure of national desire. So, it seems that "we always came home for Mum's food."

Curtis and Pajaczkowska argue that, for the traveller, eating becomes a way of negotiating unfamiliar cultures where communication through language is denied—a way to "experience the innocent sensuousness of pure appetite".[25] In similar fashion, want to argue that eating the mother (mother's milk, mother's cooking, dreams of mother) becomes a way of negotiating familiar cultures. Like coping with foreign travel and its contradictory outsider/coloniser identities, perhaps day–to–day living in the late 1990s is equally fraught with contradictory imperatives and power positionings? Perhaps the solution lies in symbolic returns to a pre–linguistic childhood state—a childhood of tasting, touching. smelling? For it is here that sensory embodiment in the spaces of home

is everything, with formal language, to some extent, redundant. This, then, is the satisfying "feel of grandma's place" or Bachelard's landscape of remembered childhood where "life begins well... all warm in the bosom of the house".[26] Distinctions of home/away, escape/return, urban /rural have now become somewhat blurred. As well, conventional oppositions of home/nation, childhood/adulthood, innocence/experience look a little less secure. Firmly positioned in the landscape of country, memories can afford to be free-range.

Likewise, it is possible for consumers to pick and choose—to follow or vary the multiple scripts of country that the Settlers Hut represents. Although grandma is only present here in imagination to brew and bake, the makings of real breakfasts are provided, and restaurants and cafes "with the most scrumptious sounding food" are nearby. Nevertheless, Linda Morris concludes, "there is something novel about cooking in black ironstone pots... with... utensils predating the introduction of plastic and Formica". In other words, an occasional performance of traditional rural femininities is valued as a playful appropriation of mother and her cooking, and as an ironic comment on the power relations which frames these identities. Such performances easily become morality tales—reminders of the relentless labour of love from which the so-called modern woman (attach here her specific positions of class, ethnicity, age, locality etc) has escaped of course, it is obvious that Morris does not really want to be grandma—except in these occasional acts of consuming novelty. In fact, the charm of such activities depends on their difference from the mundane routines and rituals of daily life, on their non-compulsory nature, and on the presence of desirable alternatives. ("For," says Morris, "there are always restaurants available if you would rather have someone else do the cooking.") Instead, hints of a critical counter-narrative emerge. Commenting that the original owners of the slab hut, transported into the present, doubtless would "have gladly traded up for a larger residence, pool, dishwasher and double garage," Morris partially refuses that "quest for authenticity". In other words, while blowies might add to the romance of 'simpler times', the faithful reproduction of typical working and living conditions might not. In recognition of this, Morris notes that at least the Settlers Hut has "(thankfully) a dual flushable toilet, hot and cold running water and a small bar fridge". The attraction of novelty, in re-creating hard work and austerity as play and creature comforts, obviously has its limits.

So, Morris certainly does not want to be grandma in any substantial way. However, I suspect she wants to have a grandma (and don't we all?). The fantasy of the rural does not necessarily involve positioning the self in its work relations, or, if it does, the desired location tends to be one of privilege. While Morris and companion "lie outstretched on seagrass chairs on the river meadow and toast [the settlers]... and simpler times," meanings of grandma and her nourishing labour, and the actual efforts of this site's service providers, are raided for a childhood fantasy of being cared for, and for an adult one of perpetual leisure. This, after all, is the essence of performance—an active process of selecting some meanings (comfort, leisure) while omitting others (drudgery, fatigue). So, the return to country, to home, and to mother is hardly innocent. Both host and guests participate in filtering meanings and memories of country' for its selective presentation. This is a return, then, that requires a complex performance of present and past, fantasy and memory, underwritten by multiple regimes of power, in which gendered meanings (along with those of class and ethnicity) play a considerable part. On our selection, ideally, we can select our place.

Hotel Sorrento

"On our deck, in the light of an almost full moon, we feasted on Pad Bai Kra Pao Talay... and seriously good Panang Curry and ignored the rules of this-drink-goes-with-that food and shared a bottle of champagne as the cows chomped alongside."[27]

Our second 'short break' is in the hills above Berry on the south coast of New South Wales.[28] From the outset Alicia Larriera, the reviewer, explicitly names the homestead with its separate guest cottage as home. "Before we'd been shown our rooms or even unpacked, we wanted to move in... We felt that our host... was showing us... to our own home," she says. Three days of bucolic bliss follow. The account concludes: "Forget moving in, we want to be adopted". Love at first sight? A tale of the goosegirl-princess finding her true heritage? This article offers a wealth of romance readings. However, there are a couple of its threads that I want to follow

briefly, building on concepts of performance and place as integral to the tourist fantasy.

Philip Crang argues that: "The production and consumption of tourism are fundamentally 'geographical' processes. At their heart are constructions of and relationships with spaces and places... In turn these places and spaces operate as settings for the performances of both producers and consumers, helping to establish the precise character of the tourism product and its performance.[29]

Tourism settings are more than meaningful representations requiring performance, they are also, to use de Certeau's language, structuring spatial strategies that are tactically inhabited and used..."[30]

Crang elaborates these arguments through, for example, reference to Bouquet's study of farming families in south west England who offer bed and breakfast accommodation to holiday–makers. The work involved in doing this is, for the most part, the responsibility of the women of these households. From this study Crang draws two critical perspectives. Firstly, through this work of tourism, farms are re–constituted as sites of intersection for urban and rural discourse—both hosts and guests perform their home cultures for each other, as well as re–negotiating each other's culture. Secondly, meanings of domestic privacy and traditional hospitality are also re–worked, with these revised meanings structured spatially in order to accommodate the anomaly of paying guests.[31]

Returning to that place that Alicia Larriera wants to call home, what kinds of performances are on offer, what kinds of meetings of city and country occur, what kinds of negotiations are required to ensure home as a space that is both public and private? From the start, it seems that this is a home that mediates meanings of city–in–the–country—a home which enfolds both the cosmopolitan and the rustic in peaceful co–habitation. For example, in Larriera's account there are references to "Corbusier–style leather chairs," glossy magazines such as *Vanity Fair* and *Marie Claire*, offers of Pimms by the pool or Lindt chocolate at the end of the day, and the possibility of seriously good Thai/Malaysian food. All these signifiers of global consumption and Euro–cosmopolitan taste are seamlessly interwoven with references to Arcadian views of gentle pastures where cows graze, or walks to a waterfall "nestled at the rear of the property" and blackberry picking near a "historic graveyard". Like English country houses, comfortable seaside hotels, and villas in France and Italy beloved of *Gourmet Traveller*, this south coast retreat promises a plethora of meanings of city and country, of global and local, of home and hotel. In fact, the reviewer appears anxious to strengthen this connection of the homely–cosmopolitan. Almost in one breath she speaks of both home–baked banana cake and Lindt chocolate (much as in five–star hotels, except they rarely lay chocolate that good on the pillow). So, at the intersection of nostalgic longing and global consumer consciousness, the host performs the tourist product—a product containing multiple and flexible narratives for identity (the gourmet, the nature–lover, the blackberry–picker, the local historian). At the same time, the guests perform as tourists—in this case, the knowing tourist of brand–names, styles and rules of social life.

However, despite its emotional pull, home is not without regulation and constraint. Likewise, with all its pleasures for the taking, this is not a domain without work. Meanings and spaces of privacy, usually regarded as the core of domesticity, must be re–negotiated by the host who invites the public into her home, and by the guests seeking homeliness in a space that is not home, but anxious to purchase its nostalgic meanings. Certainly, guests may revel in the privacy of self–contained quarters. However, such quarters also effect a significant spatial separation from the host, with the rules of contact clearly delineated (for example, whether host and guests will dine together). Even the offer of breakfast in bed is both gesture of intimate caring and strategy of spatial distancing. So, although Larriera admires the main house—the homestead heavy with wisteria, the real home—her place clearly is in the cottage behind, the stage for homes performance.

This performance, however, requires management. At times this labour is invisible, with only its products in evidence. "What pleasure to return from an excursion to Berry to find your bed freshly made," says Larriera. Like Morris' contented lazing on the river meadow outside the Settlers Hut, here again is an enactment of that ultimate fantasy that housework simply disappears, or is undertaken by competent, unseen hands. Aside from its obvious class inscriptions, this is a fantasy that has particular resonances for woman—for feminine identities vested in domestic work, and shaped by relations of power that assign this work primarily to woman.[32] The

gendered spirit of grandma, together the classed and gendered one of the faithful servant, returns in a new and more sophisticated, cosmopolitan guise.

Nevertheless, although work may take on the character of invisibility, the host of this 'short break' plays an active part in managing her guests' performance of country life. "Perrie... was showing us... Perrie was wondering whether we'd like a Pimms by the pool... Perrie's hospitality... Perrie... bothered... the next afternoon she baked us a... cake... Perrie's son... led us on an adventure." Continual reference to the host throughout the text implies that an agenda is being carefully staged for guests' own participation in the fantasy of country. Particular routines and rituals (of food, rest and recreation) are to be established, although there is a necessary flexibility about their observance (breakfast in bed is refused). So, not only are the spaces of home to be managed, but guests' time needs to be structured as well. An implicit menu of activities is always on offer (a pool to swim in, a child to walk with, chairs to nap in) for the illusion of freedom and endless leisure.

Crang observes that in "tourism encounters... positionings of producers and consumers are not necessarily static". For example, he argues, employees might adopt resistant tactics with customers to exert some measure of autonomy within workplace constraints—tactics such as arriving to wait on a table "just that few seconds later than demanded... [or] moving off that fraction too early". On the other hand, "Performative work may be experienced more positively".[33] Although recognising constraints operating in provider–consumer exchanges, employees might use such exchanges as sites for playful identity performance. This is in much the same way (as recent work in cultural studies emphasises) that everyday consumers of fashion, music, sport or household goods, raid these cultural sites for identity meanings.[34] So, a degree of canniness and creativity is required, both to accommodate the needs of guests, and to meet one's own needs in regard to independence, privacy and work satisfaction.

Presumably, consumers of tourism likewise develop capacities for canniness, as well as specific tactics of resistance. Certainly, guests arrive with their own agendas for managing consumption, whether these agendas concur with, or diverge from, those of the host. My point is that such interactions (between producers, consumers; hosts, guests; servers, served) are necessarily mobile ones. If these interactions are to be productive for all concerned, constant re–negotiation among participants is required, together with the exercise of considerable personal skills.

For example, Larriera remarks in passing: "It was a little strange to discover that Perrie was a colleague, a part–time sub–editor at the *Herald*". The crucial question here is: can that homely figure of grandma or of caring mother not only be chic and cosmopolitan, but also be a journalist, a colleague? Fortunately, in the postmodern landscape of country, identities are sufficiently elastic to keep ambivalence about positioning in check. And it is here that memory might lend a hand, softening potentially uncomfortable aspects of server–served relationships with alternative points of connection and different identities for interaction. ("It dawned on me", says Larriera, "that... [Perrie's] was a face from the Fairfax kiosk, a fellow coffee addict.") In remembrance of coffees past, one cosmopolitan professional recognises another, displacing more disturbing recognitions.

Going Back

Ghassan Hage complains that the cosmopolitan experience of tasting other foods, other places at local ethnic restaurants can produce discourses of diversity in "a field where migrant subjects have been erased, and where the central subject is a classy and more often than not an 'Anglo–cosmopolitan' eating subject".[35] So, by defining diversity simply in terms of the number of opportunities to 'Eat Korean' or 'Eat Portuguese', or in terms of the range of ethnic restaurants available in home suburbs, we are producing a multiculturalism without migrants—a culinary landscape in which commodities of style are detached from the cultures they reference. For: "in the cosmo–multicultural version of things, if an area is more multicultural that another, this appears to have less to do with who inhabits it, who makes a home in it, and the degree of interaction between different cultural subjects within it, and more to do with what multicultural commodities are available on its markets and who has the capacity to appreciate them".[36] If meanings of multiculturalism can be emptied of migrants, perhaps those imaginary landscapes of country are likewise emptied of their local inhabitants? So, do

these landscapes now become a country without producers, workers and home–builders, for example, with only the styles of country (and particular styles at that) in evidence, and available for tourists to purchase?

However, viewed differently (and taking up Hage's political challenge against erasure), these rural landscapes look busy with activity, and resound with competing voices.Throughout this paper, there are traces of different maps being followed in everyday imaginaries, and shifting positions in everyday negotiations. Certainly, John Howard, in his recent attempt to dampen some of the fire of the Wik debate, might declare: "Australia's farmers, of course, have always occupied a very special place in our heart".[37] This may be so, mythologically speaking, but I suggest that 'special places' for contemporary Australians are more nuanced and more subtly negotiated than Howard's sentimental statement suggests. Furthermore, occupying these places (either as residents or visitors) might call for a range of skills that include flexibility, assertiveness and inventiveness. In fact, negotiations of constraint and pleasure, of personal longing and public nostalgia, of commodity provision and purchase are tricky ones indeed, and ones with potential to subvert such oppositions as urban/rural, tourist/local, with their prescribed power positionings.

In this paper I have suggested that a 'special place' for these negotiations is, perhaps, that landscape of home—that place where Helen Edwards "could happily be in, and not die of frustration," or Marion Halligan's "places we have been happy in". Nevertheless, in the sphere of public life, it is the work of cultural critics to ask: whose longing is to be satisfied, whose imagery of home is dominant in the cultural imaginary? Massey suggests that it is those who feel loss of power in the current mood of time–space compression, disappearance of national communities and unstable, contingent positions for identity.[38] Perhaps this explains why, in the public cultures of government and media, those who appear to have most to lose are those who look back to grandma's place, and to the comforts of conservative power positionings?

Meanwhile, for analyses of the everyday experience of the country, whether as tourist or local, as producer or consumer, I suggest there is much critical work to be done. My discussion of examples of tourist and travel writing hints that there is a wide range of stories and perspectives available to enrich our meanings of country, and to expand our consumption of cuisine nostalgie beyond its dominant menu of middle–class, Anglo–Celtic, mother–centred offerings. Indeed, such stories and perspectives might question the unproblematic adoption of these nostalgic images and discourses, anyway, and instead might focus on ways to respect difference and to foster interactivity between different communities and cultures.[39] Primarily, however, it is important to recount tales of country that recognise figures in rural landscapes as autonomous subjects—as workers with particular skills and knowledges, as inhabitants whose 'place' is negotiated on a daily basis—rather than simply as vehicles for urban imagining.

So, for those concerned with Australian gastronomy in the 1990s, and with the cultural phenomenon of gastronomic tourism in particular, I suggest there is a task that lies ahead. This is is to re–conceptualise remembered food cultures, re–mapping these as active and multiple mediations of food and place in everyday life. Such a project might indicate productive ways of challenging the politics of globalisation, and of questioning conservative positions in relations of class, gender and ethnicity, together with their nostalgic commodifications. Or as Joanne Finkelstein said to Robert Dessaix (in their conversation about restaurants, but one equally applicable to analyses of cultural tourism in general, and to analyses of 'short breaks' in particular): "We're becoming very good performers. The fashionability of the restaurant increases that tendency and reinforces our desire to play at certain images... [but] I'm... critical of the kinds of performances we're engaging in. I'd like us to have better ones—richer, more reflective, more elaborate."[40]

Footnotes

1 Ali Gripper, 'Far from the Maddening Crowd', *The Sydney Morning Herald*, October 2, 1997, Domain/p.8.

2 Marion Halligan, *Cockles of the Heart*, Port Melbourne: Minerva, 1996, p. 227.

3 Postcards from the Edge: Sydney's Real Estate Refugees, *The Herald*, Domain, Front Cover.

4 See examples: Sally Hopman, It's a Perfect Life for City Refugees, *Sunday Times*, September 28, 1997; Jennifer Stynes, Law of the Land, *The Sydney Morning Herald*, June 26, 1997; Ben Hills, Pick of the Crop, *The Sydney*

Morning Herald, November 22.

5 Hugh Mackay, Reinventing Australia: *The Mind and Mood of Australia in the 90s*, Pymble, Angus & Robertson, 1993.

6 David Carter, Future Pasts, in David Heaton, Joy Hooton and Donald Horne eds, *The Abundant Culture: Meaning and Significance in Everyday Australia*, St Leonards, Allen & Unwin, 1995; Robert Freestone, The Great Lever of Social Reform: *The Garden Suburb 1900–30*, in Max Kelly ed, Sydney: City of Suburbs, Kensington, University of NSW, 1987; Michael Symons, *One Continuos Picnic: A History of Eating in Australia*, Adelaide, Duck Press, 1982.

7 Hugh Mackay, Reinventing Australia: *The Mind and Mood of Australia in the 90s*, Pymble, Angus & Robertson, 1993.

8 David Bell and Gill Valentine, *Consuming Geographies: We Are What We Eat*, London, Routledge, 1997.

9 Maggie Beer, *Maggie's Farm*, St Leonards, Allen & Unwin, 1993; Stephanie Alexander, *Recipes My Mother Gave Me*, Ringwood, Viking, 1997.

10 Curtis and Pajaczkowska note a generally accepted hierarchy in the activities of exploration, travel and tourism. Furthermore, while exploration and travel involve some risk and the possibility of transformation of identity through coping with the unfamiliar, tourism (especially package tours) is predominantly dedicated to putting back into the risky business of travel some of its guarantees—the itineraries, insurance and secure destinations which are a part of everyday life.

11 Hugh Mackay, Reinventing Australia: *The Mind and Mood of Australia in the 90s*, Pymble, Angus & Robertson, 1993.

12 Jean Duruz, Out of Tuscany? Tasting a Country and Renovating Identity, paper presented to Objects of Belonging: Consumption, Culture and Identity Conference, University of Western Sydney, October, 1997.

