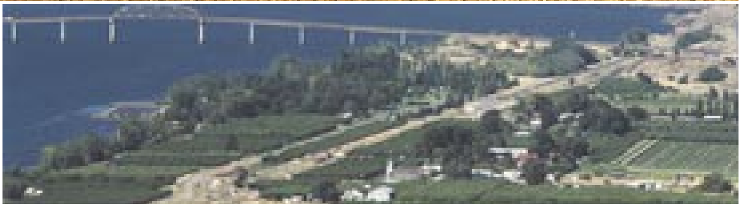
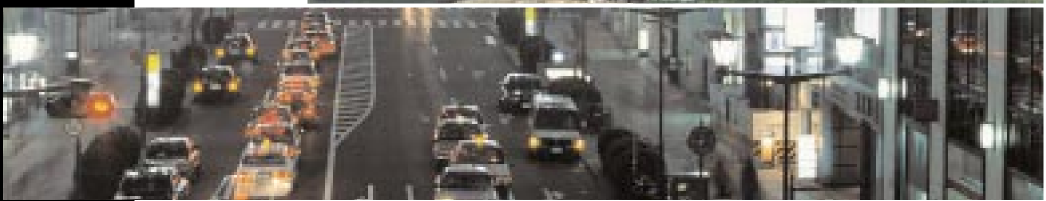
Learning to manage change

Developing regional communities for a local–global millennium

edited
Ian Falk





Learning to manage change: Developing regional communities for a local–global millennium Ian Falk (ed.)

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Foreword

Learning to manage change: Developing regional communities for a local–global millennium is a book that illustrates the benefits of integrating different approaches to community and regional development for rural Australia. The intention is to illustrate the theoretical, practical and strategic backdrop to community and regional change. The key theme is the value of lifelong learning to community capacity building, where learning is taken as the integration of formal, non-formal and informal education and training at all levels.

The importance for rural development and sustainability in the socioeconomic context of rural decline is a contentious issue. Some argue that decline is the inevitable result of the playing out of market forces. Others, including those represented in this book, take a different view. The view is that something can—and should—be done, and that working towards a lifelong learning society is our best chance of achieving a vibrant and sustainable rural Australia. In order to achieve these goals, fundamental concerns related to re-building social trust and social capital must be addressed as a matter of urgency.

The book avoids a rhetorical exhortation to action, but instead sets out the rationale for a constructive approach to developing communities and regions using an integrated and cross-sectoral approach. From the theoretical underpinnings established early in the book, the issue of the participation of specific sectors in these processes is described. Then there is a section where practical and proven strategies, cases and examples are described from different sectors and perspectives. In all, what I hope is that the book will provide the start of a reasoned, constructive way forward for regional and community development through learning.

Learning to manage change: Developing regional communities for a local–global millennium has four parts, and 24 chapters overall. In these chapters, there is a richness of issues, background information and practical strategies related to rural communities and their development in the 21st century. The world in which rural communities are located is characterised by a nexus between a concern and valuing of local communities, and the pressure cooker forces for change and responsiveness imposed by an instantly communicating global economy.

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Preface

This book has been prepared according to standard academic book publishing procedures. The individual chapters were initially edited and screened, and were returned to the authors for amendment as required. At this stage, some chapters submitted were rejected.

After initial revisions, all chapters were sent to two independent and blind reviewers, one from the economics and social development field (Australia) and one from community and regional development (USA). Each of these reviewers commented on all chapters, their individual integrity and the overlaps and coherence of the assembled work. These comments were returned via the Editor for authorial amendment once again.

My thanks go to the independent reviewers for their time and trouble in helping shape this book into a coherent whole.

Acknowledgements

I am grateful to all those who assisted in various ways with the preparation and production of this book. Many people worked behind the scenes to coordinate the chapter contributors and the flow of paperwork associated with that process. Deborah Wagner coordinated the electronic formation of the chapters. Glenda Holloway worked hard from her rural retreat on the stages of unification of style and appearance. Susan Johns and Margaret Kreft edited the chapters to their final version guided by Bron Power. Carol Cheshire from NCVER guided the process to its fruition.

Particular thanks go to the independent reviewers from Australia and the USA, who spent many hours of time and expertise assisting the book reach its final form.

PART ONE

Local–global context

CHAPTER 1
Challenges facing rural regional Australia in new times

Ian Falk

This first chapter introduces the key issues and challenges facing Australia's rural regions. First, the underlying need to adapt to social change through learning is discussed, along with the story of a town currently facing these challenges, and what it is doing about planning for the future. International and national socioeconomic trends are then identified and discussed. Among these trends are the influence of globalisation, the decline in credibility of global markets and economic rationalism, metrocentrism and the urban drift, schooling, the revision of the nation's literacy and numeracy requirements, the nature of work in the regions, unemployment, the policy environment, the ageing nature of the population, and shifting meanings of key concepts. The chapter finishes by setting the scene for the remainder of the book.

Introduction

Regional Australia's population of some seven million people (and falling) has already told the nation that it has had enough. The rise of the One Nation party reflected the disenchantment with the nature and pace of social change, or 'rural adjustment' as it is called, being conducted by major political parties. Those parties are increasingly felt to be wielding an unrelenting economic rationalist sword. Such disenchantment is in many respects misplaced. Rural and regional areas around the world are suffering similar problems. These problems stem from the globalisation of agricultural and other markets, the resulting competitiveness for existing and shifting markets, and the loss of population from regional areas that results. As a result, there is a seemingly inevitable out-flow of economic and social infrastructure. There follows the general and familiar story of withdrawal of government and health services, shops, banks, and so on. Regional communities are portrayed as being stuck in a downward spiral of declining commodity prices, public services, commercial facilities, and political influence. Frustrated by rhetoric and policy which seems sometimes more suited to running a factory than a complex web of human beings, a number of people simply give up and walk off the land. Some stay and suffer, many others fight on.

How can people struggle against seemingly unbeatable economic odds? The whole of the national and international economic community is fixed in a scenario of change. The economic 'trends' are presented to the public as being fixed and inevitable. The markets simply must have their way. Such a landscape of relentless 'adjustment' seems levelled against any effort by individuals or their communities to stay around and fight. The message is that change is here to stay. Markets must be allowed to play out. People begin to feel as if they don't count. But change hurts.

To cope with change, people need to engage in learning processes of both a formal and informal nature. Whether we realise it or not, all of us learn throughout our lives, and our learning contributes to our community's stores of social capital. Each new situation or unknown entity we encounter is met by 'adjusting' or 'adapting' or 'finding out' about what to do about that newness. In times when we are being bombarded by more frequent and more all-encompassing newness, learning eases the burden of change, and through sound learning processes, people come to understand the nature of the forces and influences which bring about the situation that currently affects them. Thus, the decision-making is in their own hands.

Change through learning

Over the last few decades, a large number of communities in regional areas have been successful in learning how to halt the slide in their communities' fortunes. Consolidating and even developing a community under adverse economic circumstances is not easy, and is often viewed as pointless—the last ditch effort by desperate survivors. But is it? This book claims that it is indeed possible to turn around the fortunes of communities, and provides several examples of how this turnaround has been achieved in communities and regions overseas and in Australia. People have always created economic outcomes. Within the existing economic and social frameworks, the effort of people working collectively and individually can make the difference between the survival of a township, or community, and its demise. To believe the rhetoric which suggests that we simply have to sit out the effects of economic forces is akin to the case of a corporation that admits it cannot do anything strategic to plan for and improve its future.

Given the confluence of political and social conditions in Australia at present, it is possible that the time is ripe to tackle the difficult problems associated with rural and regional consolidation and sustainability. There is a growing recognition within government circles and the public at large that solutions must be armed with both economic and social measures—one of these by itself is not sufficient. However, working across economic and social sectors requires a new way of thinking about achieving collective outcomes. Social capital has recently emerged as the 'missing ingredient' in the blend of physical and human capital already harnessed in pursuit of social and economic wellbeing. Social capital can be used to achieve the kinds of social cohesion, trust and collective cooperative behaviour that can sustain local conditions of benefit to communities in these changing times. Building social capital is a process of learning. Alongside the other main forms of capital—physical and human—social capital is now recognised as having considerable potential to act as the 'glue between the joints' of society. Or, to use another analogy, it is the oil that lubricates social activity in the creation of beneficial socioeconomic outcomes.

Drawing on both the outcomes of recent research and on a record of successful community development strategies, it is possible to suggest a positive way forward—a way which might bring the sectors together as communities of learners whose purpose is to build stores of social capital and hence the capacity of communities. In turn, these stores can be used to contribute to the greater common good. It is the task of this book to set out the rationale, the challenges and some practical exemplars of ways in which this might be achieved.

The book grew from a concern that conventional sectors of activity in our country were acting in isolated ways. Schools did not blend with their communities; TAFE Institutes provided the same courses in the country as in the city regardless of the needs of the local labour markets; health services worked in isolation from education, local government and so on; business only came into contact with other sectors if they happened to be customers, or perhaps as the donor of a prize for the school speech night.

While the primary area of activity from which the book arose was the vocational education and training sector, the book's final shape has arisen because of the nature of the times. Often called 'new times', the contemporary era is characterised by social, political, cultural and economic differentiation and fragmentation instead of standardisation and homogeneity.

These are times when to ignore external influences on a closed community is a precursor to the almost certain demise of that community. No sector can afford to cut itself off from the society around it. Working in new times means, however, a new kind of working, and one which requires constant learning as its partner: working with, not against; working across sectors not within; flexible, constant and fluid learning of required knowledge and roles on a 'just-in-time' basis; working and learning across diversity of individuals and groups not in homogenous settings.

A typical rural town?

To help fix the scene in the mind of the reader of this book, picture a small, picturesque beachside town on the eastern seaboard of Australia. The town is real, but stays anonymous for our purpose here. It is located on a large bay, with beaches and oceans nearby. The population of the town is 2100 people in winter but more than 10 000 in summer. There are two country supermarkets in town, one chemist, one medical practice (there were two until recently), a small hospital (under threat), a handful of specialty shops, two public utilities, three banks, two secondhand furniture outlets, and two pubs. The town is lucky that it retains so much business activity, as it is the centre of a much larger regional hinterland of 3000 people, whose smaller towns have seen much more severe closures and withdrawals.

The health and wellbeing of the whole community depends on the supply of funding and services of various kinds. Funding and services flow to the community through several different streams, sectors, programs and sources: education, health, medical, training, volunteer, aged care, commercial, and more importantly via three tiers of government. On investigation, it is discovered that the delivery of these streams of funding and services rarely if ever intersects. In fact, 'the local experts', those in town who know everything about everything, tell us that the right hand simply does not know what the left hand is doing. There is little or no coordination or rationalisation between the sources, and the local experts know how much money, goodwill and resources are duplicated or wasted.

The town has a history of internal social and economic difficulties. It has a very low per capita income, a high proportion of welfare recipients, and a high proportion of unemployed, especially youth unemployed. Its fishing fleet has been reduced. Its summer tourist influx has diminished. One by one, businesses closed, the community's youth had to leave in increasing numbers to access further education, and teachers dreaded more than ever being posted 'out there' to the sticks. Health services and a supermarket closed their doors, several other small businesses closed, and government services stopped or shrank. More people in families took on paid work, for less hourly pay. There was less time for talk, less time for kids, less time to help out in the community. The pool of volunteers decreased. Community groups ceased or became skeletal. The older male public community leaders tried for a decade or more to repair the damage, to no effect. Old strategies no longer worked. Nothing that had once worked seemed to work any more.

Recently, two events in the community signalled a change. The first event was a bitter division over a development. 'Jobs will be created in this industry', said some. 'Jobs will be lost through defacing the environment', said others. The community, divided though it was, formed into interest groups who, for two years now, have worked rallying support and meeting frequently to fight for their case. Of course, the central focus of each faction was on the future good of the town. External resources were drawn on by both sides: new information had to be gathered, politicians lobbied, experts consulted, and research found, commissioned and used for each faction's case. People were volunteering for roles they had never seen themselves carrying out before. Community interaction was at an all-time high.

The community's capacity had been developed. In the course of several months, the situation was resolved (unsatisfactorily to one faction, of course) by the State government, but the tension in the town remains.

Not long after, there was a whole-community project to raise money for a kids' skate park. The target was reached in a few short months, as the community interactivity was at an all-time high. Local youth now use the skate park, and the word has spread—youth from outside the community come in to use it as well. Since this apparently small success, the local government has initiated a community-based strategic planning process which, it claims, must be driven and owned by the community. A townscape has been commissioned and tabled, an industry audit completed, and on the basis of the information from these, various government grants applied for. There is a new air of optimism starting to be heard in the streets and shops.

From this case, it is possible to see evidence of the social and economic outcomes of people learning through their interactions across the different sections of the community, in pursuit of varying common purposes. Their capacity to act has been developed and broadened. Their knowledge and sources of knowledge have expanded and been applied to different yet purposeful tasks and activities. Their personal and collective identities have altered so as to be able to act in different ways and to facilitate action and permit future action. Their talk about their work and leisure activities, and learning about each other's funding and programs, produces not only more cost-effective solutions to social and economic problems, but provides the social infrastructure for further learning and implementation of local solutions to those problems. In many respects, this community is showing the signs of becoming a learning community.

