Electronic Edition: March, 2010

Economía

New economic systems to empower people and support the living world

Geoff Davies

Imagine a much more equal and inclusive society than we have now. It has old-fashioned family values, solid local communities, and full employment in an efficient and sustainable market economy with a debt-free money supply and no executive plunder. Impossible? Perhaps. ***But Geoff Davies' project is distinguished by such commonsense, hard science, practicality, surprise, fine writing and expert contempt for orthodox economics, it's a joy to read for visionaries and sceptics alike.***

- **Hugh Stretton**, Social Scientist

Geoff Davies turns his critical scientific gaze on contemporary economic orthodoxy and finds it deeply deficient. His work makes a strong case for a radical reconstruction of economic arrangements if we are to live more fruitfully and harmoniously.

- **Frank Stilwell**, Professor of Political Economy, University of Sydney.

I find Davies' arguments refreshing and convincing. They cannot be ignored. … if Davies is even half right, we, the people, must urgently modify the economic model which drives all of our financial institutions, nearly all of our current politicians and all of our public services.

- **Bob Douglas**, Emeritus Professor, Australian National University, and Chair of the Board of Australia21, reviewing in *The Canberra Times* 13 March, 2004.

Most of us would not live in our home the way we live on our planet. We are fouling our nest and failing to provide for the the basic welfare of our fellow human beings.

Davies argues that the primary agent of these failings is a pathological global economic system. ***Economia*** *reconceives economies as complex, self-organising systems, which means they operate according to the same underlying principles as the human societies and living systems from which they have emerged.*

In this new conception, economies can be stable and resource-efficient. Every one of us can live in material sufficiency and according to our personal and cultural values. We can live in synergy with the living world. Individual dignity, cultural diversity and biodiversity can flourish once again.

About the Author

Dr. Geoff Davies is a Senior Fellow in the Research School of Earth Sciences of the Institute of Advanced studies at the Australian National University. He was educated at Monash University in Australia and at the California Institute of Technology and Harvard University in the USA. He held university appointments in the USA and lived there for a total of fifteen years before returning in 1983 to Australia and his present appointment.

He is a well-established geophysicist at the international forefront of his field of plate tectonics and mantle convection. He has published over 100 scientific papers and the book *Dynamic Earth: Plates, Plumes and Mantle Convection* (Cambridge University Press, 1999). He is widely recognised by geophysicists and geochemists for his work integrating plate tectonics, mantle convection and the chemical evolution of the Earth's mantle. In 1992 he was made a Fellow of the American Geophysical Union, an honour limited to 0.1% of roughly 50,000 members in a given year. In 2005 he was awarded the inaugural Augustus Love Medal for geodynamics by the European Union of Geosciences.

Permissions

The author would like to thank the following copyright holders for permission to reproduce their work: Page 30: T. Jackson, N. Marks, J. Ralls and S. Styme, for the extract from 'Sustainable Economic Welfare in the UK, 1950-1996', Centre for Environmental Strategy, Guildford, and the New Economics Foundation, London.

Joe Miller, Moab, Utah, for permission to use the poem *If Earth*.

Every attempt has been made to seek permission from copyright holders. However, please contact the author if there have been any omissions.

First published February 2004 by ABC Books for the Australian Broadcasting Corporation, GPO Box 9994, Sydney, NSW 2001. Copyright reverted to author 2009.

This electronic edition published 2010 by Geoff Davies.

This is the 2003 pre-publication text, except as noted within Part 7.

Eco-nom'-ia, *from* ***Oikonomia****: the wise management of a household, so as to increase its usefulness to all its residents over the long term. (Greek:* oikos*, a house,* nomos*, law.)* ***Economia*** *might thus be paraphrased as global good housekeeping.*

To my late father,
***Fred Davies**,*
for his thirst to know
and his refusal to accept mediocrity and injustice.

*To **Stan Dale**,*
for teaching the world and me
how to replace ignorance and fear
with awareness and love.

*To my former wife **Deborah Reid**,*
for her belief in this adventure,
her willingness to recreate herself
and her insistence on passionate engagement.