13 Interview with Helen Edwards.

14 Interview with Helen Edwards.

15 Interview with Helen Edwards.

16 Interview with Helen Edwards.

17 Doreen Massey, *Space, Place and Gender*, Cambridge, Polity, 1994; David Bell and Gill Valentine, *Mapping Desire: Geographies of Sexuality*, London, Routledge, 1995.

18 Annually *The Sydney Morning Herald* incorporates in its *Good Weekend* supplement a feature that describes potential weekends away.

19 Linda Morris, Take Two, *The Sydney Morning Herald*, November 9, 1995.

20 *Ibid*

21 Alan Saunders, *A is For Apple*, Ringwood, William Hienemann, 1996.

22 Hugh Mackay, *Generations: Baby Boomers, Their Parents, Their Children*, Sydney, Macmillan, 1997.

23 Stephanie Alexander, *Recipes My Mother Gave Me*, Ringwood, Viking, 1997.

24 See Linda Morris, Take Two, in regard to all quotations/references to the Settler's Hut.

25 Curtis and Pajaczkowska, Getting There, in George Roberts, Melinda Mash, Lisa Tickner, John Bird, Barry Curtis and Tim Putnam eds, *Traveller's Tales: Narratives of Home Displacement*, London Routledge, 1994.

26 Gaston Bachelard, *The Poetics of Space*, Boston, Beacon Press, 1969.

27 Alicia Larriera, Bucolic Bliss, *The Sydney Morning Herald*, April 12, 1997.

28 Alicia Larriera, Bucolic Bliss, *The Sydney Morning Herald*, April 12, 1997.

29 Phillip Crang, Performing the Tourist Product in Chris Rojek and John Urry eds, T*ouring Cultures: Transformations of Travel and Theory*, London, Routledge, 1997.

30 *Ibid*

31 *Ibid*

32 Helen Grace, Icon House: Towards a Suburban Topophilia in Helen Grace, Ghassan Hage, Lesley Johnson, Julie Langsworth and Michael Symonds, *Home/World: Space, Community and Marginality in Sydney's West*, Annadale, Pluto, 1997.

33 Phillip Crang, Performing the Tourist Product in Chris Rojek and John Urry eds, T*ouring Cultures: Transformations of Travel and Theory*, London, Routledge, 1997.
34 Celia Lury, *Consumer Culture*, Cambridge,Polity, 1996; Stuart Hill, The Meaning of New Times in David Morley and Kuan Hsing Chen eds, *Stuart Hall: Critical Dialogoues in Cultural Studies*, London, Routledge, 1995.
35 Ghassan Hage, At Home in the Entrails of the West in Helen Grace, Ghassan Hage, Lesley Johnson, Julie Langsworth and Michael Symonds, *Home/World: Space, Community and Marginality in Sydney's West*, Annadale, Pluto, 1997.
36 Ghassan Hage, At Home in the Entrails of the West in Helen Grace, Ghassan Hage, Lesley Johnson, Julie Langsworth and Michael Symonds, *Home/World: Space, Community and Marginality in Sydney's West*, Annadale, Pluto, 1997.
37 John Howard, Prime Minister's Address to the Nation cited in *The Sydney Morning Herald*, December 1, 1997.
38 Doreen Massey, *Space, Place and Gender*, Cambridge, Polity, 1994; David Bell and Gill Valentine, *Mapping Desire: Geographies of Sexuality*, London, Routledge, 1995.
39 Symons argues that multiculturalism should not be trivialised as being merely about "spaghetti and polka". Multiculturalism is important precisely for what it can do to our own food, shelter and clothing. Michael Symons, *The Shared Table: Ideas for an Australian Cuisine*, Canberra, AGPS, 1993.
40 Robert Dessaix, Conversation on the Civility of Dining Out, *Meanjin*, 49, 1990.

Panel Discussion

Panel Discussion
Barbara Santich: Thank you Jean. I think we should also ask Jean to do a similar analytical perspective on her little sojourn in the country for these couple of days, and see what meanings she might find in it. If you would like to stay here and we'll ask the other speakers to come up for any questions. Michael Symons and Rosario Scarpato would you like to come up here and we'll ask for questions from the audience for any of them.

Alan Saunders: I've got two comments—one's about Rosario and one's about Michael and I can't really unite them, so I'll just do them separately.

Rosario, I hugely enjoyed your paper and I think it's wonderful to have such a paper—it makes a bit of a change at one of these Symposia to have a paper that unashamedly embraces the Postmodern. If I had one tiny point to make about your paper, it is that I think perhaps you overestimated the difference between the postmodern world and the world of the past. I think you loaded the argument a bit by choosing the potato as a slow moving tuber around the world. I think if you had chosen the turkey, or the chilli, they seemed to move with impressive speed from the Americas to Europe, and in the case of the chilli from the Americas to Europe and then to Asia And then of course we have examples like Japanese food embracing deep frying tempura and tomkatsu and so on.

But Michael, I was deeply puzzled, I have to say, by your paper. What puzzled me was that it seemed to me you were setting up some false oppositions. You thought you were talking in defense of materialism, and nothing that you said was incompatible with materialism, but it in fact seemed to me the position that you were defending was a sort of reductionism or methodological individualism, which are not the same as materialism.

I mean, what is it that makes economic rationalism rational? Well, supposedly, it's that it is based on the notion that human individuals will behave rationally; and the concept of rational being used here, which I don't fully embrace, is that they will try to maximise their advantages and minimise their losses. And the supposition is that a large number of people behaving in that way will more efficiently produce an outcome that is beneficial for all, than Governments trying to interfere in this very complex process will. So you have a

large number of people acting selfishly, rationally, and from this there emerges a system, a complex system.

You seem to assume that as soon as the talk is of complex systems of this kind, then we have entered the realm of the mystical, or of the idealistic, and it seems to me that you were mystifying the economic realm unnecessarily. And it wasn't at all clear to me that the position you were defending was incompatible with the position you thought you were attacking. So your paper seemed to me to have a rather strange feeling of two blind men dressed in black fighting each other in a cellar at night. You know, they weren't landing the punches on each other, the two antagonists that you set up.

Michael Symons: Can I go first, while I try to hold together what you've been saying. Well I'm glad you asked you know that sort of thing! Economics does come out of what I would call a materialist history, which is probably what's in the back of your mind. Economics is very much part of—it inherits almost directly from say, Epicurius. Many of the great economic thinkers, early on particularly, were very much influenced by that strain of thinking, as against the Platonic or whatever. So how come then—this is how I'm interpreting the question anyhow—how come, following an Epicurian materialist, as I call it, strand, you end up being idealist? And that, I suppose, is the point I was trying to make.

The point is, sure we should look at markets. Sure we should see the individual pursuing their own goals as really important. But, what goes wrong is, once we start doing that and saying let's do some sums, let's put it into our computer, or let's do equations which demonstrate how these accumulated effects dictate what people are doing, then we go wrong. Once you start to transform those sorts of insights into an airy–fairy science that's the problem and you get, you know, these huge distortions where you don't have economic goals pursued by individuals, but by totalitarian bureaucratic corporations who don't act like selfish individuals or whatever, like we set out with, but act in totally different ways; setting up totally different idealogies and totally different logics that they want us to follow. That's where it goes wrong.

I doubt if I've helped Alan, but I hope I've helped someone else! I'm not a student sufficiently of economics—never admit to deficiencies when you're speaking!—but really that's something I want to get on to look at. Where did the Epicurian materialist, where did the empiricist as opposed to rationalist, the hedonist as opposed to aesthetic, where did that get transformed into this ideology, this mystical science, this thing that can be pushed at us as this new God in our lives, that's telling us how to run a country? That's what I'll look at in a bit more detail. I think John wants to help me there.

John Fitzpatrick: I think there are two levels of this, and one is that obviously economics is a reductionist science, a reductionist activity, it's a reductionist way of mapping and you could think of it say like a subway. If you go to a city and there's a subway map and it tells you how to get around the city, and there might be a map of trams which tells you a more complex way to get around the city, and a map of streets and then you actually ask people. There is a sense in which you lose fundamentally a material reality, you lose complexity etc. as you move toward this level of reductionism, but reductionism in that sense may still be useful. I mean subway maps are useful. They give you a sense of power, they let you get around.

There's something else that's particularly important that's been going on in the last twenty years, and that is the rise of what is called economic rationalism with capital letters and so on, and that is the way in which a particular form of movement of money has separated out from other forms of economic activity and investment of capital and so on. And that is the capacity of money to just move in a microsecond; and to move on no other basis that's connected with anything else is what I think is most astonishing here.

Michael talked about the market. If you listen to the way they interview these people, they talk about market sentiment, for example: what does market sentiment say?. And what is market sentiment about? Markets ask: are they going to wind back the welfare state? Are they going to do this? Are they responsible in that sense or not? I think that in a sense the people who are making these judgments are childish in many respects.

Jean Duruz: I'd like to make a quick point, that these arguments fit into a sort of intellectual convention, and

just to add to the materialist convention, I read Karl Polyani recently and he couched it in a literary way: that economic rationalism or the free market which he was talking about in the forties, was a fiction. He actually refers to it as a fiction, so it's often caste in these terms. The real versus the non–real, and it's a dialectic. I think it's a true dialectic, not as this person here has caste it, as a false dialectic.

Barbara Santich: Any other questions?. Would you like to reply, Rosario?

Rosario Scarpato: Alan made a comment, I think it doesn't require an answer. The only thing I would like to add to my paper, and I take this opportunity to do it, is that I think that this Symposium, as my first experience, was a very exceptional experience. However the only thing that I should say is that we should also be worried about aesthetic problems for gastronomy. I mean we are all operators involved in different fields,but I feel that there is one huge commitment which the Symposium should have. This is a Symposium of Gastronomy; gastronomy should be the first—I think we didn't debate the aesthetic part of gastronomy. Why we cook, the ways in which we cook—we were worried about all the other problems. That's something very unique and very good, but there is an artistic level in gastronomy. That gastronomy, according to my view, wasn't debated in an extensive way. That's the only comment I'd like to add.

Barbara Santich: Elaine, did you have something to say?

Elaine van Kempen: I'm just going back, back to the visit to Grandma, I mean the whole thing is a great joke isn't it, because going to stay at Grandma's usually meant getting up very early in the morning to help milk the cows; only being able to have an inch and a half of water in the bath because it hadn't rained and the tanks hadn't filled; and so what you described as going back to Grandma bears little relationship to any Grandma that anybody ever went to see.

Jean Duruz: It can only really operate as a fiction. I have interviewed people for a project about something else and just incidentally some of them had country childhoods and they mentioned the drip safe, but it's very much in that context. They still felt sentimental about it, but how hard life was, you know we're talking here about growing up in the thirties for instance. But, coming back to the Bed & Breakfast, it only operates as a sort of commodity style if it's a fantasy. Who actually wants to think about the drudgery. If you want it as a holiday, you want it to be totally fantasy. You don't want to be reminded of the labour that underwrites that fantasy.

Barbara Santich: Michael, would you like to comment on Rosario—or vice versa?

Michael Symons: Well, I must say, that if he hasn't read *The Shared Table* I recommend he does, because that is actually a study of global cuisine, or the proposition that we've moved into a global cuisine, and is that a good thing or not? And the answer that I pursued in there, I hope perhaps helps illuminate what I was saying earlier.

And also my comments on both the other two papers; the answer I came up with is, that if we talk about something like authenticity; the usual sense that that's used in, is something that's culturally authentic. In other words that it is like the previous recipe; that you are doing, using, the same culture as Grandma, or that you are doing the same culture around the world. And I wanted to enlarge that idea, to bring back qualities of authenticity which are lost in that, and I've spoken about two other levels—the social and, let's call it, natural And I want things to be authentic, not just to cultural practices, but also to social behaviour and activity and relationships and also to the natural, material, strictly material, parts of our existence, namely our bodies and the natural environment.

So what goes wrong with all these things, in my interpretation, is that there's an adherence to the imaginary, or the cultural, or whatever we wish to call that level, without paying enough attention to what's going on socially between people, and particularly what is going on with our bodies and our world—our physical world.

And you can't just be culturally authentic and just do the way things have been done on in the past, you've got to maintain an authenticity, a harmony between all these other things as well. So I've gone through a sort of vertical model. I've said that this culture at the top, this meaning, has to relate to the physical world that we're in—it can't detach itself. Our social relationships also have to be interconnected to all this.

And to get back to my argument, where these things all come together—they start from—where the cultural, where the social, and where the natural really meet, is in the meal. So those meals have to be authentic at all those levels, and then you'll have a better, a more authentic, more gastronomic cuisine and a more gastronomic B & B experience.

So that for example, you missed out climate. And I've argued that climate is extremely important. And you missed out the environmental aspects, like the ecological degradation of shipping foods around the world. Things can be totally inappropriate, I would argue, climactically and geographically. You can't just have this global cuisine. You can't just have a fictitious cultural level understanding of a cultural level experience, allegedly, in a B & B

Rosario Scarpato: I can reply to that. I think that this is the first time in history that people that are cooking and people that are dining who are attached with the reality of the things that you are mentioning. I think that never before has there been a mentality of healthy food. You know in the past what was happening. They were destroying agriculture just for the pleasure of one person, maybe the King or an aristocratic family. I think you are right when you say there are constraints, and there are things that must taken into account. What I'm trying to prove, that people, the operators of this gastronomy, are much more aware of all these things than people in the past.

I'm an optimist, that's probably my main problem. Because I believe that today we are in a better position in the field of gastronomy, of eating well, eating better. And we are much more attached to reality than people in the past. Personally I enjoy good eating, but I'm very concerned also about my health. And like me, all the other people in this room probably are as well.

You said before that the stomach is limited. Probably this is the first time in human history that we are realising that we are not eating just because we are hungry. We are eating for pleasure. This story of food and sustainability, is related to the fact that people are/were dying because they're starving. Gastronomy of the past was based on this. That's why we didn't have some development in an artistic sense, in my opinion, of gastronomy.

So I think when you say "You must also take into account this," I am already doing this. I'm saying that if you go to Cheong and you ask: "What are you doing there?" Cheong will explain to you that he is trying to cook tonight's dinner taking into account all those things that we are worrying about here. Plus he is also worried about the next generation. I'm saying that, in the end, this is a counter–revolution. I'm saying, I'm a result of this personal dynamism. Practically all of history the gastronomers were dreaming. Why can't gastronomy do that? Of course I think we should respect nature.

And I would also like to reply to the observation that Barbara made before about Ravel. I'm not denying that there is an international cuisine and a regional cuisine. What I'm saying is that there is a third cuisine. There is a level, a transversal level that is of culture and philosophy. And this is probably the biggest achievement of global gastronomy, become for the first time we are not just cooking to feed people.

You said this morning, even if we wanted to accept the idea that we are eating just because we would like to share time, that's already a huge achievement. But if you go back to my paper, we never thought that cooking was a philosophical theory, a philosophical way to do something that is linked with our very being. And if you look at our history, cooks were welders. The rich were just there to destroy the environment.

I can't see why globalisation in cuisine is something negative. I understand the risks and I'm saying one of the ideological parts of a global cuisine is to be conscious of the risks. But the serious globalist in cuisine doesn't cook the food of the multinationals—refuses the idea of this; appreciates the localism of the ingredients.

Yesterday I was saying that as gastronomers, we should be worried and be in touch with the local. This was a good point, but it has been the point for the last two hundred years. We should also be worried of globalism.

We should find a way, as operators in this field, of how to have the two things interacting. And we should do this at an aesthetic level, because we can't do it at an economic level—we don't have enough power. We are—if we believe in the artistic message, or the aesthetic message, or the philosophical message—refusing the idea that ideas can be stronger, like money.

I always remember the first time I was taught about pre–Socratic philosophers. They were good philosophers and we are still relying on them, but if they weren't good enough to sell olives, they didn't have anyone listening to them. I still believe that we should be able to sell our olives—I'm talking olives—good things I mean, things that survive—but at the same time, we should be philosophers ourselves, particularly if we are dealing with food. I think that today we are finally finding this truth. If Plato had written that cooking was a noble art, today we would be in a totally different world.

Jean Duruz: I just wanted to comment on the authenticity stuff. This is sort of just spinning sideways from what you just said Michael, but I certainly didn't want to give the impression that on one hand, you know, you can be the inauthentic tourist, you know, you go in and it's totally commodified. On the other hand you're the authentic person with the memories of the farm holiday who was actually there and has all this sort of treasure trove of memories to bring to it. I mean I think it's much more complicated than that, and I don't want to create that kind of polarity between the tourist and the rememberer, because I think we all take a kind of baggage which is a complex mixture of our memories, and of kind of dominant discourses and images that get circulated in the market.

I guess what I was really trying with this paper is, yes maybe we just need to think about the kinds of opportunities for fantasy performance that are offered to us. Because I'm not against fantasy. I went to this mansion near Port Elliot in South Australia, and ten of us played at being in a Tuscan villa for a week, it was fabulous. So I'm not against fantasy but I think that, for our own imaginative kind of enrichment, we need to look at opportunities that breed respect for people, that are not ripping people off. That we don't necessarily fall in with capitalist market style as the only kind of way to represent the rural. I should say I've had these fantasies and lived in the country, so I'm not coming just as a city person fresh from Rosehill going out to the sticks. But rather I have this continuing tension. One time it's the Barossa, another it's twenty acres out of Ballarat and another time its Bacchus Marsh. I think whether you live in the country or the city you always have to deal with the fantasy of the other, whatever it is.