Societies and regions are made up of communities like the one described, and they have the potential to learn new ways of becoming sustainable. Yet social and economic well-being do not occur in a vacuum. It is the result of social processes. Achieving sustainable social and economic outcomes for communities across Australia is only possible by dealing with the social processes of the community as a whole, not simply with its parts in isolation.

The challenges

In order to manage change in the complex environment of a living, dynamic community, it is first of all essential to understand those dynamics. Why are they the way they are? What is the relationship between the local behaviour and the broader national and international socioeconomic scenario? Under conditions of rapid change to social and economic circumstances, there are particular social and economic trends which can be identified. All are evident in communities and regions. All affect each other, and the potential—the capacity—of the community to constructively manage its development. This section now describes the nine main socioeconomic trends and challenges as I see them.

1. *Globalisation, declining credibility of markets and economic rationalism*

The fixed and all-pervading influence on regional and community development is the instant nature of global communication and the instant availability of knowledge and information through electronic means, especially the Internet. This has altered forever the nature and operation of the economic scenario, the financial sector and the way we talk about 'difference' and 'diversity' of groups, cultures and ethnicity. However, there has been, partly as a result, the start of an apparent decline in the credibility of global markets—a recognition that they are failing to support economic predictions. There is the related failure of the 'export or bust' scenario to cure economic woes, and a mixed outcome for the so-called 'Asian crisis' which seems to have had nothing but a good effect on Australia. The decline in public support or credibility of economic rationalism, along with the perception of political processes as being somewhat elitist and sophist, has seen the desperation of sections of both the rural and urban communities. This desperation has resulted in a large number of people opting for apparently shallow, ideologically myopic, single-purpose and fringe political parties typical of 'closed community' thinking. Closed communities typically ignore externalities.

The challenge for regions and communities is to balance the need for external information and influences with the need for a sense of 'place'—the need for individual and group identity in a community-of-common-purpose. Yes, we are all members of various real and virtual communities, but it would be a fatal mistake to discard people's expressed grief over the 'loss of community' as being simply emotional nonsense. Place and identity count, and must be accounted for in the process of responding to change. Chapter 13 describes how this challenge is met in different countries.

2. Metrocentrism and urban drift

The balance between an agrarian society and an urban one has been tilted in favour of an all-pervading metrocentric one, tinged with more than a little old fashioned classism. Decision-making, leadership styles, economic and social policy, education and training provision, health and business, are informed by an insidious and pervasive view of the city-as-centre. The nature of our geography has imposed a pattern of social, cultural and economic activity that places high levels of dependence on a relationship of mutual dependence between 'the bush' and 'the city'. Caught in the decline of government, health, education, training and commercial services caused by so-called 'thin markets', youth must leave the country in increasing numbers, volunteer numbers are reduced, and rural poverty remains an unrecognised and un-talked about phenomenon.

Paradoxically, rural problems are not contained to rural areas. Corresponding problems are caused in urban areas, cities, suburbs and larger centres in relation to housing, health, transport, schooling, and social concerns such as drugs, alcohol and homelessness.

The challenge inherent in this social trend is to construct local identities of people and places which stand in their own right, and do not only depend on the stereotypical 'rural/urban' binary for their existence. Chapter 22 contains a number of examples of how this challenge has been met, including the example of the 'Believe It!' campaign which is a good case in point.

3. Schooling

Once the place of unfettered and non-politicised general education, schools have become sites of contest between governments, teachers, parents and students. The same sets of statistics are used by the opposing forces to support contradictory positions, as instanced by the literacy debate with the national literacy test results and the government's use of them. As Norton Grubb says in Chapter 6 of this book, 'schools are often used to enhance economic development (which) is usually counterproductive'. However, the battle about general versus vocational education is now located firmly in schools. The effects of the institution of schooling on rural areas are mainly caused by the centralised nature of the system, where staffing, curriculum and resources are managed more or less from the 'Head Office'. Even when resources are 'managed' out of regional offices, these offices usually reflect a high level of centralist policy and practices, with some encouraging recent exceptions. Simplified and over-characterised, schooling tends to:

- be for the 'mainstream' (that is, *non*-rural);
- emphasise 'basic skills', namely those particular basic skills more appropriate to an urban and large-industry set of values and outcomes rather than the diverse and complex mixed-skill occupations of rural areas;
- be centralised not regionalised;
- be less integrated with community in respect to staff, curriculum and resources, and
- be resourced for those students who are 'good with their heads' rather than those who are 'good with their hands', thus valuing non-vocational education and training outcomes as opposed to vocational.

4. Revision of the nation's literacy and numeracy needs

There is no question about the fact that the nation's literacy and numeracy needs have changed. The problem is that 'literacy levels' have been measured by tests which measure some aspects of literacy and numeracy, such as technical skills, but not those aspects of literacy and numeracy which are so crucial to work, leisure and civic life in new times, such as how to find and gather knowledge, how to work with diverse peoples, how to make judgements about what is important knowledge for particular and changing situations, how to solve problems, and how to become competent at 'civic literacy'. Politicians, constrained by the power of the tests, know the requirements for literacies and numeracies has expanded. They have no option but to move the goal posts—the rules by which judgements about literacy are made. Higher 'benchmarks' are selected, on the basis that these skills are now the ones required for a functional working and civic life. Unfortunately, the tests themselves actually prove that the skills they measure have *not* been depleted over the last decade or so. Teachers and schools have in fact raised the levels of those 'basic skills'. Nevertheless, governments and much of the public still blame schools for a perceived failure, and for the welfare recipients who are not able to acquire the revised and required literacies and numeracies.

The challenge here is for schools to work closely with their regions and communities to help achieve common goals. Chapters 17 and 18 provide some excellent examples of how this can be achieved.

5. Nature of work

Most of us now recognise how the nature of existing work is changing qualitatively and quantitatively. First, the nature of the available work is changing in broad terms from manual to knowledge work. Second, the availability of work itself is on the decline. Jobs are simply less available, a condition apparently more prevalent in rural areas. What we have not come to grips with as a society is the consequence of permanently changed 'work'. By continuing with the charade that we can achieve something close to full—high at least—employment, we are creating a growing underclass of people who will never be in paid employment. Politicians will essentially promote policies which they expect will gain the public's vote, including reactionary stances, notably, a reproduction of the desirability of 'paid work'. While elections and policies are fought on the battleground of 'paid work', we can never come to grips with the reintegration of the adult population who self-identify as worthless in relation to work. Mike Steketee, (2000) summarises a number of sources on poverty and unemployment. He notes that some areas have an entrenched culture of unemployment explainable in the context that they are now into their fourth generation where no member of their family has been employed.

To meet this challenge, what is required is a visionary shift in the nature of 'what counts as work', where contributions to community of many kinds are equally as valued and rewarded as 'paid work' is now. Chapter 5 and Chapter 23 on leadership, help us understand how to work towards such a new vision.

6. Unemployment

Unemployment is a discreet and important category of 'nature of work' (above). It is forecast that, far from governments being able to significantly reduce unemployment, it will actually increase (Rifkin 1999). For rural communities, the trend is to lose youth to the cities as they seek opportunities related to employment, education and training, and leisure. As a result, in rural communities the unemployed are likely to be more visible, whether young or old.

The challenge is not how do we create more jobs, so much as how do we restructure our thinking and communities so that there is not such a stigma attached to being unemployed. The nature of 'work' has to change so that productive work but not necessarily 'paid work' in the traditional sense, is seen to be valued by our society. It must be valued so that the current unemployed 'underclass' are reintegrated into and involved with their community's goals. Chapter 7 helps us understand the effects of this social deception on our youth.

7. Policy/program environment

Governments at all levels recognise that they have to respond to an ambivalent set of conditions and electors. Electors want to see the problems addressed quickly, so political change happens more quickly than ever before. Politicians, aware that the electorate is weary of change, often rely on a reactionary or traditional platform to carry the day. As well, the social trend to chop and change the policy environment in response to changing circumstances seems to have quite deleterious effects in its own right. For example, changes to conditions of training and learning provision for the unemployed have resulted in the recipients being denied access to the very same lifelong learning which is the subject of the policy rhetoric.

Similarly, there are contradictory policy messages indicated by, for example, media reports. On the one hand, there is talk of devolving power to the community level. This fits with the need to devolve costs through promoting community participation in establishing local solutions to local problems. However, there does not seem to be a parallel devolution of resources to support these moves. The net effect, as perceived at the community level, is still one of 'top down' rather than 'community driven'. Chapters 2, 3 and 4 explain the need for a new rationale to redress the narrow focus of the past.

The challenge in this scenario is to use the best of the story and avoid the pitfalls. The best is the community working together to achieve its own ends—becoming empowered if you like. The pitfall is not to lose access to sources of funds to help in these processes, nor to allow political leaders to use community processes as a reason to reduce resources.

8. Ageing population

As the baby boomers work their way through the population (a huge question in itself) the challenges related to this growing group include questions of health infrastructure, the appropriate use of enforced or voluntary additional time and leisure opportunities, the rise in impact of grey lobby groups, and paradoxically, the effects on youth of decreased resources resulting from the need to resource 'grey power'. The need to incorporate the skills and expertise of the ageing population towards community ends, while balancing the need to involve youth fully in these activities, will remain a local preoccupation.

9. Revised meanings of words such as community, environment, rurality, family, gender, leadership and work

Social institutions such as family, marriage and gender have changed. Through technological and scientific discoveries, our perceptions of many other concepts have also changed, such as the 'environment'. Changes to our understandings of these concepts is fundamental to this discussion. These changed perceptions result in contention around these words, which become issues in themselves, and then challenges. For example, words such as 'environment' were not contentious once. Now they are. Confusion results from differing perceptions of these terms. Consensus about meanings often must be achieved before rational discussion or planning can occur.

Challenges stemming from changing meanings include impacts on responsiveness to change. People react to fast change by returning to the security of closed communities.

Finally, the nature and role of leadership has shifted from a quite general perception of civic leadership as being the 'mover and shaker' to one of the need for a multiple view of leadership which sees different roles for different leaders in different situations, with skills in working across groups and sectors, not simply within one. This point is made by a number of chapter contributors in this book.

The significance of social capital

It is worthy of note that of the forms of capital referred to in this paper—physical (economic), human and social—social capital is the least researched of all. In other words, it has a recognised role in actually enhancing and producing socioeconomic outcomes, yet it is not measured by traditional economic or social measures. Many of the chapter contributors in this book explain their views on how social capital can be built and used towards the wellbeing of communities and regions, including Bawden, Geno and Perkins. Many others explain how their ideas contribute to the conditions which make social capital production possible, such as Courvisanos. Specific sectoral views, by those such as Grubb, Grace, Kilpatrick and Bell, Bradbery, and Fletcher and Molloy, illustrate the significance of those sectors in presenting other challenges or issues that must be planned into change processes.

In Part Three of the book, the success stories set out a variety of cases where some successful action was taken that resulted in community or regional improvement. Each of these instances, large or small, contributes in some way towards making explicit the complexities and dynamics of working with and across whole communities.

Implications for regional sustainability

All the success stories in Part Three of this volume contain the following threads or themes that are common to successful instances of community and regional development activities and projects:

- Locally developed solutions are essential for successful projects, including the study of what incentives or rewards actually work with different potential users. Potential users include volunteer groups.
- There are explicit forms of encouraging community processes, networks and opportunities to get together through planned events and networks.
- All aspects and dimensions of each community are integrated through purposeful activities.
- The full depth of each community's historical knowledge is available to the participants in the process.

The processes implemented integrate external and internal community processes, taking account of the external environment while celebrating local place, history and identity.

Summary

Achieving sustainable and desirable socioeconomic conditions for Australia's rural regions in new times requires constant learning and working across sectors and groups. It requires a consideration of people as having a need for their 'place', not just linked through virtual networks. Our understanding of the nature of learning has changed. Not so many years ago, learning was seen as the fixed and formally acquired knowledge, skills and attitudes gained at school, TAFE or university. More recently, there has arisen a legitimate field of study related to learning in workplaces, learning organisations and even learning societies. Increasingly, learning is 'lifelong', occurs constantly, and is a resource in adjusting to change. As communities and regions learn how to adjust to change, they too will need to explicitly and collectively recognise that learning is their most valuable and integral resource, and plan accordingly.

References

Rifkin, J 1999, *Work, social capital, and the rebirth of the civil society: A blueprint for a third sector politics,* Speech to NGO's Conference, Strasburg, 31 May–1 June.

Steketee, M 2000, *The Weekend Australian*, 27–28 February, p. 22.

CHAPTER 2
Regional economic decay and regeneration under structural change

Jerry Courvisanos

Declining economic conditions in regional Australia sets up the central dimension of the crisis of rural and regional communities. The chapter aims to first examine the economic circumstances of these communities in a period of rapid structural change and then to identify a path for sustainable economic regeneration. The first half of the chapter outlines the economic forces that have led to regional economic decay and the mainstream economic policy analysis that reinforces regional decay. The second half looks at prospects for economic regeneration of regional communities in line with the new emerging global economy. Crucial in making any such regeneration sustainable is a coherent policy perspective that enables all economic agents to participate in this emerging economic trajectory. The policy principle is one of understanding innovation-based evolutionary systems, while appreciating the role of strategic planning and intervention for sustainable regional economic development. All economic agents in regional communities need to participate in this planning and intervention, including governments at all levels, small business, large globalised corporations, regional community groups, trade unions, volunteer organisations, significant public sector organisations including schools, and professional/academic contributors. How all (or some) of these agents can come together to re-establish some economic base in different parts of regional Australia is the ultimate objective.

Structural change in regional Australia

Evolution has finally caught up with the dinosaur that is the economy of regional Australia. In biological metaphor terms, there are only two economic paths available into the next century: economic decay or regeneration. There is no option that allows any part of non-urban Australia to remain essentially as it has been in the past. This is the economic dimension of the regional Australian crisis. Folk in non-urban Australia inherently identify with their past and its traditions more closely than their urban cousins, yet holding on to these traditions in economic terms results in depression and decay. The alternative is to harness the urban-based 'new economy' into the regional economic structure, which means changes that entail risk and uncertainty of the type rarely experienced by regional folk.

This chapter outlines the economic structural changes that have engulfed regional Australia and two economic approaches to understanding these changes, with their divergent public policy implications. Economic rationalism is the term used to describe the current 'rule of the market' approach that dominates decisions related to public policies that affect regional Australia. Evolutionary innovation is the term used to describe the alternative economic approach with a public policy perspective that is process-oriented, aimed at fostering conditions conducive to innovation and regeneration. Two terms need clearly to be defined within a strict economic context at the outset: regional Australia and structural change. Regional Australia specifically refers to non-urban parts of Australia that have three distinctive elements of economic decay compared to urban Australia: relatively higher unemployment, declining rather than increasing populations, and consistently greater withdrawal of community services (both public and private) with relatively few alternatives to service access. These elements apply to areas *outside* the mainland Australian capital cities and the other major significant urban centres (Gold Coast, Sunshine Coast, Townsville, Rockhampton, Wollongong, Newcastle, and Geelong).[1] In the analysis below, the whole of Tasmania is identified as part of regional Australia.[2]

Structural change refers to the transition in an economy from a traditional economy based on an old technology towards a powerful new technological paradigm with a new industrial base (the new economy). This technology shift carries with it the impetus for a recovery out of recession and concurrently alters the trend path of growth significantly upwards.[3] Technological change is seen as the principal means by which capitalists search for a greater source of wealth.[4] However, it is the disrupting effect of major technological breakthroughs that alter the path of economic cycles and growth. Major innovations are introduced in a process called 'creative destruction', when new technology *destroys* the old technology by making the latter obsolete and *creating* a robust economy based on a new set of capital stock.[5] Australia is currently going through such a structural change from the manufacturing-based economy to the information-based digital economy, and regional Australia is experiencing great difficulties in adjusting to this new economy.

Regional economic decay

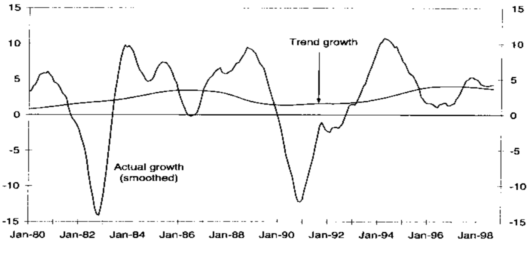
The mass production manufacturing sector, together with the primary commodities that provide input to the sector were the basis for economic growth in capitalist economies from the 1930s (Freeman, Clarke & Soete 1982). The Federal government developed hydroelectric energy infrastructure to power this type of economy through the Snowy Mountain Scheme (SMS). The emphasis was on commodity exports (wool, wheat, beef, forest products, minerals) and import-substitution manufacturing (textiles, motor vehicles, heavy engineering). Federal governments throughout this period assisted with subsidies (for commodities) and tariff protection (for manufacturing). Much of this economic development had a regional Australia focus. In this sense, the periphery was tied to the centre. Commodity exports were based outside urban areas; regional manufacturing centres were protected in steel, textiles, cars; and public infrastructure needed to support these developments (SMS, Hydro Electric Commission (HEC) in Tasmania, roads, communications).[6]

[1] Some of these urban centres may also suffer from the same elements of economic decay as regional Australia, but not all three and not to the same degree.
[2] Tasmania is denoted as part of regional Australia since it suffers from all three elements of decay in a severe form. Supporting this perspective are two observations. Hobart is the only capital city to register a rise in unemployment over the period March 1996 to August 1998—up by 0.9% to 10.3% (Wahlquist 1998). Tasmania as a whole qualifies for funding under the *Regional* Telecommunications Infrastructure Fund (RTIF), indicating the regional status of the State.
[3] See Chapters 4 and 5 in Courvisanos (1996) for a detailed account of how troughs in business cycles (or recessions) are the basis for the introduction of new technology that stimulates the economy out of recession. This also provides highly productive new capital stock, enabling the development of strong long-term economic growth.
[4] Karl Marx called this source of wealth 'surplus value'. New forms of surplus value are needed to counter the tendency for business profit rates to fall as capital stock replaces labour.
[5] J.A. Schumpeter developed the concept of 'creative destruction', see Schumpeter (1934).
[6] For details on the political economy of Australia over this period, see Catley & McFarlane (1981); Crough & Wheelwright (1982). For an example of development in the periphery, see Wilde (1981).

This structure can no longer deliver economic growth to regional economies. Freeman and Perez (1988, pp. 47–58) identify this mass production 'techno-economic paradigm' as being eclipsed by a new micro-electronic information technology paradigm and the related service-oriented 'new age' economy. In major urban-industrial centres, the structural changes involved are disguised by the mass of economic activity flowing through them. Regional economies lack the diversity of economic activity to cushion structural change. This new economy does not depend in any way on the attributes existing in the periphery. In this sense, the centre is disconnected from the periphery, and more connected to other global centres.[7]

Taking the example of the State of Tasmania as a regional economy enables a comparison to be made of recent business cycle statistics between Australia and Tasmania. This comparison reveals a growing gap between the centre and the periphery.[8] Figure 1 shows a coincident index business cycle for Australia.[9] Annual growth rates rose strongly after a prolonged 1991–92 classical recession (or depression). This was followed by a mid-1990s 'growth recession' due to uncertainties from the 1996 election and inability of the new government to initially establish business confidence. In early 1997 there was a minor expansion with a levelling-off through 1998 to stay just above the trend rate.[10]

Figure 1: Australian Coincident Index (trend and actual growth rates, per cent annualised)



Source: Mercer-Melbourne Institute (1998, p. 11).

Figure 2, in comparison, shows the same index series for Tasmania. There is a much more uncertain and volatile expansion out of the 1991–92 recession (notice the 'dip' in 1994), and then a collapse into negative growth rates with no effective expansion in 1996 and 1997. A minor one quarter early 1998 growth peak has been followed by a collapse back to growth rates *below* the trend line. The trend line also shows a slight downward trend compared to the steady rising trend of the national trend growth line. Lack of any effective cycle expansion and relative weak growth, both evident in Tasmania, are typically the type of regional economic decay being experienced in regional Australia generally.

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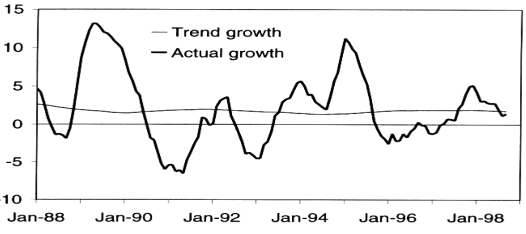
[7] See Stilwell (1992, pp. 92–102) on the centre-periphery economic relations model.

[8] Kilpatrick & Felmingham (1996) provide evidence of this growing centre-periphery gap in terms of employment turnover becoming substantially lower in States with weaker economic activity like Tasmania and South Australia.

[9] A **coincident** index portrays the **current** level of activity, while leading and lagged indices relate to statistical measures that portray future and past levels of activity, respectively.

[10] The year-to-September 1998 growth rate in GDP of 4.2 per cent (or 0.6 percentage points above the trend rate of 3.6 per cent), is strong by world standards, and certainly much stronger growth rates than in the troubled Asian region (Mercer-Melbourne Institute 1998, p. 1).

Figure 2: Tasmanian Coincident Index (trend and actual growth rates, per cent annualised)



Source: Mercer-Melbourne Institute (1998, p. 29).

Dimensions of the regional economic decay stemming from structural changes outlined above can be listed as long-term falling commodity prices, removal of protection, introduction of deregulation and competition policies, changes in western retail demand, and rise of cheaper sources of production in developing countries. All these factors have accompanied the collapse of traditional sectors of the Australian economy (see Bell 1997).

The national economy in its early 1990s recovery reflected the shift away from the traditional economy with strong investment of fixed capital stock in the new age economy. It is for this reason that the 1997 strong national growth recovery has *not* been able to pull up the regional areas along with urban growth. As growth is increasingly dependent on the information technology paradigm, regional economies like Tasmania which maintain the traditional economy are unable to take advantage of national growth impetus. Evidence of this in Tasmania is the uncertain and eventual aborted attempt to expand out of the 1991–92 recession (see in Figure 2 above).

With the levelling-off of national economic activity through 1998, there is no strong effective demand pushing the level of national economic activity. This *amplifies* any structural regional dilemma. The Asian crisis reinforces the traditional sectors' decline, with the most exposed export industries to the Asian economies being those that are regional commodity-based (e.g. steel, wool, wood products).

Economic rationalism

Mainstream economic analysis is neoclassical economic theory. Issues are defined in terms of market equilibrium, where price signals through supply and demand by individual players in the market result in the optimum allocation of resources. Players are motivated to achieve this optimum because they are all seeking to maximise their own satisfaction (in terms of profits or consumer demand). For a long time, market failure has been identified as distortion of the equilibrium conditions so that the optimum cannot be achieved.[11]

In the early post-World War 2 period, governments in capitalist economies saw the need to intervene when market distortions occurred, in order to offset these distortions. The offsets would tend to move the economy back towards the optimum equilibrium position. Regional economies benefited from this approach since it is in the periphery that distortions tend to be greatest.

[11] See Bryant and Wells (1998, pp. 99–102) for a simple outline of neoclassical economics and related market failures. For a more technically rigorous discussion, see Bennett (1992, pp. 3–10, 62–71).

The mid-1970s saw the rise of neo-liberalism with a rejection of governmental offsets. From various sections of conservative economics (e.g. Chicago, Virginia, Austrian Schools) arose a general view on the role of the state. That role is to provide and maintain appropriate rules within which markets can be relied on to emerge and develop in ways that will ensure a *movement* towards the optimum equilibrium position, rather than have the state dictate that *movement*. In Australia this position became powerful through the 1980s and has come to be known commonly as ‘economic rationalism’, because it reasserts the optimising motivation of rational economic individual players in the market place.[12]

Neo-liberalism has intensified the urban market-based movement of structural change and exacerbated regional economic decay. No attempt is made to plan any coherent response by the state to the decay of regional Australia. This is evident by the demise of regional economic development ministries within Federal and State governments. There is no overall perspective on regional economies, with elements of these economies spread over many ministries. Any regional state responses that have emerged, like maintenance of a particular tariff (e.g. textiles) or establishment of a regional fund (e.g. Regional Telecommunication Infrastructure Fund, RTIF[13]), are purely *ad hoc* and relate more to political lobbying pressures than any responsible economic plan. So, despite the ascendancy of neo-liberalism as a broad economic perspective, specific cases of ‘economic irrationalism’ have occurred. Such cases may provide some amelioration of the regional decay process (tariff remains) or some support for regeneration (RTIF), but no long-term strategic plan for systemic coordination exists. A new economic paradigm is needed to provide such overall coordination in the face of a new major technological paradigm.

Regional economic regeneration

There is a new age economy that has been identified in the global capitalist system. It is based on the information technology paradigm, and involves services aligned to information, finance and domestic help (Ruthven 1998). Included in this economy is reinvention of niche outsourcing markets and unique intellectual property rights. All these sectors are becoming globalised with lean management structures and ecologically sustainable practices. Incorporation of advanced computer-generated information and data processing in the technological set up of these businesses is the distinguishing element of the new age economy.

The evidence on the strength of this economy is limited and anecdotal. Statistical collection of such sectors is poor, reflecting the traditional economy bias in collation. Freeman and Perez (1988) have identified the 1980s and 1990s as the upswing in the long-term development of this economy on a global basis. Goldsworthy (1997) has identified the information technology (IT) industry as key to global capitalism of the 21st century, with the Australian IT industry worth $67 billion in 1995,[14] employing over 500 000 people and making up 7.5 per cent of the total economy. Australia has two per cent of IT global users and only 0.3 per cent of IT global producers, creating a severe IT trade deficit for this country.

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12 Recently a large number of books have been published which provide critiques of ‘economic rationalism’. Amongst them are Pusey (1991) from a sociological perspective, Rees, Rodley and Stilwell (1993) from a political economy perspective, and Quiggin (1996) from an economic theory perspective.

13 RTIF was set up by the Senate to provide funds for regions to have information technology infrastructure projects developed in response to the Howard Government’s 1997 part sale of Telstra.

14 Compare this to some manufacturing industries in the same year: $10b. In textile, clothing, footwear and leather: $43b. (Goldsworthy 1998).