Question From Audience: I want to ask a question of any of the panel. You talked about the cultural and philosophical side of gastronomy, and I wondered how you feel about the effects of what I see as gastronomy being divorced from the spiritual aspects of our food. A lot of our traditions actually started for a spiritual reason. I grew up as an Irish Catholic and Shrove Tuesday was always the day you had pancakes to use up the eggs and butter before Lent and it was a real celebration. I just wondered if there were any comments on that divorce from spirituality.

Michael Symons: This is a big question. We had some of this raised in the Symposium in 1990, much to a lot of people's chagrin. It surely depends on what you understand by spirituality, and the argument I would make is that you certainly don't want to have some sort of airy–fairy view of what spirituality is. And I must say, that a lot of the people who argue for a spiritual view put me right off because they are divorcing it very much from the natural, and the social and cultural. They are thinking that there is some other reality that is going to run our lives and they are in search of it.

On the other hand I very much believe in a spiritual view. I guess it's my interpretation of it, that it's very much more, it is much more I suppose as I alluded to earlier, what I understand, and I'm perhaps reading into it my view, but a bit more as I understand it, the indigenous view of spirituality, where it is really there in the everyday rather than some eternal quest for some other. It is right here. If you really want to know, I'll say it yet again—if you really want to know where spirituality is, it's in the meal.

Cath Kerry: I want to help Michael answer that question, simply because Michael's answered that question for me in the past. Because I think his paper was incredibly important and incredibly moving, I want to make sure that Michael is understood. So, I don't think he has fully answered that question, so I suppose I'm being 'Mother'. It was not to embarrass her that Michael wished Gae a happy birthday. It's very much that Michael, I say Michael but as he has taught me this, believes very strongly that we should follow patterns and rhythms and rituals. And so, I mean I believe Michael would say those sorts of things are very important, that there should be seven days in a week. We don't need bloody shopping at the weekend. We do need a rhythm that says we operate for seven days and we come to a pause. That in our life there are cycles, and birthdays are one of those cycles. And that Easter is a mapping out of the year. And those things should remain very important. Would you agree with that Michael?

Michael Symons: Why did I say that? I'm trying to think why did I wish Gae a happy birthday. I think it was more that she's been very much part of this and...

Cath Kerry: But also you see birthdays as important.

Michael Symons: I see it as a love affair, the Symposiums in many ways for all sorts of reasons, and so I think it is important to acknowledge Gae for some reason.

Rosario Scarpato: I just want to add a little to what Michael said in reply to your question about the divorce between gastronomy and reality. In one sense my paper today was a way to show you that I'm trying to link what we are eating and cooking with reality. My son, the next generation, will have not your memories of your childhood when you were eating. That's what I called the reality of history because the child of everybody, will have different memories. It is not like before, when there was just one imaginary view. Now the media has changed everything. You don't know which imaginary in the minds of which people. The amount of, and also the speed of, reality has changed. Being concerned about postmodernism in cuisine is a way to anticipate. Aesthetically, if I'm an operator, if I'm an artist, I should start to think now about what will happen with spirituality, what I'm going to cook in twenty years time.

And that's the whole point of my paper. This was a contribution, in a non–traditional way, to say that I'm linking what we are eating and cooking to what's happening in society. The papers presented after me were good, but I was thinking about the younger generations. I was thinking of a dozen people. How many of these people have the idea of Cuisine Nostalgie. I think that many of them don't have any idea. But they are probably very well aware about environment, but in terms of what they are going to eat they have other things in mind. They might go to Hungry Jack's or similar establishments. We must cope with this in reality. That's it.

Jean Duruz: I just want to say that I grew up in a very dour religious household with very dour religious food and I was so glad to escape, and this weekend I feel as if I've died and gone to heaven.

Question From Audience: I don't really want this to be the last question, but I've been wanting to ask it because with Rosario's paper, you mentioned—to me it was utopian in a sense, that sort of history's dead and now we have Utopia and I admit, I don't want to engage with Utopia because I don't think it's real, unfortunately. I mean, you know, and I know to say that somethings not real is not postmodern. I mean, I realise this, but in mentioning Plato, I think what you're doing with gastronomy, is sort of saying "Well, you know, Plato rejected it so let's make it like a pure form. Let's elevate it to a pure form like language". You're analysis seems to be looking at food as language, as sort of elements of form that we can create a pastiche of, that we can put together, and that's not problematic. I mean, you've stated that we have need to embrace globalism somewhat critically. I would argue that we should not embrace globalism without being critical. I would just put much more emphasis on the critical aspect I suppose.

Rosario Scarpato: I would like to clarify one thing. There are two aspects when we use the word 'globalisation'. One is the political one, and the other I deliberately called 'global cuisine'. It's a totally different thing. I repeat, I'm against all the degradation created by globalisation, and this is not utopia. What I'm talking about is happening. If you travel to China, China's chefs are worried today to cook something for people who are coming from overseas. They are real problems. That's why cuisine is changing. That's why this modern cuisine is much closer to the needs of the people.

We have situations in which people are eating, not for hunger. You will find that cuisine will be sometimes fiction cuisine, just spectator, just show. This wasn't happening in the past at the level it is today—it was just to show the King. Today it is happening almost everyday. The model that I'm trying to show is that, fortunately in parts of the world like this, we have still have some room to determine the direction of this globalisation. Before it becomes only McDonalds, we can say that fine dining, good dining, eating well, can be an ideology, a global ideology, to combat against globalisation in the worst sense of the word. I better stop there.

Barbara Santich: Marieke, do you have some announcements? Can I just say I'd like to say thank you to Marieke and Sarah, Lois and all of the Victorian committee for putting on a fantastic Symposium.

Marieke Brugman: At 5pm local woman are putting on a classic Aussie afternoon tea—in case the Banquet is late! So the sequence of events is, you can walk until five. Caroline Pizzey who is sitting at the back of this room is this Region's great walking expert. She's got some marvellous maps. If you don't want to have afternoon tea, you can walk until six. At 6pm there are four more campfire conversations. At 7.30pm we'll see you for drinks, for hopefully a Banquet due somewhere around eight.

I'm also going to take this opportunity to say that tomorrow, between breakfast and re-convening in this meeting room at 10am, we will set up a depositing station, it will probably be in the dining room. We'd be incredibly grateful if you would return to us one towel, one pillow case, one pillow, one sheet folded, one blanket folded, and one deflated Lilo folded—all of the stuff which were supplied in the tents. It will help us enormously. We've got a lot of stuff to take away from this camping area when we leave and we'd like to be able to do that early in the afternoon. Enjoy the rest of the afternoon and we'll see you either at afternoon tea, drinks or banquet.

Afternoon Tea

Reviewed By Ellie Chambers: It wasn't as though we needed to eat another thing. But what started as a whimsical idea during the symposium program crystallised as a sumptuous afternoon tea.

Feted and spoilt by chefs in residence, Philip Searle and Cheong Liew, there seemed little need for an in-between meal. So the discreet inclusion of 'afternoon tea' in the program barely raised a flicker of interest—perhaps silent thoughts ranged from dunking bought bikkies in tea to the odd Tim Tam. After all, the wizardry of our clever cooks kept us tantalised, amazed and well satisfied—how could we possibly want for more. But want we did.

Long trestle tables draped with cloth in signature purple, set up in the mess tent, somehow looked ready for a sacrificial lamb—particularly as the scene was set with war-like tents in regimental rows overlooking the deserted courtyard 'battle ground'. All around, the ancient tors stood sentinel over the proceedings in the crisp mountain air. Almost unnoticed, a van drew up after midday and Glenda Lewis and Elizabeth Coates, the provedores for this occasion, quietly and efficiently began to unload.

Boxes of equipment and food containers were opened—unspoken and in complete harmony—so it was clear that this theatre had been performed many times before. Plates, cake stands and trays appeared, each

co-ordinated for a particular dish—no placing a lemon-filled Swiss roll on a round plate here!

Out came blow-away sponges. Some were made with duck eggs. "Only way to get a good sponge," purred Elizabeth. Ruby red jelly blocks were quickly split and filled with dairy fresh cream; crisp Anzacs jostled for position with mouth-watering cream puffs; the perfect chocolate hazelnut slice was placed at the opposite end to the equally perfect jelly slice and hedgehog.

I was briskly reprimanded for arranging the yo yos on a flat plate. And they were quickly transferred to pride of place on a silver shell-shaped three-tiered cake stand. By this time, a few of the members, who decided not to follow Rosemary Stanton's example of a 'brisk walk' before another feed, were hovering. And still the food kept coming. Brandy snaps, made by Ray Mutch ("the best brandy snap maker in the district"), were dressed with a piping of star-shaped cream at both ends to "make them look less ordinary," said Glenda, whose mother-in-law made the sponges and puffs. "She's been doing it for years, knows the recipe by heart, this is nothing unusual," she said, but we know otherwise.

Eclairs with their glossy chocolate tops are just too much for one onlooker. "Help yourself there's more in the van," laughed the unfazed Elizabeth. The walking group started straggling back to camp. The dawdlers coming in behind considered this an interruption to a perfectly fine afternoon... that is until they saw the spread. The simple act of Rosemary letting out a notch in her belt said heaps. It began: what happened next was exciting. Indecision gave way to yelps of delight and sighs of bliss—one of everything was the answer! Plates were piled and the clever ones scarpered to enjoy the spoils in isolation. For some, this was their first taste of traditional rural afternoon tea delicacies; for others it was pure nostalgia.

This marvellous spread was prepared by the local Cavendish Ladies Committee, many of whom work the land on properties, yet are artists when it comes to 'whipping-up' traditional sponges, scones, biscuits, pastries and eclairs in the normal course of their week's activities. These foods are part of our culinary heritage. More than 28 different items were prepared for our pleasure. They represented 28 reasons why these recipes must be treasured and preserved forever.

The Banquet

Cheong Liew & Phillip Searle Banquet

Aperitif
Seppelt DP 117 Show Fino Sherry

Entree
Oysters on the Fire
Hanging Rock Macedon V

Entree
Grilled Blue Swimmer Crabs
1990 Crawford River Riesling, 1990 Knights Riesling

Main
Hangi of Pork Shoulder, Baby Emu, Murray Cod,
Rice Pilau, Herb Salad, Leeks
1967 Best's Pinot Meunier (Magnum), 1977 St Huberts Shiraz, 1981 Balgownie Cabernet,
1989 Redbank Sally's Paddock, 1990 Craiglee Shiraz

Dessert
Phillip's Surprise
1994 Brown Brothers Noble Riesling

Afters
Coffee & Tea
1977 Stanton & Killeen Vintage Port, Bullers Black Label Muscat,
Yalumba Old Pot Still Brandy

Buried Treasure

Reviewed Gay Bilson: They're not as young as they were, these two archaeologists who buried and dug up the banquet for the 10th Symposium. Phillip Searle and Cheong Liew, the artist and the sage. We know they're not so young because we watched them work.

After fifteen years of meetings and meals in sophisticated, urban spaces, the inevitable, in retrospect, circle closed and we willingly slept on the earth, on the source of our food, for the two days and nights of the Symposium. A city of tents in the glorious Grampians in North Western Victoria, coldroom temperature at night while the baker stoked his travelling oven, his unruly hair and moustache haloed in lamplight and turning him into one of the actors in a 17th century travelling theatre troupe—Mouchkine's Molière?

So camping being what it is, no defensive private comforts via walls and doors, but civilised by unspoken courtesies, preparation was public and invited help. For two days the cooks cooked and the baker baked. The cooks dug a large rectangular oven in the earth and baked stones to store heat. They stuffed, then coated, young emus (all 'drumstick' as if a deformed foetus) in seasoned butter and flour and wrapped them in banana leaves and paper and cloth and mesh and mud and did variations of the same to sides of pork and to Murray Cod, enough, too much, for seventy people. The parcels were hugely, grandly primeval and of the earth to which they were returned, mud to mud, and buried in a graveyard hours before the time at which it would be ransacked for the feed.

Above the pit, scrubbed, tight-lipped oysters were opened and tainted by flaming twigs and leaves as the first course of the banquet. Blue swimmer crabs as cold and fresh as the Grampians air were grilled over the fire to become the unsurpassed food of the banquet. Underneath, the meat and fish suffered stone-warmed changes: in bed with heat for eight hours animal and fish in slow combustion became food.

We watched while Searle and Liew dug for our dinner. Out of respect no one helped now. We became slavish audience to divine risk taking, the shovel became the privileged tool of the creators, and the earth which was shoveled out of the underworld oven smelled of must and released humidity. Symposiasts, as cold thigh-ed in the Grampian's chill as the dead emus were warmed in burial, sat on this upturned earth to warm themselves, and collected the stones to warm their beds.

The cooks, more curious than those to be fed, began to unwrap their gifts. Emu bones slipped away from moist flesh as easily as a beggar's chicken will fall apart. The flesh was tinged green by the wrapping leaves. When Searle had opened his now deceased restaurant in Sydney he had made trays for abalone sandwiches of slow baked bread dough shaped in imitation of an abalone shell. The wrapping from the emu was thrown aside in much the same way as the bread trays, discarded crafts, use to disuse.

The pork had become blubber and sea slug. The division of texture and hue between the skin and fat and muscle had dissolved. Each side had been transformed into a pork-pink sea-jelly. Fifteen years earlier Searle had opened the First Symposium's banquet with a jellied seascape, an edible, wobbling sculpture in a glass tank of immense proportions. These pork slugs returned us to the origins of seascape.

The Grampians are sandy from millenniums past, moments became reminders that time transforms on a grand, seemingly motionless scale and eight long short hours had given intimations, delusions of timelessness, of paradoxes. Eating this slug brought us back to earth: it was no more than food.

The cooking pit had become a diagram, an inverted vertical slice of evolution's inevitability with the fish the uppermost layer instead of one of its lowest. The pork had turned into one of the least formed developments, the invertebrate slug, but tasting wonderfully of pork. We ate, wrapped in our bedding.

Shrouds, mummies, sleeping bags, mud wrapped gifts of intimations of mortality, grave digging, tamed and useful fire, inadequate words, unkeepable experience, transforming cookery, sleep: the privilege of the few who had the guts to take stomach–filling risks in faithful knowledge that what is unbuyable and unhoardable forms us and keeps the creative spirit, the privileged gift of the few, alive.

Often, when audience to live, chamber–music making of the highest order, I suffer a shiver of inadequacy, a certain discomfort. Music in performance, as uncatchable as falling stars and as unhoardable as food, doesn't seem to need me, I become irrelevant even when blessed (that conundrum of a word which means wounded as well) but food needs me as much as I need it. Food must be eaten. It passes via the inquiring tongue to the stomach and is metabolised, transformed to feed my body, to keep me alive and thoughtful. It is useful, more than useful, necessary.

When it seems alchemical and becomes food for thought it doesn't transcend its materiality but confirms it with a confidence which is sustaining in the face of inevitable death, plant or animal, to support life, the cruel paradox which touches on the nature of art and the imagination. It is the work of cookery in the hands of the alchemical few which allows us this intimation of the sublime worth of the material, something which is so gloriously, so devastatingly dependent on destruction. Dust to dust, ashes to ashes, flesh to transcendent moment of consequence, particular to me, but universal and comfortingly convivial.

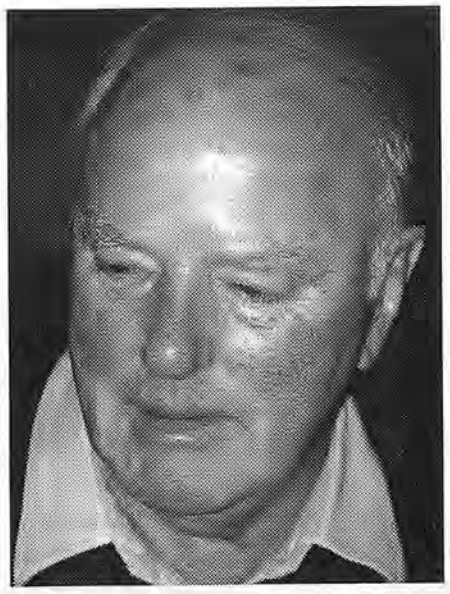
It is the obvious, inescapable work of cooking which makes it adorable. Experimentum Mundi, to return to musical comparison, is an operatic piece which celebrates artisanal work without falsely elevating it to pretentious art. It was performed for the forty third time for the 1998 Adelaide Festival of the Arts. Experimentum Mundi is opera in its most literal sense: the performers work. They make shoes, grind knives, lay stones, chip marble, tap wines barrels, knead pasta dough, heat and shape iron, and lathe wood. A chorus of women chant something quite possibly mundane, pianissimo, at the composer/conductor's cue. A paver turns his score in order to take part in the composition but is never falsely asked to think of himself as a musician, yet music is made.

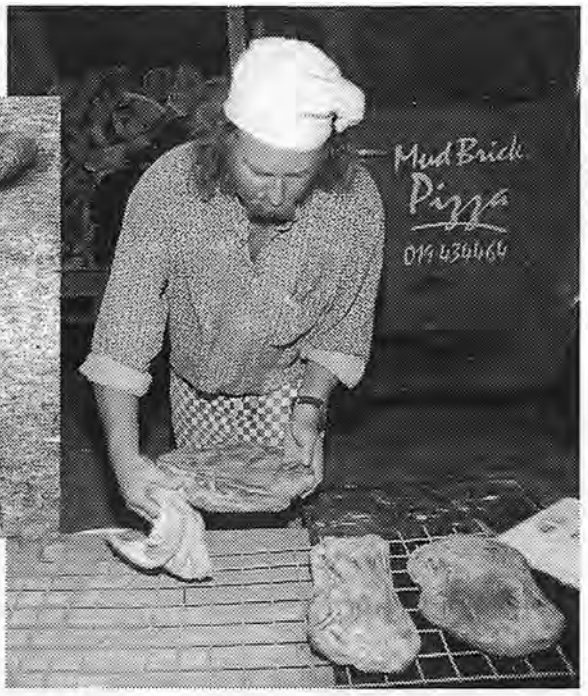
Experimentum Mundi seduces its audience for the same reason that the best cooking does: both make no claim for their performance other than the exemplary, every day repetition of craft. Giorgio Battistelli, who conducts his score at every performance, made musical theatre out of other mens' work but in rare sensitivity left that work to be, asked nothing more of it than that it fit into the shape of his composition. He knew that the sublime rests in the ordinariness of spectacular skills, and so too do those who cook and eat the best food which is more likely to be bread soup than truffled larks' tongues.