Regional Australia has contributed generally little to this new economy. It is still heavily based on the traditional economy, as the Tasmanian cycle data indicates (see Figure 2 *cf.* Figure 1). A recent population report (KPMG 1998) shows that ten of the top dozen regional areas that have shown population growth are located in Australia's warm coastal areas and have strong service-based economies based around tourism and IT support.[15] They are experiencing regional economic regeneration, based on the new economy. The dozen regional areas that are losing the largest populations are all based on traditional industrial, commodity or mining components. No amount of reinvestment by traditional-based firms can ensure long-term viability of commodity and industrial activities in regional Australia. Cheap labour and resources in third world countries, together with poor demand (exemplified by weak world prices), have ensured that traditional sector reinvestment by firms in developed capitalist economies cannot be justified in any rate of return measure.

Neo-liberalism would dictate that the state should not interfere with the market forces that have produced this new economy. Following this dictum, the current trend in regional Australia will exacerbate. This is where a few warm coastal regional areas will regenerate and grow, but the vast majority of regional Australia will continue to suffer economic decay.

Rejection of neo-liberalism is not enough, if it means the continuation of neoclassical mainstream economic analysis in explaining economic development and devising economic policy implications. Optimum market equilibrium cannot explain the major determinants of decay and regeneration (Bryant & Wells 1998, pp. 99–102). It is an equilibrium supply-demand model at a point in time (static) with technological change identified as an exogenous variable disrupting the equilibrium solution with no guidance to its outcome. Any policy guidelines that come from such an economic model will only result in government intervention that tries to adjust for the exogenous effect of technological change in a way that sustains (or resuscitates) the *status quo*. Reinstatement of subsidies, protection, tax breaks and public services in regional Australia, in order to account for market failure will only temporarily relieve the crisis without addressing the need for regeneration. Market failure is no longer the most appropriate economic justification for state intervention. A new economic paradigm to guide government policy is required.

Evolutionary innovation systems

'The past decade has witnessed the rapid development of a radically new school of economic thought, and one that may ultimately prove very influential in policy considerations' (Bryant & Wells 1998, p. 1). The essence of this approach is the role of innovation in enterprise behaviour that brings about technological and organisational developments, and also drives structural change. Bryant and Wells (1998, p. 53) have called this approach 'evolutionary innovation systems' because it is based on three elements:

1. *A dynamic (non-static) economic model* which assigns evolutionary change of firms from infant, growth to maturity (and then decay or regeneration) as the central competitive process in the market, and where static price signals are subsumed within this broader process.

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[15] This top dozen includes both the Sunshine and Gold Coasts, which were excluded from our definition of regional Australia.

2. *Empirical studies of the processes of technological change and innovation* as the basic inductive 'real world' focus of behavioural investigation of organisations, with an appreciation of the factors that account for development and diffusion of technology through the economy.

3. A *systems approach to interaction and knowledge* based on historical and institutional economic circumstances that lead to behavioural motivation by players in the market that recognises bounded rationality (non-optimal) and cumulative acquisition of knowledge.
This approach is built around two basic assumptions on the operation of organisations in the economy:

- potential capabilities of the organisation ('slack' or spare managerial capacity)—the organisation's historically-determined resource base; and
- organisational routines (or conventions) that determine how the constraints from the potential are handled—the organisation's culturally-based decision structure.

The dynamic competitive process is created by coordinated cumulative learned routines in production, distribution, marketing and improving product and processes (innovation). The more flexible the routines are in business, the more able they are to evolve and change the market environment to achieve some competitive advantage. This requires corporate strategic planning, innovation and also ability to know when to change routines.

A systems approach to economics handles dynamic competitive processes, based on satisfying (rather than optimising) behaviour with decision rules of thumb that form the basic business environment (mark-up pricing, rate of desired excess capacity). This environment establishes some stability in an uncertain world (context-based rules). Systems work only within *tolerable* limits, assessing conduct on the basis of staying within these limits so rules remain unaltered. Feedback loops of 'learning by doing' provide the flexibility for rules (and pricing behaviour) to change.[16]

Policy implications from this approach recognise that market imperfections (or failure) are the keys to the generation of innovation and technological change, not the reason to abolish or ameliorate such imperfections. Policy action must ensure a variety of activities and not specialise in neoclassical 'comparative advantage', while encouraging innovation and 'learning by doing', even if it means mistakes are made. Policy should focus on processes that improve systems rather than be neoclassical outcome-oriented. Finally, policy should encourage positive expectations by building social consensus and disseminating new technologies (reduce time taken for diffusion paths).[17] This policy perspective essentially aims to develop a strong social capital (or community infrastructure) base for the regeneration of an economy from traditional to the innovation-based new economy. Many other chapters in this book examine various specific strategies to developing such social capital.

Implications for regional sustainability

Economic implications for regional sustainability stem from the evolutionary-innovation policy dictum. The focus must be on how to create an environment in regional Australia that will induce strong innovation-based, service-oriented activities. Regional policy needs to recognise that innovations introduced at the recession phase of the business cycle allow for a

[16] See Bryant and Wells (1998) for a non-technical detailed synthesis of this new school of economic thought and its historical roots.
[17] This list of policy implications is adapted from Bryantand Wells (1998, p. 92).

strong upward thrust into recovery (short-term) while regenerating (long-term) growth.[18] This needs government strategy to build a sustainable, innovation-based economy.

Two pillars to this recovery strategy are (1) attraction of 'leading edge' large IT-based global-oriented organisations (public and private) to establish initial multiplier effects and know-how, then (2) creating opportunities and basic infrastructure for local-based organisations to link into the information economy. The second pillar needs a 'critical mass' take-off using the state as 'anchor client', IT access centres, community networking to develop cooperative and integrated links both in business and in the general community, electronic commerce centre, and incubation sites for local firms to develop IT-based skills. In particular, local regional firms need support to enter global markets and develop global corporate plans through the IT paradigm. Funding to support such strategies (e.g. RTIF) is only worthwhile if it is part of a strategic regional plan that involves all levels of government in a coherent integrated approach for regeneration of traditional regional areas.

The regional plan should recognise sub-regions within the region, identifying specific aspects of social capital that can be developed with strong innovation and 'learning by doing' processes. Each sub-region needs to examine its capabilities and cultural-based institutions with a view to encouraging reinvention and learning around them. An example is of a wine-based sub-region shifting from basic commodity sales to a tourism (wine tours, live concerts in vineyards) and hospitality (regionally known labels sponsored in tourist resorts) focus using IT-based physical, human and social capital resources. By focusing on the strengths of past traditions, sub-regions can plan with state support to redevelop them in a long-term strategic process that integrates with the broader region so as to fit into the new economy.

Conclusion: Focus on challenges and strategy

This chapter has sought to demonstrate two principles and their relation to regional sustainability in Australia. *First* is the notion of a dynamic evolutionary economy that is innovation-based, and the need for regional Australia to accept the challenge to regenerate along this new economic trajectory. *Second* is the policy principle of strategic state intervention based on a new systems-based economic school of thought, to manage the shift to the new trajectory path in regional Australia.

The first principle is non-conditional. It is occurring as you read this, with only a minority of regional centres able to take advantage of the new economy, since it is highly centralised and global in nature. The second principle is highly conditional on the ability of governments, along with regional communities and businesses, to recognise how strategic planning and cooperation is required for regional Australia to participate more directly and long-term in this new economy.

Regional Australia has many development groups who are gaining various levels of state support to regenerate by diversifying and value adding. South Australia's Riverland is one example, where agriculture is becoming highly diversified and linked to service-based needs around wine, olives and almonds (Wahlquist 1998). Another is the Tasmanian Rundle Government's *Directions Statement* and its collaboration with two giant telecommunications giants (Telstra and Nortel) to bring IT into a leading regional position (Courvisanos 1998). In both cases there is a need for 'established' industries to reinvent themselves in a way that can take advantage of the new techno-economic trajectory (e.g. trees and eco-tourism, wine

[18] See Courvisanos (1996). On the link between business cycles and innovation, see in particular Chapters 3 and 4. For historical case studies on this approach, see Chapter 7.

and entertainment). Also, there is a need to diversify in a way that a`llows IT to feed into other industries that are related to regional advantages in an environmentally sustainable manner (e.g. ecotourism, wind power generation, sustainable forest cultivation, aquaculture, alkaloids).

Of course, there will be failures and backsliding. Business cycles are always with us. The focus must, however, remain positive from business, community and government. Traditional industries will continue to provide basic regional economic activity for a while longer, but its proportion will continue to decline. Regeneration is needed to provide a trajectory shift into a stronger regional economy for the future.

References

Bell, S 1997, *Ungoverning the economy*, Oxford University Press, Melbourne.

Bennett, R 1992, *Recent developments in the theory of economic growth—Policy implications*, Bureau of Industry Economics Occasional Paper 11, Australian Government Publishing Service, Canberra.

Bryant, K & Wells, A (eds) 1998, *A new economic paradigm? Innovation-based evolutionary systems*, Discussions in Science and Innovation 4, Department of Industry, Science and Resources, Commonwealth of Australia, Canberra.

Catley, R & McFarlane, BJ 1981, *Australian capitalism in boom and depression*, Alternative Publishing Cooperative Ltd, Sydney.

Courvisanos, J 1996, *Investment cycles in capitalist economies: A behavioural Kaleckian contribution*, Edward Elgar, Cheltenham.

Courvisanos, J 1998, *Investment in innovation: An 'instrumental analysis based on the Tasmanian and New Brunswick information technology strategies'*, School of Economics Discussion Paper 98-03, University of Tasmania, Hobart.

Crough, GJ & Wheelwright, EL 1982, *Australia: A client state*, Penguin Books, Ringwood.

Freeman, C, Clark, J & Soete, L 1982, *Unemployment and technical innovation: A study of long waves and economic development*, Francis Pinter, London.

Freeman, C & Perez, C 1988, 'Structural crises of adjustment: Business cycles and investment behaviour', in *Technical Change and Economic Theory*, eds G Dosi, C Freeman, R Nelson, G Silverberg & L Soete, Pinter, London.

Goldsworthy, A (Chairman) 1997, *The global information economy: The way ahead*, Information Industries Taskforce Report, Department of Industry, Science and Tourism, Canberra.

Kilpatrick, S & Felmingham, B 1996, 'Labour mobility in the Australian regions', *The Economic Record*, vol. 72, no. 218, September, pp. 214–23.

KPMG 1998, *1998 Population Report*, KPMG,.Melbourne.

Mercer-Melbourne Institute 1998, *Quarterly Bulletin of Economic Trends*, no. 4, Melbourne Institute of Applied Economic and Social Research, University of Melbourne, Melbourne.

Pusey, M 1991, *Economic rationalism in Canberra*, Cambridge University Press, Melbourne.

Quiggin, J 1996, *Great expectations: Microeconomic reform in Australia*, Allen & Unwin, Sydney.

Rees, S, Rodley, G & Stilwell, F (eds) 1993, *Beyond the market: Alternatives to economic rationalism*, Pluto Press Sydney.

Ruthven, P 1998, 'Implications for business strategy and investment opportunities', in Mercer-Melbourne Institute, *Quarterly Bulletin of Economic Trends: Special Supplement Issue on the Asian Crisis*, Melbourne Institute of Applied Economic and Social Research, University of Melbourne, Melbourne.

Schumpeter, JA 1934, *The theory of economic development*, Harvard University Press, Cambridge Mass., (originally published in German, 1912).

Stilwell, F 1992, *Understanding cities and regions: Spatial political economy*, Pluto Press, Sydney.

Wahlquist, A 1998, 'Great dividing rage', *The Weekend Australian*, 26–27 September, pp. 23, 26.

Wilde, PD 1981, 'Industrial change, structural adjustment and the periphery: The case of Tasmania', in *Structural change in Australia: Some spatial and organisational perspectives*, eds GJR Linge & J McKay, ANU Press, Canberra.

CHAPTER 3
Life beyond economics: Learning systems and social capital

Richard Bawden

There is a growing recognition in communities across the globe, which a fundamental rebellion is brewing. This challenge to convention reflects two fundamental tenets: (a) that the essential activity of being human is not the setting and seeking of goals of resource allocation, but the establishment and maintenance of relationships; and (b) that learning about our world involves experience, spiritual insights, values, emotions, and disposition, as well as 'pure' reason. Relationship building, it is argued, is the essence of social capital, while learning is its currency. Evidence is provided in support of the contention that we are fast moving 'beyond economics' as an expression of total human endeavour, and this is related to the notions of a risk society and what is referred to as reflexive modernity. The challenges of the globalisation of risk, and thus the risks of globalisation, are explored from a perspective of 'appreciative systems', and this notion is itself investigated through the perspective of learning systems.

Introduction

> I find it surprising that we have no accepted word to describe the activity of attaching meaning to communication or the code by which we do so, a code which is constantly confirmed, developed or changed by use. I have for many years referred to this mental activity as 'appreciation'; and to the code which it uses, as its 'appreciative system'; and to the state of that code at any time as its 'appreciative setting'. I call it a system because, although tolerant of ambiguity and even inconsistency, it is sensitive to them and tries to reconcile them' (Vickers 1983, p. 43).

It is not a trivial endeavour to take on an intellectual movement with such an awe-inspiring aura, tradition, and title as The Enlightenment; particularly given that its foundations were established during the 17th century with the birth of the philosophy of rationalism, and its association with the later emergence in the 18th century, of science and the technologies of modernity.

Yet such a challenge is afoot, with individuals and communities alike, in pockets the world over, beginning to rebel against a logic and rationality from which, as Ulrich (1993) has it, 'moral judgement has been eliminated'. In the face of the complexity of a problematic which includes social, cultural, and ecological risks on a global scale, the ethics of human actions are assuming increasing importance. Under such circumstances concerns lie both with the contributions of the unforeseen consequences of scientific application, as well as with the inadequacy of scientific rationality to deal with such impacts.

The primary arguments that I want to present here, fuel this rebellion, which is taking as its two fundamental tenets that, contrary to prevailing perspectives: (a) the essential activity of being human is the appreciative establishment and maintenance of ethically defensible relationships, rather than the mere setting and seeking of goals of resource allocation; and (b) experience, spiritual insight, values, emotions, and disposition, are all as essential to this human activity, as is reason; the more so when the latter is reduced, as so often it is, to instrumental rationality.

Standing on the shoulders of such insightful writers as Geoffrey Vickers, West Churchman, Werner Ulrich, and Peter Checkland, I want to further argue that there are considerable advantages in exploring these two matters from a systems or systemic perspective. This is with the full realisation that by assuming that particular viewpoint, I am further adding to the anti-establishment development movement by challenging the cosiness of its linear (non-systemic) paradigm. The most important point of a systemic approach after all, as Churchman (1971) has emphasised, is that it is committed to ascertaining not simply whether the decision maker's choices leads to the desired ends, but whether they lead to ends which are ethically defensible. Ends, that I submit, can neither be assessed through scientific nor economic rationality.

Finally, in the company of these same writers, I want to reinforce the point that the tenets above reflect the notion of development as a recurring process of learning: with the first proposition indicating the 'purpose' of such learning, and the second hinting strongly at the nature of the process. With my convictions about the usefulness of a systemic paradigm, I shall be exploring learning itself from a systems perspective, and as the focus is on relationship building, I am adopting social capital as my context: the propensity and capability for responsible collective action.

The kernel of my argument is that if communities are to redeem their own destinies from the monocultural poverty of economic imperialism, they need fresh models of learning and methodologies for their own systemic development, to guide them as they seek to learn how 'to do the right thing'. And as any interpretation of the 'right thing' is a function of the appreciative systems of those doing the interpreting, it makes sense to explore this particular construct a little more at this juncture, with reference in particular to the work of Geoffrey Vickers.

Social capital—the wealth of relations

Reflecting back on his own professional lifetime of service to private and public industry in Great Britain, Vickers (1970) was strongly convinced of the inadequacy of goal-setting and seeking as an expression of human achievement. This was a theme to which he would continuously return up to his death in 1982 at the age of 87. It provided the context for his most powerful concept of 'appreciation'—the notion that relationship building (or eluding in the case of undesired situations) involved norms, which individuals develop through experience and then use as their guides or codes for building further relations. It is an ongoing process of learning which Checkland (1981) described in the following manner:

> Our previous experiences have created for us certain 'standards' or 'norms', usually 'tacit' (and also, at a more general level, 'values', more general concepts of what is humanly good and bad); the standards, norms and/or values lead to readiness to notice only certain features of our situations, they determine what 'facts' are relevant; the facts noticed are evaluated against the norms, a process which both leads to our taking regulatory action and modifies the norms or standards, so that future experiences will be evaluated differently (p. 262).

An essential point then is that such appreciation organised as appreciative systems, conditions new experiences while itself being modified by them. Appreciative systems thus evolve both for individuals and communities where relationship building must perforce include an appreciation of shared appreciative systems. This is a matter to which I will return shortly when discussing the nature of co-learning for the development of social capital.

It is the establishment, maintenance, and growth of networks of relationships which, as I understand it, constitutes the potential of social capital. And it is the erosion of such networks, particularly through emergent individualism, that causes so much concern to writers like Robert Putnam (1993). This is a concern that was clearly articulated by Alex de Tocqueville who, in writing about America more than one hundred and fifty years ago, voiced his worries about individualism, which he posited, 'at first, only saps the virtues of public life, but in the long run ... attacks and destroys all others and is at length absorbed in downright selfishness' (Heffner 1956).

It is in our commitment to community networks and the organisations and institutions within them that surely represent the antidote to the destructive forces of rampant individualism. As Handy (1997) argues, America prefers to put its trust in civil associations rather than Government. It is a society which has defined rights but accepts some civic responsibilities as the norm.

What can we say of Australia in this context? With our trinity of governments, our plethora of bureaucracies, and the overwhelming predominance of the metropolis over the distributed community, whom do we trust? Or perhaps more to the point, is there anybody we trust?

What is the nature of the appreciative systems and settings across our civil associations? Does the spirit of ANZAC (Australia New Zealand Army Corps) 'mateship' prevail? Is our fiercely combative sporting heritage a threat to relationship building? What are the feelings and issues which currently prevail across our communities? How pervasive really is the force of economic rationalism? How far down the track is Australia Inc? What impact will the divisiveness now apparent over major social and cultural issues such as native title and republicanism, have on our ability to make and maintain appreciative relationships across our communities? And what of the ever-present racism and the trenchant xenophobia espoused by the Pauline Hansons of the day? Is such fragmentation in danger of amplifying individualism born of the competitive ethos of economic rationalism? Or will the sheer complexity of our situation facilitate the re-emergence of empathetic communities and the synergy of collective learning and action?

There is certainly little doubt that matters are becoming ever more complex, as the economic perspectives of past decades are being expanded to include social, cultural, political, legal, ideological and, what might loosely be termed environmental, aspects. Many see an appreciation of such factors as heralding the need for a fundamental shift in the way we see ourselves, where the call is increasingly for a more reflexive form of modernity, as we increasingly become what Ulrich Beck refers to as a risk society. 'We are concerned no longer exclusively with making nature useful, or with releasing mankind from traditional constraints, but also and essentially with problems resulting from techno-development itself. Modernisation is becoming reflexive; it is becoming its own theme' (Beck 1992, p. 3).

Risk society

It is almost forty years now since Rachel Carson published her book *Silent Spring* (1963), which gave voice to major concerns about the global environmental impacts of local actions. As Checkland (1981) has emphasised, this book triggered a very significant shift in 'appreciative settings' across the globe with respect to the impacts of industrial degradation. While the 'facts' about this were available for many decades prior to the sixties, there was little readiness to notice and evaluate them until the publication of Carson's book. 'Thereafter the standard of what was acceptable changed sharply as new considerations became regarded facts and new norms emerged. The rise of the conservation movement has followed and these days no industry or Government can now ignore in its activity or legislation the care and maintenance of our small planet; the settings of the appreciative system have changed' (Checkland 1981, p.263). The recent Kyoto convention provides powerful evidence of the internationalisation of the phenomenon.

And there is much more to it than this for, as we become a more reflexive society, so we recognise a host of factors which reflect the risks we now face on a global scale. Even as this is being written we are seeing the re-emergence of the threat of nuclear war, with the focus this time being on the Indian sub-continent, while events in Indonesia reflect amazing and essentially unforeseen dynamics combining complex economic, social, and political issues. These two matters are of global concern for quite different reasons, yet both amply illustrate risks of local actions on a global scale. There is much more to a global risk society than these highly visible discontinuous events, for in this new age of reflexive modernity, there are all sorts of forces for change operating on a global scale. Beck (1994) suggests that one of the major forces for change in this regard is the increasing influence and incidence of unanticipated outcomes of modern, especially industrial life. 'Society is changed not just by what is seen and intended, but also by what is unseen and unintended' (p. 6).

In the early part of the 19th century, textile workers in the north of England smashed power looms and mechanical knitting machines in reaction to what was effectively the substitution of capital for labour, and industrial actions continue to this day as manifestation of the continuing concern for this process. Levels of unemployment and underemployment remain persistently high in many economies in both the so-called developed and developing worlds, while levels of social dissatisfaction with such situations is increasing, as the level of awareness of them being outcomes of modern industrial society spreads. As Beck (1994) and others have emphasised, this dissatisfaction, which is being facilitated by the extraordinary growth in communication technologies and ever-increasing levels of education, is leading to significant challenge to established social structures and systems of authority. Science and technology are included here, as are bureaucratic institutions and government agencies, and indeed the very form of government itself.

Witness the unanticipated events surrounding the collapse of the centrally-planned economies of the former Soviet bloc and of the introduction of democratic elections in the Republic of South Africa. Even within long-standing democracies themselves, significant and profound changes are underway, as politics increasingly becomes the expression of particular interest groups within society.

In essence, we are experiencing sea changes in the norms and nature of communities and societies across the world—the globalisation of environmental risks and other undesirable consequences of industrial modernity is being accompanied by fundamental shifts in beliefs about the nature of nature and the role of human beings within it—what can be referred to as ontological beliefs. Citizens in countries in many parts of the globe are beginning to shift their exclusive concerns beyond economics to embrace the full complexities of the relationships between the ecology of the planet and the activities of its peoples. Not just because that complexity is being recognised, but because conventional economics itself is proving to be 'an entirely inaccurate view of how people behave in a modern industrial society' (Ormerod 1994).

Social capital itself is acquiring a global nature, as regional and national borders are easily transcended through the technologies of communication. With 'virtual communities' attracting increasing commitments, and people communicating quite freely about these issues across trans-national networks, the matter of appreciative systems and the meanings which are generated through them as perspectives, become part of a universal discourse for change.

This, in turn, is providing a challenge to a second set of beliefs; those concerned with how we can come to know about the nature of nature in the first place—matters of epistemology. Faith in objective scientific 'truth' born of The Enlightenment, has been severely shaken, not just by the obvious inappropriateness of such a rationality for dealing with those moral and ethical aspects of a risk society which are becoming primary in a reflexive modernity, but by the observations of many scientists themselves. How can we learn to decide what it is that we should be doing to improve our relationships with and within it?

Learning systems

Earlier it was submitted that the second tenet of the brewing 'rebellion' was grounded in the recognition that experience, spiritual insight, emotion, and disposition are all as essential as reason, as aspects of how it is that we learn to establish appreciative systems. And this proposition in its way is as radical as the other, in its call for us to shift our appreciative settings to move beyond economics and embrace the 'whole system'. Economics as a discipline firmly reflects its foundations in rationalism: the belief that through reason alone we can 'discover' the nature of nature, without recourse to any experience we might have of it. It is no coincidence that economics is a quantitative science with its intellectual traditions established in the mathematical foundations of Descartes, Leibniz and Spinoza and their belief that as humans, we have innate ideas or knowledge about the world which are prior to our experience of it; and thus necessarily true (Marias 1967).

The growing awareness of the global nature of risks in an industrial society referred to earlier is being accompanied by a growing recognition that there is more to learning than can be provided solely through reason alone. Without having to assume the anti-rationalist arguments of empiricist philosophers like Locke, Berkeley and Hume, it is not difficult to accept that much of what we learn is derived from our experiences. Indeed, as has been argued elsewhere (Bawden 1997), learning itself can be envisioned as a system of inquiry which integrates the process of meaning making through two sub-systems: an experiential sub-system with its source as experience, and an inspirational sub-system, which has innate insight as its source. We can imagine these two sub-systems linked together through a dynamic in which the output of one becomes the input of the other, while reflecting the tension of the differences between them as a necessary precondition of system coherence.

The systems view of learning liberates us immediately from the prevailing and very narrow view of instrumental rationality. Through the agency of inspirational learning, facilitated through 'disengagement' both from the concrete world of experience and the abstract world of concepts, we can access those deeply held insights which reflect our 'spirit'—our essential human-ness. And if we then accept those insights, we can apply them to the concepts we originally generated experientially from our concrete experiences. The first outputs of experiential learning are abstract concepts which are subsequently 'transformed' by insight output from the inspirational process, into meanings. These meanings are then used as the basis for both meaningful plans and actions, one of which of course, is the process of learning itself! So learning is a meaningful action which generates meaningful actions through the transformation of both concrete experience and the abstract concepts derived from it, by 'spiritual' insight.

Now we can see how ethical considerations can transcend the prevailing tendencies for them to be considered solely in consequential (rational) terms. Inspirational learning allows the liberation, and thence synthesis, into 'reason' of those ethical positions which are grounded in notions of 'goodness', 'rightness', 'justice' and so on. This systemic view of learning thus accommodates the Churchman (1971) imperative for the determination of the ethical defensibility of our intentional acts.

The purpose of such a learning system reflects those intentions of the learner(s) who comprise it, while its internal milieu is determined in large part by their emotions.

A vital aspect of this notion of a learning system is that it is fundamentally a social system: meaning is a social activity and meaningful action, a collective activity. It is the currency of social capitalism. People learn from and with other people. We share our experiences, our insights, and the meanings we create out of the synthesis of them both. And we do all this with little, if any, explicit consciousness of the role of perspective or worldview or 'appreciation' in the process. Whether we know it not, our learning systems are, in Vickers (1970) terms 'appreciative systems'—what we learn about the nature of nature and of our relationships with and within it, is a function of the standards, norms and values which we hold about it! In other words, the meanings that we create (or more accurately co-create) reflect all sorts of tacit assumptions which we hold. We observe what we observe, and think what we think about such observations from particular perspectives. And the essence of those perspectives are similarly reflected on what we plan, and what we do. What we know, and how we value that knowledge and its application, are indeed manifestations of our appreciative systems. We are fortunate that these themselves are open to challenge and change, at least when the mood and disposition which prevails as the internal milieu of the learning system, permits. It is most important that we learn how to challenge and change these 'appreciations' which, for convenience, we can simplify to 'perspectives'.