We banqueters–to–be who stood close enough to Searle before the burial of the meats and fish might have felt a certain uneasiness at the apparently experimental nature of the feast but should have known that experiment in the hands of the experienced is the natural inheritance of craft. Also self–assurance (the cook is an arrogant egoist who becomes selfless at the moment of plating) dictated that he knew what he was doing would work. It wasn't that he feigned surprise at the results but that he was wonderfully pleasured by his own work, by the kind of risk–taking which is less risky than it might appear: Experimentum Mundi.

Did we expect a coup de théâtre from Searle as a final sweet course? Given his past icy and edible sculptures, and the chill of the night, The Emperor of Icecream might have been expected to produce the Rococco amongst the kangaroo droppings. Instead he used the travelling wood–fired oven to bake fruit and cake, containing all work to those foods and techniques which made no quarrel with the site. Fire and heat were essential and kept us alive.

For centuries cooks with fire, but without kitchens, have turned flesh into aromatic, palatable food by protectively burying it with particular, suitable, hot stones. Our banquet–makers returned to the past in response to the camp. Any other solution would have been irrelevant and even stupid. They proved themselves survivors and that imagination doesn't necessarily have to catapult us into future food. In excavating an earth–oven, the




Mud Brick
Pizza
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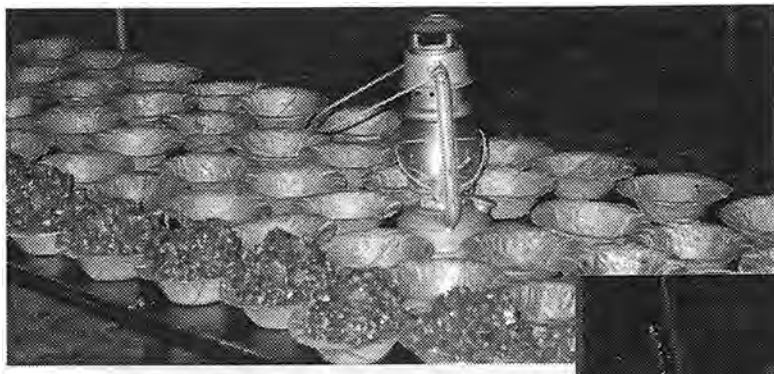
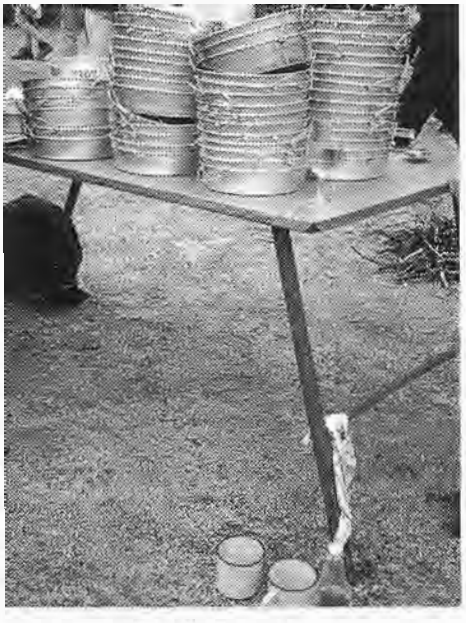


Tenth Symposium of Australian Gastronomy

Day 4

Beyond the Tuckerbox

Securing the Future



Breakfasts

Reviewed by Gae Pincus: Breakfasts! How can one talk about breakfasts without talking about the camp and the joys of camping! The wind, the rain, the symphony of squeaking tent poles, rolling off the narrow pumped airbed with every turn. Waking before the crack of dawn with an over full bladder (oh, I must have had some sleep then) and painfully putting off the inevitable struggle out of down and into boots and sweaters and raincoat and stumbling into the mist toward the great jag of fluorescent light and the dull roar of a generator, in the gum trees past the tents—Rows a Loos! What a name, what an experience!

Then the trek back to the tent and dealing with the wet floor and trying vainly to sleep some more before the repeat performance to the amazing semi-trailer shower block for (hopefully) hot show therapy to get the frozen limbs and thick head functioning.

More struggle with putting on all the layers I could find and only then, the AMAZING sights, sounds and tastes of camp breakfast. But first, the first breakfast—the cabin breakfast at Halls Gap. There the ease of waking in a raft of cabins—dinky little, maybe prefab, houses in a number of different tourist developments around the town.

Delicious muesli (Carman's Toasted Muesli), wonderful creamy yoghurt, local honey, bananas, grapes and, belatedly, bread to toast and load with first bash at cabinmate's jam—Rosemary's homemade jam—yum! Only sour note—no real coffee, just coffee bags which pretend to be ground coffee but are tricked up with nasty old instant. Some cabinoes did claim to have had plungers and ground coffee provided—must have been the class of the establishment. Tea drinkers were well favoured with a wondrous array of nifty little Calico teabags in a variety of styles and flavours from the Tea Corporation.

The first camp breakfast set you up for the day and completely obliterated any twinges/whinges from the night and the rain—apple juice, Carman's toasted muesli, stunning, glistening brown, oven roasted peaches out of the portable wood-fired oven belonging to the amazing Rob Bakes. A highlight was the left-over fresh mixed berries and Meredith Fromage Blanc from dinner the night before—sensational with the muesli and roasted peaches.

More? Fabulous bread made overnight by the aforesaid Rob Bakes—sourdough, fruit—and the greatest array of wonderful home made and purchased jams provided by symposiasts. The jam experience of the event had to be the fresh Malaysian coconut jam made by Siu Ling Hui—large jars of it from which enthusiasts were knifing enormous mounds for their bread or toast and positively gobbling it down. And yes—there was real coffee!

How could Wednesday's breakfast be better? More muesli, yoghurt, fabulous bread for toast, more greedy mounds of coconut jam, leftover dessert cake—Phillip's Surprise, and a do it yourself fry-up of Johathon's bacon, eggs, tomatoes, mushrooms and even (bliss) left-over oven baked potatoes!

Wash it all down with Seppelt's 1993 Sparkling Shiraz and we felt like there was no tomorrow. Certainly we didn't need to eat again for a week.

Campfire Discussions

Eric Rolls: We had a lively discussion. Everybody joined in and it was good to listen to, We began by discussing specific labeling: it is vital to know where food comes from and what is in it. Monsanto's soybeans were attacked.

Under the umbrella of American laws designed to cover such frauds, the company added no more than two per cent of engened beans to the mix so that noting about it need not appear on the labels. The Dutch Government countered this by passing a law declaring that if a manufacturer cannot guarantee on a label that the product is free of engened material then the label must declare that the product has such material or may have.

In view of the wealth of these companies and various strange laws being passed in different countries,

someone wondered if the Dutch stance would remain legal. There were more questions than answers.

How do we go about countering such decisions of governments—is it worthwhile writing to politicians? There was general agreement that it was worthwhile if approaches were made by both private individuals and by groups stating clearly that such and such a decision was an outrage and that all members of the group would not be voting for the party at the next election. Threatening their jobs was much more effective than trying to teach them.

Discussion went on to local markets. Can producers market on special quality and special flavours? Can we have variety marked on boxes of vegetables? Meat should carry a label saying what breed it is and how it has been fed, especially whether in feedlots or on free range. In Europe provenance has always been important—appellation controlée is printed on labels for all sorts of produce everyday.

We have marvellous local produce and it is not being marketed as it ought to be. The Ligurian honey on Kangaroo Island is the only produce I know that is marketed properly. King Island made a half–headed attempt but rascally manufacturers with false labels spoiled consumers' appreciation of the island produce for years. They are now recovering but their wonderful produce needs better marketing.

Dija mutton, the wonderful saltbush mutton, is in demand all over the world. Few in Australia have heard of it. Australian Meat & Livestock Corporation, supposed to be handling it in New South Wales, are completely vague about where to get it. Even at the last food fair in Adelaide the only Dija mutton available was in a pie which had lost its flavour.

Consumers have to be educated. Cheap food from supermarkets is in fact expensive food since it causes loss of human health, loss of environmental health, loss of diversity. Paying more for produce with local qualities is economical shopping.

Advertising is very necessary, it does work.

We discussed Aboriginal hunting of native animals. Someone said it would be OK if they used spears and nulla nullas instead of shotguns from 4–wheel dives. Nancy Williams jumped on that, saying that over the last 60 years 4–wheel drives and shotguns have become traditional tools. Native food is valuable to many communities and they will monitor what is taken. No one can drive up from Redfern to Cape York and shoot a cassowary to eat. Local communities would prevent it.

There was general opinion that groups such as this symposium should make a common move to demand that governments maintain good food, not the sterile food demanded by the new breed of health police, but food free of chemicals and doubtful additives.

Colin Sheringham: With the backdrop of our makeshift village and the surrounding bush, our group debated a theme that in one form or another has been addressed now at each Symposium: the notion of sustainability. The importance of this theme was highlighted by the eighth Symposium, titled 'Sustaining Gastronomy', where two aspects of the sustainability theme were examined. Firstly, how gastronomy as an ethic, a way of life, a field of study, can be sustained. Secondly, to explore the contribution of gastronomy to sustainability; its reconciliation with 'green' issues.

It is this second notion that we adopted, spurred on by previous speakers. Specifically, "Does the way we live our own gastronomic lives contribute to a sustainable future, or do we solely enjoy the hedonism that the pleasures of the table can bring?"

Disappointingly here was not a spirited defense of hedonism. This poses the question, why are we so reluctant to defend the notion of pleasure? Instead, the discussion focussed on the outreach that the Symposium can have, recognising nevertheless that the Symposium has never achieved a loud public voice. This aspect of the history of the Symposium and the previous unsuccessful attempts to galvanise a political voice, shifted group deflate to the achievements of individuals.

Involvement in dissemination of knowledge about food, whether by formal education, personal example, writing and communication, feeding others and community work all provides positive illustration of how the benefits of a gastronomic life can aid sustainability. Sadly, some saw that we are fighting an uphill battle against greater forces, especially in the area of food production and wholesaling, where large corporations, dominating

the market, are changing foodways to suit their needs. At the most graphic level, the economic plight of the traditional family farm and small retail businesses was tendered as evidence of this. While some remained pessimistic, others saw light at the end of the tunnel.

Drawing strength from Rosemary Stanton's earlier comments on the power of consumer action, examples of positive changes in the market place were elicited. Woolworth's Big Fresh now provides an increasing variety of produce, more people are talking and reading about food, and grass roots action in several countries including the UK and USA has given rise to the revival of Farmers' Markets.

Finally, the group decided that gastronomy is not about hedonism nor should it be pretentious or elitist. They recognised that pleasure is an important component balanced by an underlying responsibility for obtaining that pleasure. But maybe the last word on the topic should not come from the discussion group but from the next generation. While Michael Symons wrestled with the metaphysics of Alan Saunders' 'simplistic' question, we all heard young Dorothy Symons vocally express her opinion, in demand of her next hedonistic, but sustaining meal.

Sandra Alexander: In introducing this session Gay reshaped the topic to address the issue "How does food writing fit into the notion of sustenance and sustaining?" This allowed us to explore a wide range of issues, and the following positions emerged:

Food Journalism

This is the dominant form of food writing, and it is in fact the opposite of sustenance as its imperatives are to be constantly in search of the new, defined as 'newsworthy', and hence usually seeking the novel and the innovative, with an agenda in which restraint and preservation rank very low.

Space is a major issue for responsible food journalists, who long for the expanses that MFK Fisher and Elizabeth David were offered. Editors are reluctant to offer space because they define their readers as wanting to know about the new, and being uninterested in background and analysis.

Moreover, space in newspapers and magazines is determined by the advertising imperative, and so editorial space will be reduced to grabs, and often to infotainment. Restaurant reviews, for example, are expected to be very brief and some papers, eg the *Sunday Herald Magazine*, offer little more than point scores. Even papers which ostensibly offer space to food are in fact more about lifestyle than food—*Epicure* and *Good Living* being significant cases in point.

There was discussion of the constraints that might be placed on critical food journalism by the unwillingness of newspapers to offend their major advertisers, a situation which has a parallel in other industries where advertising budgets are large and influence is strong.

In most mass media publications, food writers are contributors, not employees. As a contributor, the rates of pay are low and the material is not well–treated. Food is regarded as the province of a few specialist contributors, whereas it would be good to see a medical or sociological writer presenting an article raising issues related to food.

The contradiction is that many writers want to write about sustainability, but editors don't believe it is interesting. They are more inclined to believe in the 'Bright Light' phenomenon—a new dish has emerged and all the moths flock towards it.

Magazines

There are many 'lifestyle' magazines which contain recipes, but there is little serious comment, and indeed it is not unusual for the recipes that are published to be wrong. There was discussion as to whether the market could support a serious food magazine—*Convivium* could not sustain itself as a publication.

Gay Bilson announced her intention to start a new, serious food journal and this was discussed at some length, canvassing the possible role of the Literature Board as Gay intends the journal to be a source of good writing: including fiction. (When this conversation was reported in the final session of the symposium, speakers drew attention to the need for the journal to be properly refereed to offer academic stature to articles it may publish.)

Existing possibilities for placing a serious article were discussed, including the *Australian Review of Books* and a US publication, *The Art of Eating.*

Practitioners and academics in other professional disciplines are often vitally interested in food, often without recognising it. Architects and designers are a case in point, and reference was made to Luigi Rosselli's restaurant designs.

Books

Fiction is one of the great areas of sustaining writing about food, and food as an element in fiction has been part of ensuring big sales.

One Continuous Picnic was a seminal publication, but it is no longer well known and there have been few other serious publications about food. Recipe books are another matter, and they dominate the food book market. The commercial prospects are an imperative, and they are firmly driven by a seasonal market, especially Christmas and to a lesser extent Mothers Day.

Is there a saturation point with cookbooks? Publishers know that food sells—maybe it is up to serious food writers to use the popularity of cookbooks as a platform to argue for more serious publications on food.

Travel writing is often closely linked with food writing and Jane Adams suggested that the Food Media Club might add the category 'Culinary Tourism' to its annual awards.

Radio

The wireless has good potential, and is highly underutilised. It is well used by Alan Saunders and by Tony Tan on the ABC.

Television

There is a multiplicity of food shows on television: celebrity chefs such as Geoff Jansz; Floyd, Two Fat Ladies; the *Healthy, Wealthy and Wise* lifestyle programs and an entire cable channel devoted to 'Lifestyle' in which food and cooking programs play a major part.

Internet

A good source of information, but problematic as there are no gatekeepers on the information. While this is to be applauded, it also means that there is no check on inaccurate information.

Films

Food films are often popular (*Tampopo, Babette's Feast, Eat Drink Man Woman, The Big Night*). (By this time the light had, appropriately, faded to black. It was too dark to see each other, let alone take notes, and the conversation drew to a close.)

Babara Santich: It was discovered, too late, that this group was to have discussed the topic 'Securing the Future'—but in retrospect, the issues raised and debated were equally relevant to this as to the extempore choice of 'Gastronomic desiderata for the 21st century', partly inspired by Rosario Scarpato's scenario of global cuisines.

It seemed at first that what the group would like to secure for the next century was the exact opposite of what was disliked in the current environment, including, for Di Holuigue, the 'food fashion press' and 'short order cooking'. This led to consideration of Rosario's bold visions and discussion of global cuisine: was there only one global cuisine or several? In any case, what did we mean by 'global cuisine'—and what did we mean by 'cuisine'? Does cuisine include products of the food manufacturing industry? Does it include fast food, as epitomised by hamburgers and pizza (and pasta, one might add)? The impromptu answer that cuisine was what people cooked, or at least prepared, was hardly satisfactory and led to a silent resolve to think further about a definition.

The problematic issue of global cuisine/cuisines was neatly sidestepped by changing the focus to

globalisation (of cuisine/s). This was associated—though the relationship was not made explicit—with what Colin Sheringham called the 'dumbing down of eating', which again led to issues raised in other discussions: the dominance of multinationals, the increasing industrialisation and homogenisation of the food supply, and the vacuity of much food writing, concerned only with promoting novelty.

In an attempt to retain a focus to the discussion, I asked people to nominate the most desirable or necessary qualities of an ideal gastronomic society of the 21st century. The wish-list expanded to eight, and probably would have found more desirable characteristics had Marieke not arrived to announce that so long as we deliberated the chefs would have no light and would not be able to work. In the interests of dinner, we adjourned. The eight items on the wish-list, not in any order of priority, were:

1 Everyone would know how to cook. This seemed to extend to everyone knowing about eating and shopping and choosing food, in addition to having the necessary skills to prepare it in ways that respected the qualities of the ingredients. The underlying rationale seemed to be that if people knew how to cook they would not resort to mass-produced convenience foods, and that probably this would be better for their health and happiness.

2 There would be respect for cultural links and cultural relevance would be retained. The context of this was unclear, but it seemed to come from a feeling that food should have and carry a meaning.

3 People would have faith in Australian and in locally Australian cooking. I think this meant being proud to be Australian and/or regional Australian, not feeling inferior and not being derivative or imitative.

4 The intimate connection between food, culture and the land would be promoted. This, in fact, was the theme of the symposium; there should be more of it, touching more people.

5 Opinion leaders would be independent, intelligent individuals rather than food companies, marketers and advertisers with vested interests in either a particular product or brand, or in a style of food writing which valued novelty above almost everything else.

6 Processed foods, which are a standard and accepted part of our food supply, would be manufactured in such a way that they had 'real' taste. This might be a big ask, given that most processing operations result in a diminution of flavour, which must then be added in other ways.

7 A corollary to the above was that the food industry would not be driven by the lowest common denominator. In other words, there should be a range of qualities from which consumers can choose on the basis of flavour, freshness, cost, etc.

8 There would be honesty—honesty in such things as food labeling and advertising, and also in the foods and ingredients themselves.

Here we ended—the enticements of a dinner by Cheong Liew and Phillip Searle were too much!

Elaine van Kempen: It was tempting to revisit the earlier discussions about labeling, marketing, the desperate need for a coalition between producer and consumer to diminish the tyranny of those in between—but we resisted the temptation. We talked about what might be called contemporary restaurant etiquette with an eye to the effects of popular culture.

Do we come to *the shared table* wanting to start at *a is for apple* and run the gastronomic gamut *looking for flavour*? Do we come with a passion for *celebration of food and wine*? Or do we come to use the mobile phone? One

interesting protocol emerged, it seems that in some places (Sydney was mentioned) it is acceptable to use a mobile phone in restaurants that don't have tablecloths. We suggest that a laundry bill is a small pace to pay for silencing the ringing phone and, more importantly, that particular tone of voice used by those who speak on them in public.

We made a mental leap from the telephone cord to the umbilical cord and discussed babies in restaurants. It appears that breast–feeding is again being frowned upon, in some cases forbidden. Surely such an extraordinary attitude to that most elemental act of gastronomy should give us all pause.

In the beginning we all spoke as restaurateurs and soon had a list of 'don'ts' for diners:

- Don't ask for too many details of the menu over the phone, or to have one faxed. It is important to keep an element of surprise for your arrival.

- Don't say "so–and–so" recommended your restaurant it implies a special relationship between restaurateur and diner that doesn't exist.

- Don't ask for a good table—restaurants should be democratic and all tables are good in one way or another.

- Don't go to a restaurant with a set menu and ask for it to be changed for example "But I want the pasta as a main course".

- Don't book for eight and turn up with five or ten.

- Don't argue about a shared bill, make your arrangements quietly and privately without involving restaurant staff; above all, don't make jokes about the bill.

And then the tide changed and we all became diners:

- Waiters should always take the wine to the person who orders it.

- They should not overfill glasses, nor top them up. This prevents one from keeping a check on how much one is drinking.

- Waiters should remember that the customer is right some of the time, but diners should also recognise that improved training programs have resulted in many waiters becoming skilled and professional. There is however still room for the out–of–work actor or the student who can be as professional as those for whom it is a career.

- Waiters should NOT ask diners "Are you enjoying the meal" or "How's the fish"—allow the diner to make a spontaneous remark if they feel it is warranted.

We touched on the subject of restaurant critics and abhorred the practice of some who ask for free meals and drinks (it happens in Adelaide apparently). We also asked for truth in reviews, e.g., "I reviewed XXX Restaurant at its launch at a special media dinner," allows critical judgement by readers yet maintains the credibility of the reviewer.

In summary we noted that, if life is to be *one continuous picnic*, the success of all concerned depends on mutual courtesy and generosity of spirit.

Nancy Williams: My outline notes for the plenary session: Reconciliation was discussed under two heads.

1 Food: is it possible to reconcile a hedonistic lifestyle (for a few—of us) and the availability of enough food for all people? Marion Maddox made the point that hedonism as a philosophical position is not selfish, but advocates pleasure for all people. We agreed that the goal should be equitable distribution globally, but acknowledge that major problems or barriers exist at all levels: producers, distributors (wholesalers), consumers.

It appears that misinformation about the people operating at each level exists in the other levels and creates a vicious circle of false goals and expectations (of type, quality, and quantity of product). Educational programs of various types and targeted at specific audiences in the 'food chain" is urgently needed. Educational programs for consumers might be modeled on the English programs like *Let's Get Cooking* and *Let's Get Shopping.*

Problems of deliberately misleading and/or deceptive advertising remain and can best be addressed by individuals and by individuals mobilising organisations of which they are members (and it was also put, in the context of influencing government or governmental agencies, that three letters constitute 'public opinion').

2 Reconciliation of indigenous and non–indigenous Australians. A consensus was expressed on the following points: Non–Aboriginal people should listen to Aboriginal people, who exist in all parts of Australia and are willing to enter into discussion; an apology should be made by government to the stolen generation on behalf of all of us—it should be formal (we are in a sense all part of government). The apology should acknowledge past acts of dispossession and genocide, which although not committed by our generation have nevertheless benefited us.

There should be an equitable distribution and sharing of the resources of the land and waters; many Aboriginal people (they are in fact more numerous than non–Aboriginal farmers) have land but—especially in remote areas—as in the case of some farmers, have not the financial capacity to manage it properly (to maintain its biodiversity and/or sustainable use). Ross Kelly mentioned the Swiss policy (program?) of subsidising farmers as 'stewards' of the lands they hold. It was felt that this serve as a model that could be adapted in Australia.

Symposia X

Symposium X: Reflections on Ten Symposia of Australian Gastronomy

By Barbara Santich: It is 1998 and ten symposia have passed. Are we any wiser? I think we are.

The Australian symposium is a younger sibling—or half–sibling—of the annual Oxford symposium on food and cookery. It is very, very different, more good–natured and exuberant, more energetically vociferous and hedonistic... perhaps half–sibling is too close, but there is a filiation of sorts.

For me, the benefit of having attended several Oxford gatherings is my acceptance into a world–wide network of like–minded people, a resource more valuable than any library. A comparable network exists in (and extends beyond) Australia, linking the 200–odd people who have attended one or more symposia here. This is probably the greatest achievement of the series of symposia, and yet it wasn't 'achieved' in the sense that a goal was set and reached. Rather, it just happened as individual connections became interlocked in a vast web.

As Dur–é Dara remarked, we are now a family, or a clan, complete with 'elders' and a baby. One of the reasons we are a family is that we are united not only by professional interests, but also by fellowship. It's a loose–knit family that continues to grow, each symposium picking up a few individuals from a previous one; I was delighted that newcomers at Symposium IX such as Bob McLennan and Ralph Potter, together with Michael Robertson and Sean Moran, participated in the latest symposium, for example.

And yet the strength and support one might expect in a family is rarely realised. The symposium network is under–utilised and undervalued. It is an underground network, something like Opus Dei, but far less public

and powerful. Its enormous potential remains unrecognised, its resources invisible. Boards such as the Australian Meat and Livestock Corporation ask for specialists such as lawyers, accountants and marketers, but never an individual with broad-based gastronomic understanding.

How do people find out about the symposium and its activities? Usually by word of mouth—yet there are always newcomers who say "If I had known about this ten years ago...". This secretiveness—not in any way a reflection of insufficient publicity—gives the symposium the appearance of a closed and exclusive shop. To date, and with good reason, all ideas of unionisation/corporatisation/institutionalisation have been rejected. I still believe, however, that it would be useful to have some form of association, some central secretariat, if only to ensure a measure of continuity and permanence, and to serve as a centre of information.

Would it help, I wonder, if we had a directory of sorts, giving the usual details of names and addresses and telephone numbers together with brief descriptions of individual interests and activities—in a way, an expansion of the various lists of participants that appear at the end of each volume of proceedings. I feel I know too little of the activities of others. I would have liked to have known about Marieke and Sarah's hospital consultancy, for example, and about the work they do in their local community.

Fourteen years on, the Symposium of Australian Gastronomy is not only old enough to have a history, it has also developed traditions, certain ways of doing things. When it came to choosing between the two offers to hold Symposium XI and Michael Symons suggested delaying the decision until full proposals had been developed, Gay Bilson, one of the symposium elders, was heard to say "No, that's not the way we do things." We recognise, then, that we—the family—have ways of doing things; we have a culture and an identity. I think it is time that others, too, recognised us.

At the Tenth Symposium of Australian Gastronomy just past, there was much talk of the future. 'Beyond the Tuckerbox—Securing the Future' was its stated theme. The campfire discussions were full of ideas and talk about things we would like to change, from the present state of food writing to the flavour of hamburgers. What we seemed not to discuss was how these changes might be effected. I think that is where our thoughts should next be directed.

Jams & Relishes

Symposium Jams and Relishes

Symposiums participant arrived bearing various jams, sauces and relishes. (The following list is as complete as later recollection allows and any omissions are regretted).

Jane Adams	Chutney
Lillian Alden	Hot Lemon Pickle, Quince Kasoundi
Mary Brander	Marmalade
Margaret Emery	Jam
Leonie Furber	Spicy Tomato Sauce
Michelle Garnaut	Chili Soy Sauce
Jennifer Hillier	Raspberry Jam
Siu Ling Hui	Malaysian Coconut Jam
Virginia McLeod	Marmalade
Sandy Michell	Raisin Chutney
Sean Moran and Michael Robertson	Chilli Oil, Jam
Janis Munro	'Sisters' Jams—Blue Diamond Plum, Raspberry
Barbara Santich	Apricot jam

Acknowledgements

Michelle Scamps	Onion Marmalade
Marilyn Shady	Cumquat Marmalade, Tomato Chutney
Ted Wilson	Tomato Kassoundi

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We are also very grateful to Diana Bosworth, who provided us with space on her home page: www.classobjects.com.au/~dibos.

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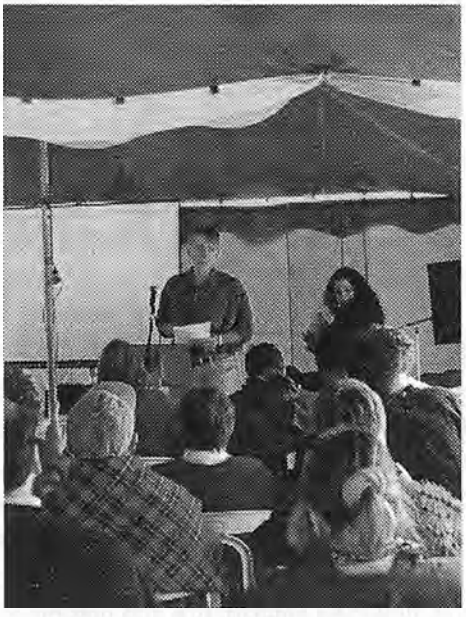
Additional Papers



Fruit & Vegetable Quality

Fruit and Vegetable Quality in the 21st Century: the Influence of Japan (John Possingham)

Summary

Horticulture is probably the most quality conscious of all the agricultural industries. For this reason much of our molecular biology has been directed towards changing the quality of fruits and vegetables rather than increasing the yield of existing varieties. Current genetic engineering and conventional breeding programs aim to alter many features of fruits and vegetables including: size, flavour, colour, texture, keeping quality, fibre, sugar and acid contents. A problem with this research is the setting of appropriate goals as the perception of quality differs between the continents and even between countries. However innovations developed in one country commonly spread to other countries as markets have an almost insatiable appetite for new products.

Japan has played an important role in developing fruits with altered characteristics. The list includes seedless, easy peel Satsuma mandarins, high sugar content Fuji type apples, large (seeded) table grapes such as Kyoho and Red Globe (bred in the USA, but made popular in Japan), non–astringent persimmons and Asian (Japanese) pears. An important contribution from Japan has been the requirement for all fruits and vegetables to be of the highest possible quality and to be low or free of organic residues.

What then will be the nature of our fruits and vegetables 10, 20 and 50 years from now? There will be obvious changes to both their appearance and taste, but also the content and type of fibre, vitamins and other biologically active compounds in both vegetables and fruits will be altered to improve nutritive value and to confer health advantages. A problem with this research is the lack of 'hard data' from human nutritionists concerning the constituents in food that are good for us. Currently we can easily alter the levels of existing constituents and introduce genes that make entirely new compounds, but it is not at all clear what we should aim to have in our diets.

It is clear that in the future both fruits and vegetables will contain materials that will improve their resistance to pests and diseases. Introduced genes will include those that code for bacterial proteins that are toxic to insects and for the production of chitinases and compounds such as resveratrol that improve resistance to fungal diseases. Many crops will contain anti–sense transcripts to switch off genes coding for polyphenol oxidase and poly–galacturonidase enzymes and ethylene production to reduce both browning and softening reactions and to improve post–harvest shelf life. Seedlessness will be extended to many fruits as a range of genes are available which interrupt different stages of pollen and seed formation. Male sterility will be extended to a range of crops and combined with parthenocarpy. Self fertility will be built into some of those species that currently require cross–pollination. However consumers will have the final say as they may not like to eat apples and pears without cores and stone fruits without stones! Perhaps we will relish seedless kiwi fruit with smooth skins by giving them a new name!

Key Words

Fruits and Vegetables, Quality/Nutritional Changes, Increased Shelf–life, Seedless

Introduction

Over the last 20 years a revolution has occurred in biology as a result of our increased understanding of the information systems of living cells. Using the methods and techniques of molecular biology, genetic engineers are now able to deliberately alter the genes (DNA Informational units) contained in the nucleus and in the nucleoids of both plastids and mitochondria of plant cells. Specific genes which code for characteristics such as disease, pest and herbicide resistance cart be introduced and expressed without significantly altering other features of a given plant system. Providing appropriate promoters are available to switch on the introduced gene, it is now possible to introduce into plants genes from a wide range of other organisms including related and unrelated plant species, bacteria, fungi and animals. It is also possible to switch off and stop the expression

of genes by interfering with the messenger DNA system (protein templates) within plants. Genetic engineering is now being coupled with conventional plant breeding to significantly increase the turn out of new varieties of plants which are seen as income earning intellectual property.

It is against this background that horticulturists must look at the potential changes that might be seen as desirable in horticultural crops in the 21st century. In the case of many crops the aim is not to increase the level of production, but to improve the quality of the product. With the current techniques at our disposal for modifying genes and their expression and in turn the specific features of plants and of their products it is possible to bring about a great variety of heritable changes in almost all of our fruits and vegetables. Perhaps the most important decision currently facing the horticulturist is deciding on what to do out of the many things that are possible. This of course will be heavily influenced by the availability of research funding which increasingly will attract private investors who will seek to share in the profits expected to come from the development of new high quality varieties.

In the past many of the genetic changes that conventional plant breeders aimed to bring about were for the benefit of growers. They included increasing the level of production and improving disease and pest resistance. These days product quality and post harvest aspects are of critical importance and the genetic engineer increasingly must direct his efforts at the consumer via the large supermarket chains where fresh fruit and vegetables are sold. This paper aims to draw attention to some the future changes that might take place in the quality of our fruits and vegetables over the next 20+ years.

Chemical Residue Reduction/Sustainable Horticulture

Over the past 10 years there has been a continuing requirement in virtually all developed countries to reduce the usage of chemicals in agriculture. The pressure for this has come from consumers and has been very high in horticulture because many fruits and vegetables are eaten fresh and not processed. The pressure has also been high in the densely populated countries of Europe and Asia and notably in this country where farms and centres of population must co–exist. The chemicals that consumers seek to avoid include insecticides, fungicides and herbicides which in some cases are directly harmful to wildlife and to humans. Accordingly one of the early objectives of genetic engineers was to look for sources of resistance to incorporate into plants that would make plants tolerant of both insect pests and fungal diseases without altering the overall characteristics of the crop.

One of the early successes in this area has been the incorporation and expression of genes from the *Bacillus thuringiensis* which code for bacterial proteins that are toxic to lepidopteran insects. There are a number of *Bt* genes that code for different toxic proteins. These were initially used to protect cotton and subsequently maize and tomato. (Koziel et al 1993, Perlaket al 1991) Another genetic mechanism that improves insect resistance involves the proteinase inhibitor gene which has successfully been incorporated into tomato (Johnson et al 1989); while a further approach involves a gene that raises endogenous cytokinin levels and increases the resistance of tomato plants to both insect and fungal diseases. (Smigocki 1995)

Resistance to some fungal pathogens has been obtained using genes that code of hydrolytic enzymes which have the ability to limit fungal growth, but more commonly chitinase genes have been inserted into crops including tomato and brassica and have lead to increased fungal resistance. (Broglie et al 1991, Grison et al 1996, Jach et al 1993) Work involving chitinase is in progress in Australia aimed at making selected cultivars of grape vines (*Vitis vinifera*) resistant to powdery mildew which is a major problem for our wine grape growers.

Another area of genetic engineering is connected with developing strategies to equip crop plants with resistance to virus diseases. Early work focused on the use of genes derived from viral genomes such as those encoding coat proteins. (Fitchen and Beachy 1993) Coat protein mediated resistance has been successful for both squash and cantaloupe. (Woodson 1997) More recently broad spectrum protection against virus infection has involved mutated versions of viral movement proteins from potato and the ribosome–inhibiting protein gene from pokeweed. (Lodge et al 1993, Tacke et al 1996) There is an urgent need to find ways to limit the spread of viruses of the fan leaf complex which are particularly damaging to grape vines and which are spread

by the nematode *Xiphenema index*. The current control method for the nematode and in turn for the virus involves, fumigating the soil with methyl bromide which is environmentally unacceptable.