The work of Karen Kitchener (1983) and of Marcia Salner (1986) on cognitive processing, provides a logic which clarifies how this might be accomplished, while being perfectly consistent with the learning system construct.

Kitchener and Salner both recognise the significance of three levels of cognitive processing which can be interpreted in learning terms as:

- learning about the matter to hand (first level learning)
- learning about how we learn about the matter to hand (second level or meta learning)

- learning about the perspectives through which we operate at the first and second levels (third level or epistemic learning).

In other words, as we go about our 'routine' learning about the world about us, we are also able to (a) interrogate how we are doing that (and challenge and change it if appropriate), and (b) interrogate the perspective through which we are 'appreciating' all that is happening in the world about us (and again challenge and change that if appropriate). Here then is the recursive process envisioned by Vickers and described earlier in the quote from Peter Checkland: we view the world with a particular appreciation (from a particular normative perspective), we make sense out of what we view from this perspective, we take action consistent with the perspective while also questioning the nature and influence of that perspective, and we make adjustments to it after reflections on all that has happened (at all three levels of learning).

It is at this epistemic (third) level of learning that we can challenge and change the basis of our rationality, and herein lies one of the great attractions of reflexive modernity and the role of community within it. It is much easier for us to recognise the way we do things and the perspectives which have such an influence on this through information reflexively 'fed back' to us from those with whom we co-learn and collaborate. Thus we are very much more likely to both challenge and change our appreciative systems in response to comments from others, than from self-analysis—no matter how rigorously this is done.

The same is true of our sensitivity to the need for a systemic flux between the experiential and the inspirational. The experiential process is most likely to be conducted from an instrumental rationality while the inspirational process liberates those norms which then significantly influence the meanings we construe and the meaningful actions we take. Cooperation in learning encourages the critical reflexivity so fundamental to the systemic flux between these two domains.

A general conclusion

The need for systemic thinking is central to the argument for collective learning about those complex, multi-dimensional circumstances which typically characterise a risk society. Systemic perspectives accommodate complexity by focusing less on causality and more on relationships. And this is as appropriate to communities themselves, and the social capital which they both represent and develop, as it is to the processes they use to develop it. It is, as we have seen, also entirely appropriate as a construct for the learning process which is the very currency of the formation of social capital: a process which has two basic subsystems (experiential and inspirational) operating within it, and which is self-reflexive through the engagement of learning at three different levels within the system (learning, meta learning and epistemic learning).

Communities of collaborators establish, maintain, and develop 'appreciative relationships' through reflexive co-learning activities. The purpose of these 'learning systems' is to facilitate adjustment to changing circumstances, which invariably will also result in changes in the systems themselves, especially with respect to their appreciative settings.

It is through such dynamics that the instrumental rationality of economics, which has so dominated human affairs for the past few decades, can be effectively challenged and changed in order that actions more appropriate to the messy complexity of reflexive modernity can be taken and in a context which allows their ethical defensibilities to be evaluated.

As Vickers (1983) would have it: the conditions for survival are cultural rather than technological; they require for societies, groups and individuals to reset their appreciative systems, their standards of what to expect, what to attempt, and what to put up with, to an extent which people have not previously achieved or needed.

References

Bawden, RJ 1997, *The community challenge: The learning response*, Paper presented at the Annual Conference of the Community Development Society, Athens, Georgia, August.

Beck, U 1992, *Risk society*: *Towards a new modernity*, Sage Publications, London.

Beck, U 1994, 'The reinvention of politics; Towards a theory of reflexive modernisation', in *Reflexive modernisation: Politics, tradition and aesthetics in the modern social order,* eds U Beck, A Giddens & S Lash, Stanford University Press, Stanford California.

Carson, R 1963, *Silent Spring*, Hamish Hamilton, London.

Checkland, P B 1981*, Systems thinking: Systems practice,* John Wiley, Chichester.

Churchman, C W 1971, *The design of inquiring systems,* Basic Books, New York.

Handy, C 1997, *The hungry spirit,* Hutchison, London.

Heffner, RD (ed.) 1956, *Democracy in America* by Alexis de Tocqueville, Mentor, New York.

Kitchener, K 1983, 'Cognition, meta-cognition, and epistemic cognition: A three level model of cognitive processing', *Human Development,* no. 26, pp. 222–232.

Marias, J 1967, *A history of philosophy*, Dover Publications, New York.

Ormerod, P 1994, *The death of economics*, Faber & Faber, London.

Putnam, R 1993, *Making democracy work*, Princeton University Press, Princeton, NJ.

Salner, M 1986, 'Adult cognitive and epistemological development', *Systems Research,* no. 3, pp. 225–232.

Ulrich, W 1993, 'Some difficulties of ecological thinking, considered from a critical systems perspective: A plea for critical holism'*, Systems Practice,* no. 6, pp. 583–611.

Vickers, G 1970, *Freedom in a rocking boat,* Allen Lane, London.

Vickers, G 1983, *Human systems are different*, Harper & Row, London.

CHAPTER 4
Sustainability for regional development: Integrating the models

Barbara Geno

While numerous articles and papers have addressed the three primary aspects of sustainability, less attention has gone to how to integrate these three aspects in furthering sustainable regional development. This paper reviews efforts which have been made to develop regional-level management schemes which seek social, environmental, and economic sustainability. In these schemes, the components of sustainability tend to be viewed in a hierarchical manner and the aspects of environmental sustainability and economic viability usually dominate. The issues of social sustainability are often left to be operationalised at the national level. However, the concepts of human ecology may be applied to the challenge of integrating the social and economic aspects of sustainability at the regional level. In addition, social impact analysis also offers a technique to operationalise social sustainability at the community, or regional, level. These social approaches to sustainability serve to provide mechanisms for truly integrating the social, economic, and environmental aspects of sustainability.

Introduction

Development as a modern concept usually means the progression to a 'higher' stage of civilisation with greater social and political complexity and a larger economy in terms of the amount and kind of resources used. Development is generally viewed as offering an improved quality of life or wellbeing. Despite the greater complexity of society and greater control over nature, it is now perceived that many of the impacts that humans have on the environment are detrimental. Therefore, concern has developed with regard to having human development which is 'sustainable development'. The concept of sustainable development has been agreed in Australia as 'ecologically sustainable development', which integrates the three aspects of social, economic, and environmental sustainability.

Ecologically sustainable development (ESD)

In the late 1980s, a Federal process in Australia was started to implement internationally agreed conventions for sustainable development. A compendium of ESD recommendations and State government responses was released in 1992 with strategies for implementation. These initiatives direct the funding for ESD in Australia and are having an impact on regional communities. The general objectives of ESD in Australia were refined into provision for:

- improvement in material and non-material wellbeing;
- intergenerational and intragenerational equity;
- maintenance of ecological systems and protection of biodiversity; and
- dealing cautiously with risk, uncertainty and irreversibility (ESD Working Group 1991, p. 6).

Many researchers agree that sustainability requires the integration of viable economies, viable ecosystems, and viable communities to create a sustainable global society that has a stable and secure natural resource base and can be maintained indefinitely. Therefore, the moral obligation to meet 'the needs of the present without compromising the ability of future generations to meet their own needs' is the central mandate of sustainable development (World Commission on Environment and Development 1987, p. 87). From this vague mandate, Australian communities have the responsibility of demonstrating that the objectives of sustainability are being met.

The three platforms of sustainability—systems approach

A systems approach has been used to identify the basic elements of sustainable development (Barbier 1987). In attempting to coordinate the various elements of ecology, economics and community, Barbier (1987, p. 104) outlined biological systems goals (genetic diversity, resilience, biological productivity), economic system goals (satisfying basic needs, increasing useful goods and services, equity enhancing) and social system goals (cultural diversity, social justice, participation). While Barbier's model suggests that these are separate systems, in practical reality they are interlinked both physically and socially. Attempts to model these as integrated systems have been made. However, a good deal of the literature of sustainability contains a discourse which is based on the separate nature of these systems.

In the next section, the issues of integrating the three aspects of sustainability are explored and some models which fit the conditions of integrating the three aspects of sustainability are discussed.

Integrated models of sustainability

A number of different conceptual models have the potential to fulfil the conditions of social, economic, and environmental sustainability. They are found in a diverse literature spanning natural resource management, ecosystem management, and human ecology. There are two identifiable approaches to integrating the three aspects of sustainability. The units chosen to operationalise sustainability distinguish them: units defined by natural systems or units defined by human social systems.

Natural systems models

Natural systems models support the characteristics of ESD through the use of collective (group) values. The value orientation varies from ecocentric to anthropocentric (nature-centred versus human-centred), depending upon the approach to the ecological goals of natural resource management. How the 'region' is identified determines the basis for decision-making about resource allocation and use. Two schools of thought have developed: bioregion-level and ecosystem-level management. Bioregions are geographical divisions, often divided on the basis of water catchment. Ecosystems are divided on the basis of common climate, geomorphology and species which may or may not coincide with bioregions. While these two forms of resource management are similar, distinctions between them have been drawn in the literature.

BIOREGIONALISM

In bioregionalism, the primary focus is on the development of self-reliant economic, social, and political systems within a geographical region. An extreme concept of self-reliance is proposed in bioregionalism in an effort to ensure that humans stay within the carrying capacity of the region. Natural resource management in a bioregion is focused on systems of production which 'draw on local resources, do not degrade the ecosphere, and require people to consider the long term ecological implications of production versus short term economic gain' (Diffenderfer & Birch 1997, p. 5). Thus ecological considerations are given priority in bioregionalism. The economic system of bioregionalism, with its the focus on self-reliance, is in conflict with the present reality of globalisation of economies.

ECOSYSTEM MANAGEMENT

Ecosystem management is an even narrower concept than bioregionalism. Priority in this model is given to ecosystem health and diversity in the interests of fulfilling the ESD objective of the maintenance of ecological systems and protection of biodiversity. Norton (1992, pp. 24–25) suggests that ecosystem management can offer guidance as to the form of a sustainable human society through imitation of the ecosystem's self-organising principles. In this type of sustainability, ecological considerations are of the highest order and it is suggested that society and economics should mimic ecological systems. The approach to natural resource allocation is concerned with the empowerment of individuals at the local level and reinforces group values. Ecosystem-based management is complex and requires a trans-disciplinary focus. This trans-disciplinary focus has been suggested as ideal for integrating social, economic, and environmental aspects of ecosystem management.

In Australia, ecosystem-based management is being trialled through water catchment planning. The Murray Darling Basin initiative could also be considered ecosystem-based as well. Planning at the water catchment level recognises water catchments as integrated systems which are affected by the activities of individuals and businesses within the catchment area. The catchment committees, as political appointments, vary in their effectiveness. In most cases, they are not representative of the local community but rather reflect local power relationships and therefore do not meet the aim of social justice contained in ESD.

Problems with natural resource based models

One problem with these regional concepts of sustainability is that their focus on geographical regions and individual ecosystems suggests a provincial form of development which contrasts strongly with the trend toward globalisation in national economies. Many Australian regions rely upon traditional economic growth forces through the development of resource-based industries, by capitalising on the natural assets of the region or simply by attracting manufacturing to the region through competing with other regions. Economic development and measures of success under bioregionalism and ecosystem management forces local communities to capitalise on environmentally-benign industries such as recreation and tourism. It also directs them to develop sustainable economic activities based on regionally-available and sustainably-managed natural and social resources. Therefore, the natural systems approaches constrain the type of activities local residents might adopt to develop their resources.

Human ecology-based systems

Machlis, Force and Burch (1997) proposed a form of ecosystem management which uses the human ecosystem as the self-organising principle. The key elements of the human ecosystem are defined as critical resources (natural, socio-economic, and cultural), social institutions, social cycles and social order, all of which are measurable (Machlis, Force & Burch 1997, p. 347). This paradigm of natural resources management seeks to include humans in the system and to give priority to the social goals of sustainability as the highest-order principle. Thus the human ecosystem is defined as 'a coherent system of biophysical and social factors capable of adaptation and sustainability over time' (Machlis, Force & Burch 1997, p. 351). It is suggested that the model could be used as the organising framework for social impact assessments and has the potential for integrating the three aspects of sustainability through multi-scaled measures.

In contrast to the two paradigms of natural resource management which priorise the ecological goals of sustainability (perhaps ecocentric in scope), the human ecology paradigm places humans at the centre of decision-making and their social welfare comes first. In view of the anthropocentric definition of sustainability (having to do only with human present and future generations), this paradigm may receive wide acceptance. In Australia, this would facilitate the ESD process through enhancing the participative process at the local level by placing ecosystem management at the local level.

Socioeconomic indicators of sustainability

While considerable attention has been devoted to the development of indicators of ecological sustainability and the development of market and non-market mechanisms to assure the ecological soundness of human development, less attention has been devoted to the development of socioeconomic indicators of sustainability. Numerous proposals have been made to integrate the social and economic aspects of human society into models which account for the biosphere. What are also required are more accurate measures for intergenerational and intragenerational equity as critical components in ecologically sustainable development. In addition, measures are required to determine whether or not there is increasing material and non-material wellbeing. Two techniques have been identified which attempt to address such questions of measurement.