A further area of gene manipulation is developing field crops with in–built resistance to herbicides. This approach is being extended to horticultural crops and will replace herbicide placement and crop shielding to prevent damage to the plant when using non–selective herbicides. The extensive growing of herbicide resistant varieties is likely to lead to the development of herbicide resistant weeds and may even increase the chemical contamination of the environment. This could become a problem with crops such as bromoxynil–resistant cotton and glyphosate resistant soybean which are now grown over very large areas in the USA.

Engineering Horticultural Crops for Self Fertility

Although many of the horticultural crops we currently grow are self fertile there are others such as pear, cherry, plum and almond which require pollen from different varieties to produce satisfactory crops. There is also the extreme situation of dioecious plants such as pistachio and kiwi fruit where separate plants carry the male and female flower parts. There are many incompatibility mechanisms that interfere with the events of both cross and self pollination. These include simple temporal disjunction in which stigma receptivity is separated in time from the availability of mature pollen. This situation can be exacerbated by both temperature and humidity which differentially affect the development of male and female parts of flowers. Weather conditions can also affect both wind and insect pollination. Commonly incompatibility mechanisms can have a molecular basis involving proteins of the stigma surface proteins that inhibit, or fail to stimulate, pollen germination and growth. Other incompatibility mechanisms are based on proteins within the style that inhibit pollen tube growth. Because of our increased knowledge of the reproductive biology of crop plants it is now possible to consider engineering horticultural species for the character of self fertility. This is seen as a continuing project for well into the 21st century.

Manipulation of Product Composition

The genetic engineering of fruit and vegetable composition will be a major pre–occupation of genetic engineers over the next 20 years and possibly further into the future as techniques are already available to change (improve?) their nutritional value. A major limitation for the plant biologist is the availability of medical knowledge about the constituents in fruits and vegetables that are both good for us and bad for us! An apple a day is known to keep the doctor away and virtually all grape products, juice, raisins, wine (red) and fresh grapes are regarded as health giving. However we do not know which constituents of grapes and apples contribute to good health in humans. Further we knew that green and yellow vegetables, and fruits with high levels of anthocyanins contribute to a healthy diet, from correlative rather than from experimental data, and assume that critical constituents includes vitamins, fibre and a range of unknown anti–oxidants. Also it is now possible to alter the lipid composition of higher plants and reduce the level of saturated fatty acids to improve nutritional value (Ishizaki–Nishizawa al 1996): and it is possible to manipulate starch levels. (Stark et al 1992) At this point in time plant researchers are more able to manipulate the composition of fruits and vegetables than medical scientists are able to provide information about the direction to go to improve their nutritional status for humans.

Changes in fruit and vegetable composition, colour and shape that increase their marketability will in future years occur at an accelerated rate. With some crops, new varieties are in constant demand e.g., coloured bell peppers, small cabbages and cauliflowers, apples with high sugar levels such as the Fuji and non–astringent persimmons (kaki). At the same time there is considerable conservatism with crops such as wine grapes where a small collection of 'quality varieties' such as chardonnay, riesling, cabernet sauvignon, merlot and shiraz dominate the market. These wine grapes are currently prime candidates for gene therapy as researchers aim to introduce disease resistance into them without altering their other features. In the case of pears, banana and the raisin–grape sultana there is current work aimed at introducing anti–sense transcripts of the enzyme polyphenoloxidase to reduce browning reactions that occur during processing .

Modification of Post–Harvest Characteristics

Altering the post harvest behaviour of both fruits and vegetables was one of the earliest areas of plant genetic modification. In fact, the first commercial product of recombinant DNA technology was the 'Flavor Savor' tomato which was engineered with an antisense gene which reduced the formation of the softening enzyme polygalacturonase which in turn reduced the extent of post–harvest fruit softening and increased shelf life. (Redenbaugh 1993, Klee et al 1993) Other work has centred on the phytohormone ethylene that plays a major role in the regulation of fruit ripening (Woodson 1997) Antisense RNA was also used in tomato to reduce the activity of the enzyme ACC synthase which is involved in the formation of ethylene from ACC (1–aminocyclopropane–1–carboxylic acid). This change also delayed fruit ripening, but the effect was reversed by the addition of ethylene. Another approach has been to genetically engineer the tomato to express a gene from *Pseudomonas* which encodes an enzyme that is capable of breaking down ACC into products other than ethylene. These fruits showed delayed ripening and also responded to exogenous ethylene. A further approach with the tomato has been the use of two long standing mutant genes rin (ripening) and nor–rin (non–ripening) which have now been combined together to give tomato fruits with a 6 to 8 week delay in their ripening.

It is likely that many fruits will have built into their genetic code the feature of delayed ripening which will involve a combination of inhibiting the expression of softening enzymes and a lack of responsiveness to both endogenous produced and exogenously delivered ethylene.

Seedless Fruit

The absence of seeds is regarded as a desirable feature in many fruits and even some vegetables. However this goal is tempered by the knowledge that hormones, released from developing seeds influence fruit growth. Perhaps the two most successful seedless fruits are grape and citrus. These were initially developed using selections from wild populations notably the sultana or Thompson Seedless grape, the Bahai or Washington navel orange and the Unshiu or Seedless Satsuma mandarin. Subsequently conventional plant breeding techniques were used to develop other cultivars of these fruits with similar features. In the case of grapes the sultana cultivar has burn a major source of the seedless character which has a relatively high heritability. This cultivar is stenospermocarpic and normal seed development stops prior to the formation of a thickened seed coat. The sell seeds of sultana grapes have viable embryos which can be rescued using aseptic culture techniques. A high percentage of the grape vines derived from such rescued embryos are seedless and this approach has been used by workers in Israel, California, Australia and France as a way to develop further seedless varieties.

For success in the market place and especially in Japan it is important for grapes to be large. Most of the successful seedless varieties respond well to gibberellic acid (GA) giving berries weighing at least 5 grams which are favoured in the USA where crisp texture and green bunch stems are more important than flavour. In both Europe and also here seeded berries are accepted by consumers as long as they are large e.g., Red Globe and Italia. A further trend that may yet develop world–wide, rather than being a local one, is a greater acceptance of the distinctive flavours of hybrid table grapes such as Kyoho.

In both Australia and Japan considerable research has been directed towards the development of new seedless, easy–peel, citrus varieties. This initially involved the search for both male sterile and parthenocarpic lines but the work has now moved in the direction of isolating and inserting into existing seeded cultivars genes with these capabilities. (Kultunow 1993) There are a number of sources of genes which confer male sterility, but these need to be associated with genes that interrupt seed development at an early stage to produce seedless phenotypes. Recently it has been found that some Australian mandarin varieties, Emporer and Ellendale, are seedless when grown in insect–proof cages or in isolation away from other pollen sources. (Skyes and Possingham 1992) A problem with producing new seedless citrus varieties is the relatively long period of juvenility (about 5 years minimum) before cropping occurs in both seedlings and genetically modified plants.

The persimmon or Kaki is a crop in which the quest for seedlessness has to a degree been reversed as varieties with a limited number of seeds tend to have better flavour characteristics than seedless varieties. There appears to be no readily available source of seedless among wild types of our major pome fruits including apple and pear, and our major stone fruits including cherry, peach, apricot and plum. Additionally there is no general agreement that the development of seedless types is a desirable research objective. Perhaps the lack of seedless wild types makes it difficult to envisage such fruits.

There are a number of tropical fruits that should be considered as candidates for the development of seedless types using gene technologies possibly based on citrus. They include the avocado where small seedless fruits are sometimes available when pollination fails due to low temperature. These small seedless fruits find a ready market and suggest that seedless fruits would have market acceptability. The mango should be seen a prime candidate for reducing seed size or for eliminating them altogether. Some varieties produce apomictic seeds and might be amenable to gene technologies that interfere with the early stages of seed development. Fruits such as the longan and rhambutan have relatively large seeds and would be vastly improved if even fruits with smaller seeds could be developed. In this respect the lychee is interesting as the market pays a high premium for the one small–seeded variety that is available.

A number of species have been candidates for the development of seedless types based on crossing diploids and tetraploids to give seedless triploids. They include the watermelon where seedless fruits of somewhat inferior quality have come and gone on the market place. The cantaloupe is another where it has not been possible to reach the same quality in seedless as in seeded fruit. There are another group of fruits in which soft seeds form a significant part of the edible, these include figs, kiwi fruit and to a degree the tomato. It is difficult to envisage seedless fruits of these crops, but who really knows what the future will bring.

Summary

It is certain that the quality of our fruits and vegetables will change dramatically over the next 25 years as we utilise the combined power of conventional plant breeding and genetic engineering to modify our existing varieties. The consumer via the supermarket chains will exert a far greater influence on the direction of change than farmers who have been the traditional recipients of research on crop improvement. Disease, pest and herbicide resistance will continue to be important attributes of crops, but mainly because we are increasingly demanding a clean environment coupled with sustainable horticulture. The traditional university and government sources of funding for crop improvement research will largely be replaced by funding from both private and public entrepreneurs who will expect to participate in the profits to be obtained from patented varieties with novel characteristics.

One of the dangers inherent in such an entrepreneurial approach to crop improvement will be a narrowing of the genetic base of most of the horticultural crops we consume. This has occurred over recent years as only a very restricted range of varieties are now available of our main fruits and vegetables. There could also be problems with funding work which aims to preserve a wide range of wild types of our main horticultural species.

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Transgenic Plants

Transgenic Plants: Is Anyone Taking Care? (Nancy F. Millis)
Transgenic plants, many of which are food plants, are already on the market in Canada, USA, UK and in Europe. What is the situation in Australia?

Australian System.

- GMAC–Genetic Manipulation Advisory Committee provides surveillance of all contained work with genetically modified organisms (GMO) and all field trials before general release
- ANZFA–Australian and New Zealand Food Authority has legal responsibility for food safety and labelling issues.

Issues

- How are risks assessed?
- What properties have been introduced?
- What plants have been tested in open trials?
- What concerns have been expressed?
- What are the advantages/disadvantages?
- Will the public accept GMO's as food, as ingredients of food, or eat a food in which material from a GMO is incorporated?

Do we Need a Label?

- What should be labelled?
- What should the label say?

Food devotees know that one of the major joys of life is the aesthetic pleasure which accompanies a meal where the food is superbly prepared and the flavours delicate and distinctive. To them it is of little significance whether the ingredients have been analysed for composition and texture by the most refined and accurate equipment known to science. While saying that, the gastronome nonetheless takes for granted that the food will be safe and wholesome, and to achieve those ends, is prepared to welcome the intervention of science in the cause of safety and well being.

But what about innovations in the food industry? How many of you do not have a deep freeze or a microwave oven? As it happens I do not, but I recognise I am an endangered species in that idiosyncrasy. A recent addition to the culinary scene is genetically engineered food, either the genetically modified organism (GMO) itself, or a product of it. Food GMOs are now reaching the market place, but the technology has been used since 1972 to introduce specific characteristics into all sorts of organisms, including major agricultural and horticultural crops. This paper will set out the surveillance system for GMOs that operates in Australia and the rationale behind its decisions. But before doing so, it is important to put gene technology in perspective.

Breeding in Agriculture
Ever since we began to grow food (as distinct from gathering it) we have selectively bred plants and animals for wanted attributes. We have crossed those with high levels of the attribute, and among the offspring selected the best as parents for the next cross. We have ruthlessly culled offspring with unwanted traits. In other words, we have consciously altered the genetic make up of the population. As an extreme case, think of the breeding of dogs. We have great danes, chihuahuas and everything in between, including some with inbred pathological conditions like bulldogs and dachshunds. What is different and so powerful about genetic engineering is the precision with which a defined piece of DNA can be excised from one organism and put into another with which it is unlikely to cross conventionally.

Australian Surveillance System

The Australian Academy of Science established a surveillance committee for GMOs in 1975. The Commonwealth assumed that responsibility in 1981 and today the Genetic Manipulation Advisory Committee (GMAC) undertakes that task. GMAC is a non–statutory agency within the Department of Science. It comprises of 19 members appointed for their personal expertise which covers genetics, molecular biology, plant, animal, insect, microbiological, ecological and environmental sciences along with legal and engineering knowledge and journalism.

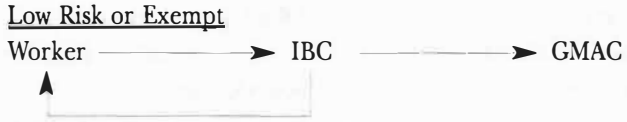
GMAC works through four subcommittees:

- Scientific: considers the molecular and genetic aspects of all proposals.
- Large scale: considers work with culture volumes >10L and large numbers of animals, plants, insects.
- Deliberate release: considers the release to an open environment of any GMO and cases where a GMO may be inadvertently released (e.g., during transport for food processing).
- Liaison: provides information on GMAC activities, live releases of GMOs, changes to guidelines and regulations.

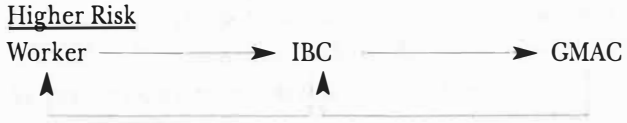
GMAC has published guidelines for the safe conduct of work in contained facilities (small scale and large scale). These facilities provide different degrees of security from very high (PC4) for hazardous GMOs down to PC2 for GMOs of low risk. The Guidelines for Deliberate Release require the proponents to give detailed information about the host and donor organisms, the GMO and any vector which might be involved in construction. They also require information about the characterisation of the DNA introduced, its molecular configuration and control, the presence of marker genes, and the stability of the construct. In addition, information is required about the interaction of the GMO with the environment and its biota, and possible impacts on nutrient cycling, water quality etc. Any experience in Australia or overseas with similar GMOs and background knowledge of the behaviour of the host organism all form part of GMAC's assessment of the suitability of GMO for release in the Australian environment and the need for any conditions to be placed on the release. The general public and other government agencies are informed of any release proposal and invited to comment. Their comments form part of GMAC's review of the proposal.

Fig, I: Surveillance System Operating in Australia through GMAC.

Contained work

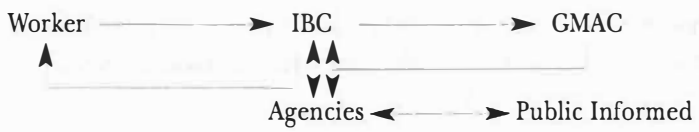


GMAC is informed and work goes ahead as soon as the Institutional Biosafety Committee (IBC) approves.



Work cannot begin until GMAC gives advice to the IBC and the IBC ensures the worker abides by the advice.

Live Release



All projects must be reviewed by GMAC. GMAC advice is sent to the IBC and any agency concerned with the end use of the organism. The agency gives legal approval if appropriate. The public is informed when GMAC receives the project, can comment on it before GMAC sends its advice to the IBC and can receive a copy of GMAC's advice.

Institutional Biosafety Committee (IBC)

All organisations undertaking gene technology work must establish an Institutional Biosafety Committee (IBC) which accepts responsibility for permitting work to go ahead and ensuring that the work is done according to GMAC Guidelines and advice.

Activities Relating to GMOs

Table 1 sets out the numbers of IBCs and the different types of proposal considered by GMAC for the year 1996–1997 and the total from 1981 to 1997 (mid–year).

Table 1 Activities related to GMOs in Australia

Activity	Numbers*	
	1996–1997	1981–1997
IBCs	86	
Small Scale (contained)	1786	4244
Large Scale (contained)	16	34
Deliberate Release	72	80
General Release	1	3

*In addition, there are large numbers of contained projects involving GMOs that are of such low risk that they are exempt from GMAC's Guidelines.

The deliberately released GMOs in Australia are largely agricultural crops, but include ornamentals, pasture species, and micro–organisms of agricultural significance (see Table 2).

Table 2 GMOs Deliberately Released in Australia to 1998

Crops	**Pasture sp.**	**Micro–organisms**
B.juncea	Subterranean clover	Agrobacterium*
Canola*	White clover	Baker's yeast
Cotton*		Bovine herpes virus I (animal
Lupin	**Ornamentals**	vaccine)
Field pea	Carnation*	Fowl pox virus (animal vaccine)
Poppy	Chrysanthemum	Pseudomonas
Potato	Rose	Rhizobium
Sugarcane		Salmonella (animal vaccine)
Tobacco		
Tomato		*General release
Wheat		

Table 3 lists the host plants and the major genes released as GMOs in Australia from 1981–1997. In the last two years, cotton and canola with resistance to insects and/or herbicides have been the most numerous.

Table 3 Some Transgenes and Host Plants Released in Australia from 1981–1997

Transgene	Host Plant
Insect resistance (17)*	Cotton, pea, tomato
Herbicide resistance (19)*	Canola, cotton, carnation, lupin, rose, subterranean clover, wheat
Virus resistance (10)*	Lupin, potato, sugarcane, white clover

*Number of proposals

Livestock

As far as livestock are concerned GMAC has considered one proposal only. This concerned pigs carrying extra copies of porcine growth hormone controlled by a zinc–sensitive metallothionein promoter. GMAC regularly receives research proposals involving 'knockout mice'.

Post Release

As more transgenic crops are granted general release status and become freely traded, new challenges arise for their management by individual farmers. This applies particularly to insect and herbicide resistant crops. The development of resistance in insects and weeds to applied chemicals, and in pathogenic bacteria to therapeutic antibiotics, gives ample cause for concern that transgenic crops will rapidly lose their efficacy, if not appropriately managed.