Social indicators in human ecosystem management

Using the human ecosystem model, social and economic indicators using widely available data can be developed which can monitor social conditions, allow comparison between regions, and evaluate human ecosystem responses to resource management actions while allowing the development of information suitable for collaborative decision making (Force & Machlis 1997). The goal of these indicators is to track the flow of materials and energy between society and nature in order to achieve sustainability. The use of social and economic indicators in the human ecosystem model allows data which is already collected to be utilised in order to track sustainability, and has great scope for the development of indicators which address intragenerational equity.

Social impact analysis

Concern for the environmental impact of human activities has long been a consideration for the activities planned as part of regional development. These are often undertaken in concert with economic measures, such as conventional cost-benefit analysis. The traditional cost-benefit analysis may be expanded to consider social impacts which include costs to individuals or communities. For any development or human activity, measures may be taken of the social costs in terms of compromised health, increased deaths, increased poverty from unemployment, and so on. This may be applied at the regional level. The focus of this type of measurement is individual development activities. It may also be expressed on a national level through examination of national economic activity and national development activities. This type of social impact research is *post facto* and focuses on the effects of development after it has taken place.

Another approach to social impact analysis is to conduct *ex ante* research to evaluate the effects, good and bad, of a proposed development activity. Socio-psychological variables such as attitudes, beliefs, values and opinions are measured in order to decide what social impacts the development activity will have on the local community. The existence of different value and belief systems within a community offers challenges to the construction of a social impact statement. The existence of overlapping projects in a given region also complicates the use of this technique. However, *ex ante* studies in communities can signal conflict over resources which might emerge. For example, Greider and Little (1988) were able to predict conflict between social groups in Utah resulting from transference of water from agriculture to energy generation. Some understanding of conflict over resources in communities is essential, as many regional development projects are mutually exclusive.

Implications of models of integration

In examining the models proposed with which to integrate the three aspects of sustainability, two observations can be made. The first is that these models tend to ignore the forces of globalisation taking place at the international level in economies, the ecological effects of human activity, trade, and the standardisation of environmental and other regulations. The second is that many of the models implicitly rank the three aspects, which is contrary to the systems approach of integration.

Issues of globalisation

There is an emerging view that sustainable development will be framed by global institutions and the incentives and opportunities offered by supranational institutions governing trade. In integrating the economic aspect of sustainability, reliance is often placed on valuing ecosystem services and properties and using market mechanisms in order to influence decision-making toward sustainable outcomes. The market mechanisms tend to be operationalised at the national and international level, rather than at the local and ecosystem level. This goes against the aims of the natural resource management paradigms of bioregionalism and ecosystem management.

Ranking the aspects of sustainability

While the term ‘integrating’ suggests an evenness of the process, the various proposals for operationalising sustainability do not evenly integrate. In some approaches, the integration becomes a ‘nesting’ of the different aspects. In others, ranking results in preference being given to one of the aspects which determines the conditions under which the other aspects will operate. At present, there appears to be no model of sustainability which *fully integrates* the three aspects of social, economic, and ecological goals by *balancing* the three elements.

The models, which priorise the environment over economics and social aspects, alarm regional communities, which are resource dependent. The approaches which priorise economics alarm environmentalists and others in the community, who feel that natural resources are undervalued (or not valued) in conventional economic analyses. Few if any attempts to operationalise sustainability have put the social system first. This latter option needs to be considered in the design of regional sustainability models.

Implications for regional sustainability

When considering regional development, it is fairly evident that the federal ESD initiatives lead to a confusing array of different development projects and community programs. While these may be a reflection of the multiplicity of community values and beliefs, some of the confusion is probably not necessary. Many efforts focused on meeting community needs for employment and strengthened economies focused on ecosystem management, such as Catchment Strategies and Landcare. Peak industry bodies, such as the National Farmers Federation, are also impacting on environmental management through the development of codes of practice. Local governments are involved in community development and ESD through initiatives under Agenda 21, the agreement to implement sustainable development worldwide.

Regional and rural development strategies need to plan to achieve desired regional and rural development outcomes, encourage and support builders and leaders in regional communities, recognise the importance of community-based solutions to local issues, and provide appropriate infrastructure and service enhancement. From an examination of the different priorities, which can be placed on the three aspects of sustainability, it can be seen that the decision-making process involved will be influenced by whether there is a priority of social, ecological, or economic goals. Different integrations are also possible depending upon whether a collective (group values and democratic participation) or individualistic approach is taken to resource allocation decisions. This paper reported on the possibilities, which are found supporting the collective approach.

In each of the models reviewed in this paper, the focus for resource allocation and the determination of the priority of the three aspects of sustainability differed. The natural systems models are eco-centred while the human-ecosystem model is anthropocentric. The first two result in a narrowly-based focus for the economic system, which contrasts with present trends toward the globalisation of economies. In contrast, the human ecosystem model could be expanded beyond the region to interlock with larger human ecosystems at the national and international level. That is, there is scope for combining economic and social indicators with those from larger systems. The human ecosystem approach also provides a coherent framework for the collection of data, which will lead to comprehensive measurement of social, ecological and economic sustainability for Australian regions, which acknowledges the impact of humans on the environment.

References

Barbier, EB 1987, ‘The concept of sustainable economic development’, *Environmental Conservation*, vol. 14, no. 2, pp. 101–110.

Diffenderfer, M & Birch, D 1997, ‘Bioregionalism: A comparative study of the Adriondacks and the Sierra Nevada’*, Society and Natural Resources,* no. 10, pp. 3–16.

ESD Working Group 1991, *Final report: Agriculture,* Australian Government Publishing Service, Canberra.

Force, JE & Machlis, GE 1997, ‘The human ecosystem Part II: Social indicator in ecosystem management’*, Society and Natural Resources,* no. 10, pp. 369–382.

Greider, T & Little, RL 1988, ‘Social action and social impacts: Subjective interpretation of environmental change’, *Society and Natural Resources,* no. 1, pp. 45–55.

Machlis, GE, Force, JE & Burch, WR 1997, ‘The human ecosystem Part I: The human ecosystem as an organising concept in ecosystem management’*, Society and Natural Resources,* no. 10, pp. 347–367.

Norton, BG 1992, ‘A new paradigm for environmental management’, in *Ecosystem health: New goals for environmental management,* eds R Costanza, BG Norton, & BG Haskell, Island Press, Washington DC, pp. 24–32.

World Commission on Environment and Development 1987, *Our common future*, Australian edn, Oxford University Press, Melbourne.

CHAPTER 5
Community psychology, planning and learning: An applied social ecology approach to sustainable development

Douglas Perkins

An ecological framework for sustainable community development and social capital is presented. Three current examples of sustainable community planning and development in the United States are briefly discussed: co-housing, asset-based community development, and new urbanism. A participatory action research process and service learning, an educational movement in the United States, are discussed as collaborative learning communities. It is concluded that sustainability should be defined not only in economic and traditional ecological terms, but also in terms of a social ecology that includes the development of community psychological ties (sense of community, communitarianism, place attachment, pride in one's home and community, community confidence and satisfaction), as well as neighbouring, citizen participation, and organisational efficacy.

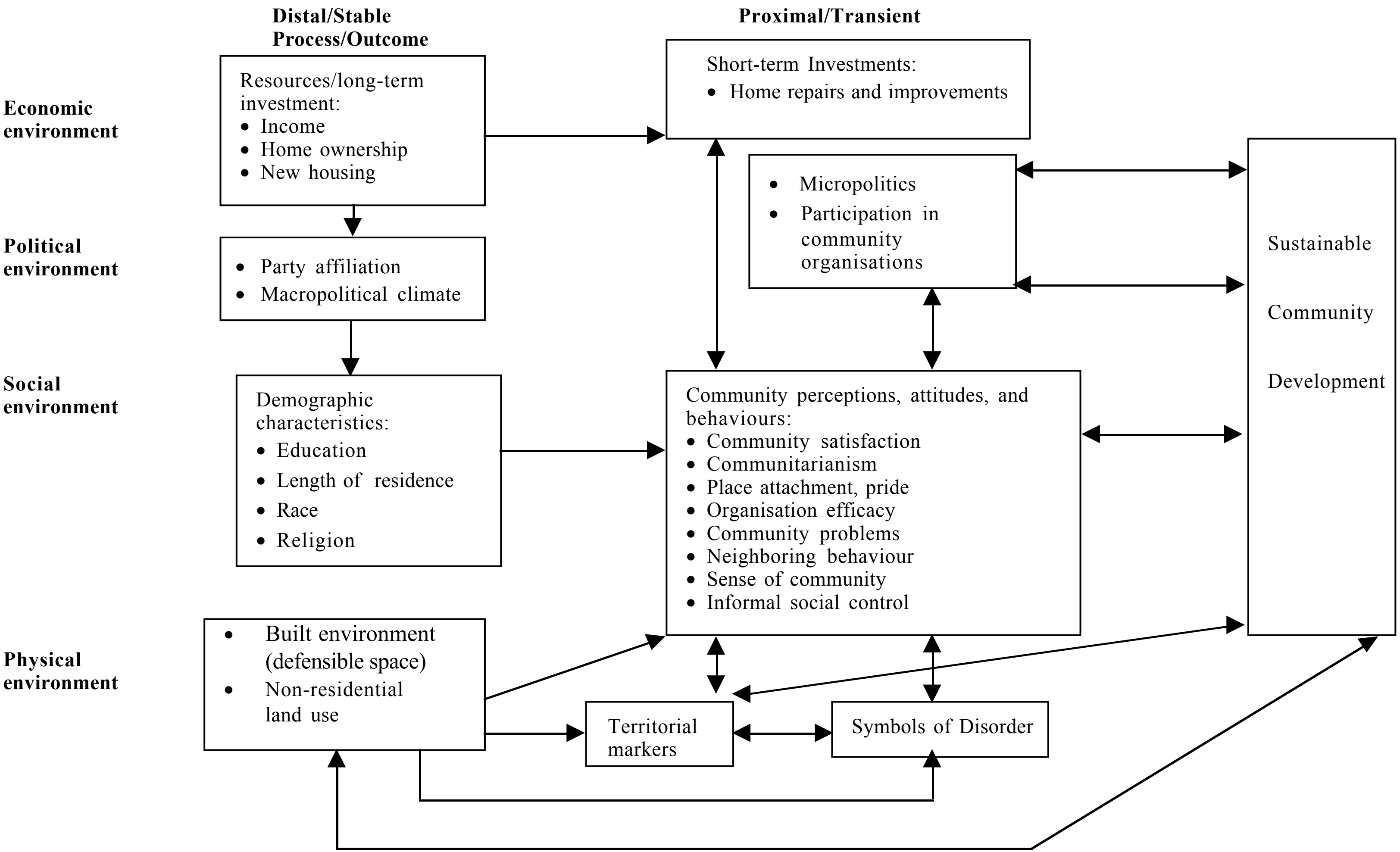
This chapter presents an ecological model of sustainable community development, several psychological concepts that further our understanding of such development and five very different, and currently popular, movements in community planning and learning which exemplify various aspects of sustainable development. The examples and the research on those concepts, which resulted in the model, are mainly from urban and suburban neighbourhoods in the United States But they are based on fundamental human social and psychological needs, attitudes, perceptions, emotions, and behaviours. And so they may apply equally well to regional Australia, despite the unique aspects of its current crisis. The implications for the sustainability of rural areas are considered.

Furthermore, I was trained as a community and environmental psychologist and have emphasised here the importance of considering psychological concepts of sustainable development. But my research is inter-disciplinary, in terms of both theory and methods used to assist and study community development organisations. And so I consider my approach to be explicitly applied and 'ecological', but do not call it 'psychological,' 'urban,' or 'American' because I think it is more broadly applicable than those terms imply.

An ecological framework for sustainable community development

The following theoretical framework for sustainable community learning and development (see Figure 1) interprets sustainability in two ways, which may be both familiar and unfamiliar. First, sustainability ought to imply an ecological consciousness. But sustainable development theories, research, programs, and policies do not always take a completely ecological perspective in terms of carefully considering the systemic interrelationships among the social, political, economic, and physical environment. (For more in-depth ecological analyses of community organisation, development, and empowerment, see Perkins, Brown & Taylor, 1996; Kroeker, 1995; Speer & Hughey, 1995; Perkins et al. 1990).

Figure 1: An ecological framework for sustainable community development



The model was originally formulated and tested for predicting citizen participation in grassroots community organisations as well as predicting community disorder problems, such as crime and fear (Perkins et al.1990). But it may be even more appropriate for analysing community development and sustainability more broadly because, by its nature, community development is about improving the economic, social, political, and physical environment.

What makes this framework ecological is that it attempts to delineate the relevant factors associated with sustainable community learning and development outcomes in each of these environmental domains and at multiple levels of analysis. But the most important dimension of the framework may be the distinction between more distal, stable or even permanent predictors and proximal, transient or changeable predictors. Stable factors include such economic resources as income and property ownership, party affiliation and macro-political climate, demographic characteristics, such as education, length of residence, race, and religion, and the built environment, including residential, non residential, and open land uses. The problem with stable factors is that by definition they are difficult or impossible to change. Transient factors include short-term economic investments (such as home or capital repairs and improvements), the level of participation in grassroots community organisations, and in particular, community perceptions, attitudes, and behaviours, which are discussed in more depth below.