Programs of Integrated Weed Management (IWM) and Integrated Pest Management (IPM) are an essential part of the use of transgenic crops. A detailed information package must be developed for farmers, consultants and seed sellers. The classification of herbicides on the basis of their mode of action and the labelling of all cans with the appropriate symbol is an excellent example of cooperation between scientists, consultants, industry and farm managers. A similar cooperation is planned in Australia for the management of transgenic crop plants.

Activities Relating to GMOs & Food Authority and GMAC

The safety, standards and labelling of foods are controlled by the Australian and New Zealand Food Authority (ANZFA). A copy of GMAC's recommendations regarding any GMO which could potentially be sold as food is sent to ANZFA at the same time as it is sent to the IBC. This advice is primarily directed to the genetic aspects of the GMO, but will draw attention to any issues GMAC believes might arise from the presence of the novel DNA, such as:

- Introduced gene makes a novel protein in the food which is not anticipated by the buyer and could cause allergies, toxicity or be carcinogenic
- The GMO might contain an unwanted marker gene
- The modified food might be nutritionally poorer
- Modified food could be indigestible
- Modified foods could have an altered shelf life (eg. consumer may not be able to detect age by its appearance)
- Mixing of genes from vegetable and animal sources disturbs some people
- Overseas markets could be prejudiced
- Multinational companies dominate the GMO market

On the other hand, there are advantages arising from the use of genetically modified food crops that apply at the farm and with the processed food. These are as follows:

- Shelf life can be prolonged
- Quality attributes can be enhanced or altered (starch structure, fatty acid profile)
- Amino acid profile can be improved
- Cost can be reduced by cheaper farming methods
- Bt–insecticidal genes reduce the use of pesticides in growing crops and reduce highly toxic chemicals in the environment and residues in the produce
- Herbicide resistance genes, as part of integrated weed management, enable crops to be grown with less persistent herbicides
- a–amylase inhibitor genes (from green beans) enable control of highly specific weevils in peas
- Genes for resistance to fungi may be incorporated into plants, reducing losses and the use of biocides
- Incorporating genes for the coat proteins of viruses confers on the plant resistance to the respective virus. This improves yield and reduces biocides otherwise used to control viral vectors, such as aphids

The task of ANZFA is to achieve a balance between these views, so that the community can gain the benefits of the technology while respecting the views of particular sectors and minimising any potential hazards. ANZFA has circulated a discussion paper on regulating food GMOs, but a decision on the use of GMOs and possible labelling has not yet been made.

Quandong Orchards

A Catalogue of Attempts to Develop Commercial Quandong Orchards in Australia (Dr. John Possingham)

History

Over a period of about 35 years I have been closely associated with attempts by various state members of CSIRO to domesticate or deliberately cultivate the Australian Quandong (*Santalum acuminatum*) in planted orchards. The scientists who participated in this work included Drs M Buttrose, M Sedgeley, B Loveys, E Runt and Mr J Grant, L Smith and Ms J Treeby. The work was initially supported by CSIRO and involved only a small proportion of the time of scientists who worked on other projects. In the 1990s I obtained a quite large grant from the Sydney Meyer Foundation on which to employ Ms. Treeby for 3 years in an attempt to advance the work to the stage of partial commercialisation. An additional objective was to assist aboriginal people in the Alice Springs area to cultivate this crop which is seen as having some economic potential.

Seed Germination and Collection and Seedling Establishment

The initial work involved developing reliable techniques to germinate the seeds of this desert species. When this work was commenced, amongst the entrenched Australian folklore about quandongs was the claim, that the seeds would only germinate after the fruit had been eaten by an emu and the seeds had been passed through the bird! CSIRO never established the truth of this claim, but a number of scientists including Drs Buttrose and Loveys and Mr Grant found that clean seeds, free of flesh could be easily germinated if they were partially sterilised with bleaching powder and mixed with moist sand or vermiculite in a plastic bag and held at room temperatures in the dark for a period of time up to 6 months. Better germination could be obtained if the hard seed coat of the nut was first cracked with out damaging the embryo of the seed. Additional germination technology involved the use of plant hormones such as gibberellic acid.

These studies established that quandong seeds could be easily germinated and to obtain a wide generic cross–section of the species seeds were collected from the wheat belt of WA, the Flinders Ranges and Eyres Peninsula in SA, the Alice Springs area in the NT and from along the Darling River in NSW. Attempts were also made to alert the rural community to that that CSIRO had set up a small research program on this crop and people were encouraged to send in seed samples of fruit with superior qualities.

Considerable care however is required when transplanting quandong seedlings to the field as that primary roots grow to the bottom of pots and can easily be broken off during the transplanting process. This loss of roots can lead to a high incidence of death amongst transplants. From early botanical studies in Australia and India it was known that all species of the family Santalaceae are partial root parasites and in natural stands are always found growing in dose association with other plants. For this reason we routinely planted as 'nurse' plants, species such as kikuyu grass and lucerne, in the seedling pots and made sure these were transplanted to the field with the quandong seedling.

Seedling Orchards

Once the problems of seed germination and seedling establishment were partially overcome, CSIRO in co–operation with interested growers set about establishing small seedling orchards in Quorn SA (Mr B Powell), Paringa SA (Mr T Angove), and on CSIRO land at Koorlong (near Mildura) in Victoria. There were many establishment difficulties with these orchards and many trees died of unexplained causes and had to be replaced. One suspected cause was the high sensitivity of the species to water logging due to the application of excess water at or after transplanting.

Despite these problems good vegetative growth of some trees occurred in a variety of situations. The Quorn orchard only had access to quite saline water (about 2000ppm), the Paringa orchard received only minimal attention as it was located on a large vineyard where grape vines were the priority while the Koorlong plantings had persistent weed problems. From observations of these plantings it soon became apparent that in any one year only a few individual seedling trees carried significant crops. Some trees produced very little fruit at all.

Others that had a good crop one year and failed to produce a crop the next year. Over a 10 year period the most productive tree at Paringa was almost completely biennial having a large crop that was followed by almost no crop in the following year. The conclusion was drawn from our seedling orchards that only about 5 to 10 percent of seedling trees produce a crop in any one year when grown in irrigated orchards.

Orchards of Grafted Trees

The somewhat disappointing fruit production results from orchards based entirely on seedling trees lead to further work aimed at developing techniques to vegetatively or clonally multiple the best performing seedling trees. Attempts were made to grow quandong trees from cuttings without success. However it was possible to graft scions (shoots) from selected superior seedling trees onto rootstock. This is standard technology with many other fruit crops and was seen as the best solution to obtaining productive quandong orchards from selected trees.

Considerable effort was put into this work utilising funds from the Sydney Meyer Foundation and attempts were made to establish orchards of grafted trees at Koorlong, Vic, Gol Gol in NSW and at McLaren Flat in SA. In all three orchards there were establishment problems leading to the death of grafted trees. The trees continued to die 1, 2, 3 and even 4 years after planting them in the field. In all three orchards drip irrigation was selected as the best way to apply small quantities of water to this desert species, but despite this there was the possibility that many of the establishment deaths Were due to water logging of the roots. Another possible explanation of these deaths was incompatibility between the scions (shoots) and rootstock of grafted trees leading to unsuccessful graft unions. To support this possibility there was evidence of shoots overgrowing rootstock and vica versa leading to restricted shoot growth in some older grafted trees at CSIRO's Koorlong orchard.

Epilogue

Staff and finance cuts at CSIRO in 1994 lead to the stopping of research on this crop of limited economic importance. Work extending over some 30 years had shown that there were too many complex problems to solve before the quandong could be successfully domesticated to justify further research. For example one the major problems that had not been addressed to any significant extent was the environmental factors affecting flowering and fruit formation. It is highly probable that fruit production responds positively, but in a complex way to water stress as the normal habitat of quandongs is in areas of low and highly irregular rainfall. I have maintained under vineyard conditions at McLaren Flat some 50 trees for over 10 years virtually without water stress and although these trees flower quite regularly they produce almost no fruit.

Included in the list of projects requiring attention is the selection of types with superior fruit quality as it had been found from limited analytical work that the best fruits at maturity contain in excess 8% sugar and significant levels of citric acid. A further objective would be to find fruits with more distinctive flavours. There is also a need to understand how best to cook them. The fruit is high in pectin and gels readily. Some cooks stew them for a long time as a way to bring out their flavour while others simmer them for shorter periods in red wine to obtain a different product. It is possible that the fruit has bound flavour constituents, alternatively they may simply lack flavour.

The fruit does not to any extent ripen off the tree and has the best flavour when it is picked fully ripe when it easily detaches. An unusual feature of the fruit is that it can be easily preserved by sun-drying as it has a naturally low water content. It does not darken on drying and can be dehydrated by soaking over night in water or red wine.

The quandong will probably only occupy a small culinary niche in Australia, mainly utilising fruit collected from the wild, as there are still many problems that must be overcome and involve expensive research solutions before this crop can be grown in intensive orchards. Currently there are good natural dense stands of quandongs in many parts of Southern WA and SA from which fruits can be collected. There are, however, problems in some seasons with insect larvae infecting the fruit. Some of the many problems associated with growing this crop may find community solutions from the activities of the recently formed Australian Quandong Growers Society which now holds regular meetings to exchange information about this recalcitrant crop.

Food Choice

Food Choice and the Quest for Variety—Modeling the Food Preferences of Contemporary Australia. (Sylvia Roughan)

Introduction

The following is a brief outline of a research project that is being undertaken as part of a Masters by Research with the Institute for Land and Food Resources at the University of Melbourne.

The study stems in part from the resurgence of academic interest in the sociology of food—the how and why of eating—and in part from a strong personal interest in the eclectic nature of the modern Australian palate. This is all the more interesting when the powerful conservatism of previous generations of Australian eaters is taken into account.

Food choice processes are being examined in this study as they are critical in discerning why one individual will choose one foodway, and another, in similar circumstances, will eat in a dramatically different fashion. These food choice variations have, in turn, implications for fields as diverse as nutrition and agriculture.

Relatively little has been written, and even less has been methodically researched, about the way in which we, as Australians, make our food choices. This study plans to make up some of this deficit, by examining the food choices of two generations of Australians. In so doing, it will also evaluate the applicability of an American food choice model in the Australian context. It will also probe the food choice processes that individuals undertake every time they make the decision to eat a food, and some of the factors that influence those food choices.

I am indebted to Dr Barbara Santich for the phrase 'Quest for Variety', which she first used in a column in *The Australian* in October 1997. It neatly sums up the sense of adventuresome zeal that many Australians now bring to the market, kitchen and table. Thanks also to the Royal Agricultural Society of Victoria for the scholarship which has made this undertaking possible.

As this is very much a work in progress, comments and opinions are most welcome. Due to the vagaries of University life the phone is not always attended—however, email addressed to s.roughan@pgrad.unimelb.edu.au will guarantee immediate attention.

Aims

- To establish similarities and differences in the food choice patterns of two generations of Australian eaters.
- To determine the dietary and social influences acting on two generations of eaters.
- To establish the applicability or otherwise of a current American food choice model proposed by Furst, Connors, Bisogni, Sobal and Falk (1996) in the Australian context.
- To propose modifications to the food choice model Furst *et al* have put forward in order to make it more pertinent to the Australian context.

Background

Relatively little information is available regarding individual food choices in Australia, either inside or outside the home. This stands in contrast to countries such as America and Britain, whew food choice has been examined as a sociology in its own right, with broad social implications for fields as diverse as agriculture and nutrition. (James 1990, Mennell, Murcott and van Otterloo 1992, McIntosh 1996, Bell and Valentine 1997)

Prior to the late nineteen fifties, food in Australia was principally dominated by the anglo–saxon influences of Britain and Ireland. While there were other cultures active in Australia (Aboriginal, Chinese, Italian) even before the well known migrant influxes triggered by the First and Second World Wars, the influence of these cultures was not visible in general eating patterns until relatively recently. (Symons 1982, Beckett 1984)

However, Australia is now known as a country that has adopted culinary experimentation with a degree of

vigour unmatched anywhere in the English speaking world. This is a distinct point of cultural differentiation from other English speaking countries, although it is evident that countries such as Britain and the US are showing signs of similar, although less pronounced, trends. (Algren 1992)

This change from extremely conservative to extremely adventurous eating is pronounced, significant and at present not well understood. This research project proposes to explore this change through an examination of the food choice patterns of two generations of Australians.

Method

Furst *et al* describe a conceptual model of the food choice process as experienced by the individual which may be helpful in understanding this cultural shift. Within this model, people's life course experiences are determined to be major influences on food choice. For each life course, the five primary influences on food choice are considered to be ideals, personal factors, resources, social context and food context. These influences affect the development of personal systems for making food choices. Personal systems incorporate two primary aspects, value negotiations and behavioural strategies. In turn, value negotiations involve balancing sensory perceptions, monetary considerations, health and nutrition beliefs and concerns, convenience, social relationships and quality of food choice decisions. Behavioural strategies develop over time and are employed by individuals to simplify the food choice process.

This study will establish the applicability of this model to the Australian context by examining the food choice patterns of two generations of Australian eaten through the elements of value negotiation and behavioural strategies, as outlined above.

A primary focus will be the relative importance of the elements making up the value negotiation segment of the model. Value negotiation, the process of weighing up and accommodating personal values during the food choice process, takes into account both personal values such as sensory perceptions, and also expressions of cultural influence and expectations—such as convenience, interpersonal relationships and tradition. As such, it is likely to reflect the socio–cultural variation between Australia and America.

This will have a two–fold benefit of illuminating the generational changes in food choices that appear to be occurring in Australia, and also testing and possibly expanding the model of Furst *et al.* At present the contributory factors as determined by Furst *et al* are broad, and while flexibility is a virtue in sociological modeling, too much openness may hinder the utility of the model in that it may lack specificity.

The study will be carried out through the comparative analysis of dietary data and attitudinal information collected from representatives of the age groups 20 – 25 years and 50 – 55 years. These two age groups were selected because the 20 – 25 age group is the youngest current independently–living age group. They can be considered to have moved away from family influences to some extent, to be independent in their food choices, and to have developed their own food decision making processes. The 50 – 55 year age group was at approximately the same level of independence thirty years ago—notionally the point at which a segment of the Australian population started to modify their attitudes to food. An older group (60 – 65) may display more traditional eating patterns, but may also complicate findings by exhibiting elderly eating patterns.) (Winter Falk, Bisogni and Sobal 1996)

Initial concepts will be gleaned through the use of focus groups, which will discuss issues concerning food choice. This information will be used to develop a set of questions for use in the subsequent survey. A significant body of information will be gathered through a survey of 300 individuals utilising semi–structured interviews, after Rappoport, Peters, Huff–Corzine and Downey. (1992) Respondents will be selected at random from individuals engaged in food related activities in a public context, for example shopping or product sampling. If necessary, case studies may subsequently be used to illustrate specific representative situations. (Eisenhardt K 1989)

The Royal Melbourne Show will be used as one of the foci for parts of the research, as it can be considered to be a significant 'showcase' of fresh agricultural produce, and has an educational function regarding food products, both in a commercial and a non–commercial context. In addition, there are a wide variety of food

outlet types available on location, enabling a wide spectrum of food choices and eating behaviours to be expressed. Other likely locations include supermarkets and wet markets such as the Queen Victoria Market.

Expected Outcomes and Significance

This research will:

- Provide greater insight into the pronounced changes in food choice behaviour in Australia over the past four decades.
- Review the applicability of food choice models that exist at present.
- Carry implications for the directions of agricultural production and food processing links, e.g., canola margarine.
- Enable the Royal Agricultural Society to plan appropriate activities regarding food and primary product promotion, through their improved understanding of consumers food choice processes.
- Provide insight into human behaviour regarding food choice and preferred nutrition strategies.

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Sylvia Roughan—An Abbreviated Biography.

My present interests are the result of a personal journey through many aspects of food production. Raised on a farm. I have always been intimately familiar with the processes needed to put food on the table. Food—whether in the paddock or on the plate—has always been an intellectual and emotional cornerstone for me. I am doubly lucky that my passion is one that most people can share with me, and that it is something that can be indulged in some way every day.

Having attended Adelaide University, which resulted in a BA (Hons), with a triple major in Geography, I spent the next seven years working with various aspects of primary production in South Australia. Highlights included meeting many very knowledgable and generous farmers, in both broadacre and intensive enterprises. Lowlights included the poor communication between producer and consumer that, unfortunately, adds to the increasing pressure on rural industries to respond to sometimes capricious consumer demand.

In 1997 I moved to Melboume, where I was fortunate enough to be able to set my own direction for my Masters by Research project. This is how I finally became able to structure a study into the increasingly diverse food choices that Australians have been making over the past thirty yews. This has proven to be an excellent justification for the increasingly unwieldy collection of books on food and the culture of eating that I have been collecting for most of my life.

Marketing Bushfood

Marketing Bushfood in Australia and Beyond (Juleigh Robins)

Introduction

From the time of European settlement Australia has been a country without a cuisine. Over the past 40 years with the enormous influx of immigrants, both European and Asian, our culinary sights have been raised from traditional British fare to a rich diversity of ethnic cuisines.

The food processing and hospitality industries however, while embracing many new food concepts imported from other cultures have largely been ignorant of the indigenous foods of our country and until recently bushfoods have played virtually no part in the formation of an Australian cuisine.

Similarly, bushfoods have played no part in our post-settlement agricultural industries, despite recognition by many early botanists and horticulturalists of their potential. As early as the 19th Century loggers were not allowed to fell the macadamia and by 1900 local botanists were signalling that this tree should be cultivated for its wonderful nut. However the American agriculturists virtually hijacked the macadamia from under our noses and made the nut their own. Incredibly it wasn't until 1963 that the first commercial plantation of macadamia nuts was planted in Australia and from that time the macadamia nut industry has become a multi million dollar one for this country. Sadly we still lag in international markets behind the American producers and the perception still remains that the macadamia is an American nut.

Do we Australians need a more object lesson regarding the marketable value of our indigenous foods than that provided by the macadamia? Our neglect of bushfood as a marketable resource is a poor legacy inherited from our colonial past. I doubt that I will ever come to grips with the dominance of European farming methods and crops in an environment that is so clearly alien to them. Doubtless historians will have the answers as to why our English colonists insisted on imposing their imported systems, crops and livestock to the absolute detriment of indigenous plants, animals and the Aboriginal people, but as a cook I would have preferred an agriculture based on food plants that grow regionally, that flourish naturally in their local environment, that don't require massive amounts of fertiliser to help them grow, or chemical sprays to repel pests or need irrigation that spoils our land.

I'm a cook and cooks, like farmers, are tied to the land. It's not as obvious but cooks recognise healthy plants that are juicy and full of flavour. They appreciate the seasonality and cycles of growing. I don't know one cook of my acquaintance who is glad that tomatoes and strawberries (to name two of the worst offenders) are available all year round, but lack any semblance to true colour or flavour.

Bush foods have this quality of true flavour for it hasn't been bred out of them by centuries, if not aeons, of genetic manipulation. We have a real chance in Australia with these foods to develop an exciting new agriculture around them. Certainly farmers (and I recognise the degree of R & D required here) will need to select the best fruit bearing strains and the hardiest specimens, but compared to the common fruits, vegetables and grains available to us, bushfoods will be virtually untouched. With the emphasis in the bushfood industry on clean foods, organic growing methods and the questioning of the principles of monocultural growing systems and the increasing interest in sustainable agricultural systems, Australia may have a unique opportunity to realise a new industry of food production based on bushfoods.

It is therefore necessary for we Australians to understand that bushfood can be, and is, more than a food fad, a novelty to be exploited. Beyond an initial temptation to try to cash in on a currently fashionable trend is the need to establish bushfood as a long term industry and to recognise that we have a truly unique and valuable resource that we can be proud of and which can enrich our lives.

The manner in which we market bushfood, both as a concept and the presentation of its end products will set the standard of how bushfoods are regarded in both the domestic and international markets.

There is no doubt that the burgeoning bushfood industry will prosper and grow and that the incorporation of bushfoods into the food, hospitality and tourist industries is inevitable and it is important that we don't

trivialise bushfood by turning it into a novelty 'kitsch' product that doesn't reflect or represent the people and the philosophies that have brought about its birth.

Robins Bush Foods have been actively marketing bushfoods for the past 9 years and these are some of the macro marketing issues that I would like you to consider when you are ready to market your bushfood

Matching Bushfoods to Market Needs

I guess this is just the slick '90's way of saying that the customer is right and what the customer wants the customer should get. It is also true that in this market the customer often hasn't got a clue as to which bushfood is which, but part of any marketing is to educate the customer and once the consumer becomes familiar with the foods and the flavours, it is of paramount importance that we listen to what they like and want to buy. I have introduced many people who want to grow bushfood to the various plants that may be suitable and the first plant everyone seems to want to grow is the quickest and easiest—Warrigal greens. That's terrific for the grower. They are easy to plant and they grow prolifically. Dollar signs light up! However Warrigal greens are one of the more difficult bushfoods to sell. They are similar to English spinach but are more difficult to handle and they don't keep well. The point of difference between Warrigal greens and common spinach is not sufficient to make them a highly marketable product and there certainly are not droves of customers beating a pathway to my door for Warrigal greens. Even as a processed product I haven't had a great deal of success with it. So where are you going to sell your huge crop of Warrigal greens if not to me or one of my colleagues who have possibly similar experiences? How much more frustrating and financially devastating if the product was a fruit or leaf that had years in the lead time to harvesting.

It is very easy to become excited about bush foods. Believe me I know! But you need to find out what and how much the market wants and needs, and be guided by that rather than by your ability to grow in terms of your capacity or skills or both. There is very little point in enthusing growers to dedicate part of their production to bushfood if that level of production cannot be taken up by the market. The bushfood industry at its current stage of development is small and consists of a few food processors and on-sellers who currently have a limited purchasing power and small markets. This is slowly changing and it can't be quick enough for me! We at Robins would love to buy tonnes and tonnes of bushfood and turn it into products and have it in everyone's pantry, and be assured that we intend to achieve just that, BUT it takes time and money to create markets for bushfood products and none of us in the bushfood industry want farmers growing foods that we are unable to buy or sell. This can only lead to disenchantment and a collapse of any future bushfood agriculture. So match your production to what the market tells you. When you can't keep up supply we'll complain and you'll be able to expand and be a stronger supplier the next season around.

Marketing Bushfoods as a Premium Product

To ensure a long term viable industry we must find, or in fact create, a market niche for bush food that the industry can fill. Due to the currently and historically 'wild' nature of the harvest of bushfoods the price of the raw bushfood ingredients are very high compared to industry standards. Who in their right mind would manufacture a food product that has a base ingredient cost of anywhere between $10 and in some cases even $50 kg and beyond? This would send the normal food manufacturer into apoplexy but not the intrepid bushfood marketers and manufacturers! We've identified and marketed bushfoods as unique and premium upmarket products. Consequently setting a high quality standard of bushfood products and consistently meeting that standard is vital for the bushfood industry. The raw ingredients will need to be of the highest quality and the 'wild' flavour must be evident.

Targeting the premium end of the market is an entirely appropriate strategy for bushfoods because:

1/ wild harvested bushfoods are highly seasonal, expensive and sometimes in short supply. While there is enormous interest in growing bushfoods, and while I caution against inappropriate or overproduction, it is clear that market expansion will from time to time outstrip production/harvest of some bushfoods for some

years until cultivated bushfoods mature and become more readily available (for example Quandong). In targeting bushfoods as a premium product we allow the industry some time to establish cultivation by limiting demand through pricing constraints and also help offset the high costs incurred in harvesting bushfoods by hand and often in remote and inaccessible areas.

2/ bushfoods are special and should be valued and marketed as such. As Europe has its truffles and caviar, we in the antipodes have bushfood! There is nothing else in the world like it and we should not devalue it by making it too cheap and demystifying it too much. Let's treasure it instead. We may sell less but with larger margins and with a sense of pride in a fine product.

3/ identifying bushfood as a premium upmarket product and ensuring that our packaging, service and product knowledge is appropriate to this market will add a certain credibility to bushfoods. Too often bushfoods or 'bush tucker' is equated with limiting stereotyped images of the swaggie out bush with his campfire. While there are many applications of using bushfoods on the open flame or in ground oven cooking, this is not enough to support an industry so full of potential. Food products today must meet a plethora of demands and the market out there is sophisticated, impatient and demands quality as a basic requirement. To market bushfoods simply as an Australian novelty would soon fade in appeal and condemn bushfood to the role of a fad. Marketing bushfoods as a premium product and charging accordingly demands that the consumer takes it seriously as a food product with integrity in its own right.

Marketing Bushfoods as Clean, Environmentally Sound and Sustainable

The global market for food today wants and demands 'clean' food products. Australia's agriculture is well placed and recognised in the world as clean food and bushfood at present fills the most stringent criteria of clean food. At present it is grown largely in wilderness areas or under organic growing conditions. Thus bushfoods are presently free from typical pollutants and agricultural chemicals, although this may not always be the case. Any growers contemplating bushfoods as a future cultivated product should be aware that the 'organic' perception attached to bushfood is important to its marketability. Consumers from chefs to the informed customer at the supermarket are looking for quality products with a minimum of artificial additives be they preserving agents or chemical sprays or fertilisers.

There is a continuing interest in bushfoods as a perceived environmentally sound agricultural product. So much damage has been inflicted on our land due to inappropriate clearing, grazing and land management techniques that we are now faced with salinity and massive soil erosion and degradation to our waterways. Bushfood farming utilising the concept of restoration of the ecosystem by planting trees, understorey shrubs, herbs and groundcovers, can be shown to actually improve marginal or degraded land. Changing our attitudes to encompass those of our Koori countryfolk may have us yet living with the land rather than off the land. As the world's resources continue to shrink it makes sense to embrace the principles of sustainability and harmony and provides a powerful marketing edge as consumers become more cognisant of these issues.

Market Bushfood as the Unique flavours of Australia to the Export and Tourist Market

Australian bushfoods provide jaded palates with the first 'new' flavours in recent culinary history. Despite the fact that these foods have been the basis of a native cuisine for the past 40,000 years at least, they are the newest and most exciting foods to appear in a very long time. I believe that eventually there will be significant export opportunities for bushfoods as a value added product. The highly acidic flavours in particular seem to suit the Asian palate while the Europeans are attracted to the 'exotic' and 'romantic' image of the foods. Like any new foray into export markets, the time frame for success is long and financially demanding. In the short to medium term, I see bushfoods being purchased in small quantities for the primarily 'foodie' segment in overseas markets. The market penetration of bushfoods will largely depend on the resources of the sellers into those markets and on their ability and willingness to educate a new market in a far away place. There is no

doubt that overseas markets will embrace bushfoods as products that have great flavour and an attractive appeal but it is going to take lots of work and money to achieve significant results.

The dimensions of the tourist market for bushfoods, however is only just beginning to reveal itself. Tourists are dying to experience truly Australian foods. The very best beef steak for dinner or raspberry jam on your morning croissant, for example, can only compare with products from the tourists own country. But what an experience to eat a fillet of kangaroo with an Illawarra plum and chilli sauce or spread Kakadu plum jelly on your morning croissants or toast. These are the things that tourists will remember just as much as the sights they see. Food is always important and frequently features in people's memories and images of places they've been to. The tourist industry is beginning to appreciate the value that bushfoods can add to a travellers experience of Australia. Over the years I have marketed our products to Qantas and through that initial exposure have seen our products picked up by other major international carriers such as Cathay Pacific, British Airways, Singapore Airlines and most recently Gulf Air. Our products are also used on Ansett Airlines and on the Ghan Railway and The India Pacific Railway, where they have been extremely well received. Much of our foodservice product finds its way north where the tourists seem to be and we have found until recently, to our sorrow that tourists have been far more interested in our products than Australians.

Marketing Bushfoods as Healthy and Nutritious Foods

In Beth Gott's wonderful book Koori Plants, Koori People, Professor O'Dea says: "relative to their cultivated forms, (Australian) wild food plants are particularly rich in protein and vitamins/dietary fibre, low in sodium but rich in potassium, magnesium and calcium. The seeds which make significant contributions to the diet of Aborigines were not only rich in protein but also contained significant quantities of polyunsaturated fat. The carbohydrate in many of these traditional foods has been shown to be more slowly digested and absorbed than carbohydrates in equivalent domesticated food plant foods".

So it's official. Bushfoods are the holy grail for dieters and those among us who are health conscious—they are the foods that not only taste great but are good for you too! I know you've heard that line before but in the instance of bushfoods it's actually true and therefore presents us with another market to explore and capture. The health food market is just ripe for bushfood and bushfood products. Much of the marketing emphasis has been necessarily centred around the food and hospitality industries, due to the small number of active bushfood suppliers and processors not being able to cover all the bases ñ although we do try! Clearly the inherent nutritional properties of most bushfoods are desirable components to include in our affluent, urbanised diet. The health food industry will have different requirements to those of the food and hospitality industries, as they will require the foods to have their nutritional qualities intact or very evident. I'm confident that superior foods can be marketed to this industry because the base food value of most bush foods are so high. The demand for 'healthy' food is quickly spilling over into traditional food markets as consumers become more sophisticated in their food purchases.

Embracing 'Quality Assurance' and 'Best Practice' as a Marketing Tool

Changes are happening at a seemingly accelerating rate around the world and these changes are driving our businesses to improve the quality of our products and services, not only domestically, but more obviously in international markets. It is a vital part of current international marketing that businesses produce simply the best products and provide the best customer service at the lowest possible cost for those products and services.

These changes in the international markets are also happening here in Australia. Tariffs which protect local businesses from overseas competitors are disappearing. Overseas businesses will be able to sell their products here more cheaply than before. Australian manufacturers are looking to expand their markets by exporting to South East Asian countries and only the best will be able to succeed.

Best practice is the implementation of practices that will result in our businesses being perceived by our customers in the market place as being the best product and service providers in our industry.

This may sound a little esoteric to you. Do we really need to worry about these things if we're going to grow

bushfood? Shouldn't it just be natural and how it grows is how it is? End of story. The answer is NO. Not if you are serious about developing a viable bushfood business in a dynamic and growing bushfood industry. If that is what you want then every effort must be taken to ensure that your product is the best that it can be for your customer. Interestingly enough this doesn't always mean the very best quality is always required. What this means is that you must listen to your customer, understand what 'best product' means to that customer and then make sure you deliver it right every single time. For example there is no point growing and selling only the very best, most perfect bushfood specimens to a preserve manufacturer. Don't misunderstand me, we certainly want the best in terms of flavour, consistent quality and so on, according to our needs. But the needs of a jam maker for example are different to those of a restaurateur. Individual sizes of fruits may not bother a jam maker but be of paramount importance to the chef who wants them to be perfect on the plate every time. So identify the customers precise needs and meet those needs, not the ones you think may be the customers needs. Good quality is quality that consistently pleases our customers, at the lowest cost to us.

There are precedents in the bushfood industry for the adoption of best practice and quality assurance. Robins are in the process of developing our own practices and procedures and a Queensland group of bushfood cultivators already have a quality assurance program in place.

It is a very good time for the bushfood industry to seriously consider the adoption of these codes as they are certainly easier and cheaper to implement when your business is still small. The practices can then grow and modify, as its a continual improvement program as your business grows. Also in light of the self regulating nature of the food industry the implementation of a quality assurance program is an important way for your business to meet all requirements and offer protection to yourself, and your customer. On the marketing side, apart from obviously becoming more customer focussed, potential customers domestically and particularly internationally, will take your business more seriously when they become aware that you are trying to meet quality targets and follow best practice.

Education and Industry Linkages

In my naive youth I thought that all you had to do to be successful was make the best product and customers would come flocking to your door. I was wrong, especially when faced with a market that is culturally ignorant of indigenous foods. I still believe you have to make the best product (I look for customers who only want the best!), but I now know that an ongoing education program has to sit side by side with any marketing I undertake. Sometimes this can be painful and tedious. How many times have I and my colleagues in the industry had to answer the same questions over and over. But there is no choice. Consumers will not be interested in or buy bushfoods if they don't understand them. I've recently been doing instore promotions at a Coles supermarket and have watched and listened to people as they taste my product. If I don't actively enter into conversation and explain what bushfoods are, where they come from, how they can use them and explain for the thousandth time that wild rosella jam is not squashed, cooked birds, then the consumers in these supermarkets look the product over, ask the price, nearly faint and walk away without buying. However if I do all of the above and get them to taste it the customer often doesn't mind the price as they have become intrigued and often will buy it. As potential bushfood growers and business operators you will have to talk and educate and encourage too. We are clawing out a space for bushfood in the enormous food market but it will only happen with increasing customer awareness.

Talking to others in the bushfood industry is also important. In Victoria we have formed the Southern Bushfood Network which will provide this forum for Victorian, Tasmanian and in fact for any bushfood business who wishes to join us. The emphasis is naturally on bushfoods that are suited to Southern conditions. The network has two sub parts to it. The Southern Bushfood Network Association issues newsletters and will promote southern products and member enterprises. It will promote good agricultural and horticultural practices and promote appropriate cultural and community approaches and ethical business practices. The Southern Bushfood Business Network is comprised of a number of Victorian businesses who have come together under the Southern Bushfood Company identity to determine the feasibility of developing and

marketing southern bushfoods under this banner. If the feasibility of the program is achievable then members of the Business Network will be required to make a substantial financial commitment to the Network to form a business. We encourage you to join us in the network association at least. Simply subscribing to the newsletter will join you up and will keep you informed about activities, potential plants, growing tips and access at a small fee to Dr. Beth Gott's VicUse Database on Victorian useful plants*. It is hoped that through the combined and complementary activities of both parts of the network that we can begin to create a real interest in and market for Southern bushfood plants. The Network is currently forming links with formal and informal networks in other areas, such as the Australian Native Bushfood Industry Committee, Australian Rainforest Bushfood Industry Committee, Australian Native Foods Resource Developments group, the Australian Quandong Industry Association and the Emu Producers Association.

Conclusion

Bushfoods are a marketable product for now and for the future. The bushfood industry while small and largely fragmented is like a sleeping giant that is beginning to stir. The potential for the future is huge, I think we all agree. However those wishing to enter the bushfood industry must be aware that it's a long term commitment. There are no overnight success stories, in fact the opposite is true. One needs to be dedicated to the concept of bushfoods as legitimate and desirable food products. In fact at this stage of industry development I recommend that you are not just committed but passionate about indigenous food taking its rightful place in the diets of all Australians, and taking its place as an agricultural industry in its own right, because only with that passion will we make it happen. It is not enough to plant the foods and hope for the best, that someone else will create the market. We all must create and grow the market in a professional and targeted way. The rewards for those truly interested are great. In the short term new vistas of knowledge and great new tastes are to be experienced. A wider understanding of our land and aboriginal culture can be attained, for no study of bushfood can be undertaken without acknowledging and learning about Aboriginal culture. Finally, bushfoods will bring financial rewards. We need to change the way we look after this country and we need to look for niche markets for our products at home and abroad. It is important for all the people of Australia, indigenous and non-indigenous to recognise and value our own native resources. The value to us as individuals and as Australians can be measured not only in money, but in terms of cultural and social benefits, environmental gains as well as economic advancement.

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