Community development and social capital

The second way in which sustainability may be both familiar and unfamiliar is that it implies the development and maintenance of community 'social capital,' or participation. Two environmental psychologists (Saegert & Winkel 1998) found social capital to consist of two informal factors (informal participation, or what others and I call neighbouring behaviour, and perceived pro-social norms) and two formal factors (leadership activity and basic voluntary participation). It is important to carefully examine and understand the differences between both forms of social capital, formal and informal participation, but also the various factors and processes that make up and is related to each form.

At the risk of sacrilege, let me voice a concern with social capital in that, like 'empowerment' and possibly 'sustainability', it has become a conceptually vague buzzword which is being used by many different people to mean many different things or, in some cases, to mean very little. In the Utah State legislature, the Social Capital Enhancement Act requires government workers to turn away all first requests for services, no matter how legitimate, and forces those in need to seek those services in the already overburdened private community service sector. Only if that fails can citizens go back to state government for help.

Community psychology and environmental psychology

The fields of community and environmental psychology have developed a tremendous amount of theory, research, and action on the specific stable elements and transient processes of the social and physical environment of communities listed in Figure 1. Environmental psychology focuses on the influence of the physical environment on human behaviour. In addition to the more or less permanent, and generally larger, features of the architectural and planning environment (Plas & Lewis 1996; see 'new urbanism', below), much of the work in this area has explored the social and psychological impact of more transient, and therefore malleable, physical features. These include both positive signs of territoriality (Brown 1987), such as cleaning up and beautifying one's home exterior or community, and also negative symbols of disorder in depressed areas, such as physical deterioration, litter, graffiti, vandalism, and poor property maintenance (Perkins et al. 1990, 1996).

Community psychology has focused on tangible behaviours such as informal neighbouring, informal social control (or people's willingness to intervene to uphold community standards of behaviour), and my own special interest: formal citizen participation in grassroots community organisations (Saegert & Winkel 1998; Perkins et al. 1990, 1996; Speer & Hughey 1995; Unger & Wandersman 1985). It has also focused on important community-focused perceptions, such as the awareness of community problems and confidence in the future of one's community and in the efficacy of local community organisations in dealing with those problems.

Both community and environmental psychologists have closely studied what constitutes and how to encourage various kinds of community psychological ties, such as sense of community (Plas & Lewis 1996), communitarianism (or the value people place on their community and on working collectively to improve it; Perkins et al. 1990), place attachment (which can be a valuable resource to individuals, families, and communities; Perkins et al. 1996), community satisfaction (which my research has found to be positively related to perceived community problems, not negatively i.e. those who perceive more problems are more satisfied with their community as a place to live; Perkins et al. 1990, 1996). The latest psychological tie my colleague Barbara Brown and I have begun to study is home and community pride.

Examples of sustainable community planning and development in the United States

Cohousing

Cohousing (McCamant & Durrett 1994; cohousing web site www.cohousing.org/) is a collaborative housing movement which started in Denmark 30 years ago as an antidote to the alienation of modern suburban life and has, since the late 1980s, spread to about 75 developments in the United States (with another 50 or so currently in progress). At present there are three cohousing developments in Australia, two in Hobart, Tasmania, the other in Freemantle, WA with more in the planning stages. Cohousing communities are like self-help/mutual aid groups in that the planning, design, decision-making, and daily life of these intentional communities is highly participatory, consensus-oriented, and communal. Professional architects and planners may be involved in the building process, although they are viewed as necessary, although ancillary, expert resources.

The design, cost, and communal life of cohousing developments vary. But all have a shared community building in addition to (in most cases) 20 to 30 private single-family dwellings, a certain number of weekly communal meals and other activities, and a layout that keeps motor vehicles on the periphery of the community. Many share childcare and other human and material resources.

Asset-based community development (ABCD)

A team of Chicago-based community development researchers and consultants have developed a popular approach to mobilising community resources (Kretzmann & McKnight 1993; ABCD web site www.nwu.edu/IPR/abcd.html). They begin by criticising the needs, deficits, or problem-focused orientation of traditional development policies and programs, which tend to blame entire communities as victims. They argue that this serves the vested interests of service providers, policy-makers, and social scientists, but disempowers the community and makes them dependent on services that, in recent years, have been disappearing in both urban and rural areas.

In contrast, ABCD is a practical and systematic strategy for releasing individual and local organisational capacities; mapping community social, physical (space), and economic assets; building relationships among those assets; mobilising the community for economic development and information sharing; developing a community vision and development plan; and leveraging outside resources to support that locally controlled plan.

New urbanism

New urbanism, or neo-traditional or transit-oriented design, is the most important movement in American architecture and urban and regional planning in the past 20 years (Katz 1994; new urbanism web sites www.cnu.org/ and www.interlog.com/~oppi/hot_tops.htm#1). The new urbanism encourages mixed, or at least proximal, commercial and residential land use with multi-modal public transport hubs; a reduction in automobile traffic and orientation, and community civic centres dispersed to create smaller, more tight-knit communities than one typically finds in most of modern suburbia.

Like cohousing, the new urbanism also uses slightly smaller and multi-unit residential properties and so higher population density in order to preserve nearby open space for parks, farms, and bushland. It is an attempt to plan and design to encourage all the community psychological ties and behaviours I have discussed, including sense of community, and informal social control through greater use of outdoor space (Plas & Lewis 1996). Its scope may give it greater potential for social and cultural change compared to cohousing. But it has thus far paid less attention to the learning and participatory aspects of community building than either cohousing or ABCD.

Examples of collaborative learning communities in the United States

Participatory action research

This is based on the work of Fals Borda and Rahman (1991). The original study that produced and tested the ecological framework for community development I presented was the Block Booster Project. It was funded by the Ford Foundation to examine the role of residential block associations in community development and crime control. It was participatory in that community leaders were involved from the beginning as collaborators in the formulation of all aspects of project design. And it was action research in that one central aspect was a series of workshops to help the block associations and leaders improve the functioning and viability of their organisations (Florin et al. 1992). We provided both general practical informations on managing voluntary associations as well as survey-based and other data specific to their local blocks to help them know how members and other residents felt about community, organisational, and leadership issues and problems. The result was the creation of neighbourhood-based learning communities of resident leaders and researchers.

Service-learning

Service-learning—the testing and illumination of primary, secondary, college, or graduate course content through participatory student projects that address local needs—is currently a hot pedagogical movement in the United States (see service-learning web site: http://csf.colorado.EDU:80/sl/). It may seem like merely the kind of practical or experiential learning that is as old as vocational or professional training or simply good teaching. But there are some new principles, such as varied opportunities for individual and group reflection, which in combination constitute a new and uniquely community-focused learning process. Service learning is of course, perfectly suited for community development-related courses (Reardon 1994).

Service-learning takes the idea of a 'learning community' very literally and seriously in exploring concrete ways to bring students, local government officials, community development practitioners and researchers, and community residents and leaders together to learn and benefit from each other. It adds reality and relevance to the curriculum by bringing to life dry classroom materials, by showing how social processes really work (and often do not work as planned) in the unpredictable and complex world of Realpolitik, and by giving students skills, experience, and connections that often lead to employment opportunities.

More often than not, service learning is a 'win-win-win-win situation.' The winners are (1) the instructor, whose teaching is brought to life and made more relevant through application to the 'real world'; (2) the students, who almost unanimously report getting a lot more out of the course, not only practical skills and experience and a 'foot in the door' of a potential employer, but also greater political awareness and a more developed sense of communitarianism and civic responsibility; (3) the clients of the host organisation, who usually get more personal attention and energetic bodies to help with their problems; and (4) the host organisations, who get unskilled, semi-skilled, and even skilled labour and a chance to test the performance of possible future workers, both at little to no cost.

I have incorporated service learning into almost all the courses I have taught at the University of Utah. About a thousand undergraduates and ten graduate students have helped plan, conduct, and report on my various community service/research projects, which have provided useful information to a wide variety of public and private organisations (including community councils, service agencies, an ecumenical religious service and anti-poverty advocacy organisation, and various city agencies and councils) with whom the students worked. The projects also had a clearly positive and lasting impact on the students' learning, as evidenced by their application of ideas and observations from the project to later course work.

Here is an example of a typical community service-learning project in one of my classes. In late 1995, a city council man contacted me. The local Redevelopment Agency (RDA) was about to designate a portion of his district a blighted area and he, the RDA, and the local community council wanted a community needs assessment to guide redevelopment plans. This project involved two classes, a total of 50 students, plus some campus community service centre volunteers. The goals for the project were: (a) canvassing the neighbourhood, distributing community service information, and conducting resident and small business interviews; (b) identifying potential block leaders throughout the target neighbourhood; (c) helping those leaders develop organising plans based on data specific to their own block as well as neighbourhood-level information, and (d) involving students in community research and community action. The student-written project report went to all the above groups and leaders and also the local community police officers and the other city council man from the area. In addition, forums were held at the university, first to present the neighbourhood results and later to discuss the organising plans.

Implications for regional sustainability

As stated at the outset, although these examples come mainly from the American urban experience, they may be equally relevant to regional development in other industrialised nations. For example, some of the latest cohousing developments are in rural areas. One of the more intriguing sustainability innovations can be found in a new cohousing community in remote Southern Utah. It has incorporated a variety of environmentally sound features, including straw bale construction which, compared with traditional materials, is more affordable and energy efficient. Even more than other cohousing groups, the Circle Springs

Community also works hard at building a community both socially and spiritually (web site: www.gj.net/~wgaia/circlesprings/). What could be a more appropriate intervention approach in regions experiencing disinvestment and out migration than asset-based community development? Rural communities have a wealth of cheap land, buildings, labour, and other assets, which may be used to either attract new investment or promote social capital and the 'cycling of resources'.

New urbanism may seem like the least relevant example for *regional* sustainability. But, in fact, it is one of the few planning strategies that takes a multi-level approach, from building design features all the way up to regional population and economic growth and transportation policies. Rural regions have many small to mid-sized towns and cities where, because land is cheap, sprawl and industrialisation are threatening the quality of life (both in towns and on farms and ranches) more so than in older, more densely settled cities. The most important new urbanist planning principle for regional sustainability may be the restriction of strip commercial development in order to maintain 'main street' economic vitality and mixed residential and commercial land use in downtown areas.

Participatory action research and service-learning are powerful strategies for applying the concept of social capital to the creation of locally specific, practical knowledge and learning communities. As long as there is a single community development professional or para professional (a trained amateur) and students (of any age and area of study) or resident volunteers, these strategies can be used to address any kind of problem in rural areas just as well as cities.

Conclusion

The most important test of these five or, for that matter, any experiments in community building and the creation of learning communities, may be their sustainability. I further believe that sustainability must be defined not only in economic and traditional ecological terms, but also in terms of a social ecology that goes beyond the idea of people as capital, to include the development of community psychological ties (such as a sense of community, communitarianism, place attachment, pride in one's home and community, community confidence and satisfaction), as well as neighbouring, citizen participation, and organisational efficacy. Neither communities nor voluntary associations can long be sustained without them.

References

Brown, BB 1987, 'Territoriality', in *Handbook of environmental psychology*, eds D Stokols & I Altman, vol. 2, Wiley, New York, pp. 505–531.

Fals Borda, OF & Rahman, MA (eds) 1991, *Action and knowledge: Breaking the monopoly with participatory action research*, Apex, New York.

Florin, P, Chavis, DM, Wandersman, A & Rich, R 1992, 'The Block Booster Project: A systems approach to understanding and enhancing grassroots organisations', in *Analysis of dynamic psychological systems,* eds R Levine & H Fitzgerald, Plenum, New York.

Katz, P (ed.) 1994, *The New Urbanism: Toward an architecture of community*, McGraw-Hill, New York.

Kretzmann, JP & McKnight, JL 1993, *Building communities from the inside out: A path toward finding and mobilizing a community's assets*, ACTA, Chicago.

Kroeker, CJ 1995, 'Individual, organisational, and societal empowerment: A study of the processes in a Nicaraguan agricultural cooperative', *American Journal of Community Psychology*, no. 23, pp. 749–764.

McCamant, K & Durrett, C 1994, *Cohousing*, Ten Speed Press, Berkeley, CA.

Perkins, DD, Brown, BB & Taylor, RB 1996, 'The ecology of empowerment: Predicting participation in community organisations' *Journal of Social Issues,* no. 52, pp.85–110.

Perkins, DD, Florin, P, Rich, RC, Wandersman, A & Chavis, DM 1990, 'Participation and the Social and Physical Environment of Residential Blocks: Crime and community context', *American Journal of Community Psychology,* no. 18, pp. 83–115.
Plas, JM, & Lewis, SE 1996, 'Environmental factors and sense of community in a planned town', *American Journal of Community Psychology*, no. 24, pp. 109–143.
Reardon, K 1994, 'Undergraduate urban communities: An undervalued form of service learning', *Michigan Journal of Community Service-Learning,* no. 1, pp. 44–54.
Saegert, S & Winkel, G 1998, 'Social capital and the revitalization of New York City's distressed inner city housing', *Housing Policy Debate,* no. 9, pp. 17–60.
Speer, PW & Hughey, J 1995, 'Community organising: An ecological route to empowerment and power', *American Journal of Community Psychology,* no. 23, pp. 729–748.
Unger, DG & Wandersman, A 1985, 'The importance of neighbours: The social, cognitive, and affective components of neighbouring', *American Journal of Community Psychology,* no. 13, pp. 139–170.