Contents

Preface

This book is about economic systems, but it takes a broader perspective and pursues its enquiries to deeper levels of our societies and our humanity than in the usual conception of economics. It is written for a general audience, not for specialists, which is appropriate because it is about integration and synthesis rather than about specialisation. This is no text book, nor am I a professional economist. I am a scientist, a geophysicist, which means I use physics to study how the deep interior of the Earth works. My main research interest, in a career exceeding three decades, has been convection in the Earth's mantle, which is the process that moves continents and tectonic plates slowly around the Earth's surface.

Why does a geophysicist presume to write about economics? The short answer is that when I encounter a theory, I want to know what its assumptions and main predictions are, and whether they resemble the observable world in any useful way. A few years ago I read an understandable account of the standard theory of free market economics, and immediately it seemed to me that the behaviour of real modern economies is radically different from the standard theory.

That proximate trigger, which set me seriously on the path of writing a book, was the book *Tumbling Dice* by Brian Toohey[1], who is an Australian jounalist and economic commentator. It was Toohey who first gave me a coherent account of the central theory underlying free-market rhetoric. In it Toohey confirmed a growing suspicion of mine: that if economies of scale are widespread then there can be no general equilibrium (p. 70). Certainly the point of Toohey's book was that we shouldn't put much stock in conventional free-market economics, but I thought the point could be stated more directly and made more strongly. I was already familiar enough with dynamical systems to recognise that if even this one point were borne out, then the theoretical basis of conventional free-market economics would collapse.

A long-standing concern about deficiencies of conventional economic policies then crystallised into the thought that I could make a useful contibution by explaining in plain English why the so-called neoclassical theory of economics is inadequate. It is clear that many people feel the world is being led seriously awry by the current dominance of free-market policies, but they find it hard to contend with the armies of jargon-spouting experts who defend the current regime. I hope to empower such people by showing them where, precisely, the theory is inadequate, why it is inadequate and, most importantly, how far-reaching are the implications.

There have been many critiques of the neoclassical theory of free markets. Many of these criticise its values, many question its assumptions about human behaviour, and a few question its technicalities, but often the implications of making alternative assumptions are not easy to discern. What may distinguish this critique is that it identifies a few fundamental problems with the theory using the theory's own concepts, and it makes clear that the implications are very far reaching.

A second seminal influence on this book was my reading Mitchell Waldrop's book *Complexity*[2], which gives a fresh and readable account of the notion of *complex self-organising systems*, through the work of some key contributors to the subject. Though I was aware of some basic things about such systems, it was only through this account that I began to grasp the detail and depth of the parallels between self-organising systems and our experience of life. Waldrop also describes important implications for economics, particularly through the work of economist Brian Arthur, but I felt the implications ran even deeper and more broadly than they seemed to suggest. I didn't want my book to be just a negative critique, and self-

organisation crystallised for me the way to offer a positive and powerful alternative to the conventional theory.

The seeds cast by Waldrop and Arthur fell onto mental ground well-prepared by Jacob Bronowski, Fritjof Capra and others you will encounter through this book. Bronowski, in his seminal 1973 TV series and book *The Ascent of Man*[3], portrayed science as an intrinsic part of our culture and history. He showed how the cultural context of the time has conditioned the kinds of ideas that have arisen, and also illuminated science as a refined version of old and widespread processes of discovery. In *The Tao of Physics* (1976) and *The Turning Point* (1982)[4] Capra, after embracing physics and spirituality, presumed to draw together our understanding of biology, the human body, medicine, psychology, economics and, by implication, our conception of ourselves and our societies. For me, Capra's reach was breathtaking. His unifying concept was the systems view, the holistic view that a complex system can be more than the sum of its parts. Capra remains my inspiration and model for boldly reconceiving any or all aspects of our existence.

My experience as a scientist also prepared me in important ways for the unanticipated emergence of this study of economic systems. Studying the Earth keeps you humble, or it should. The Earth's crust is ancient and messy, and you have to sift through a lot of confusing observations looking for gems of insight. Human affairs are much messier even than the Earth, but the practice was good. My study of the Earth's inaccessible interior has also taught me to be conscious of the incompleteness of our observations of the world, and to remember that we scientists are inventing stories to explain patterns we think we perceive in our incomplete data. Geology is a historical science. You can't put the Earth in a laboratory and see what happens if you change a few things. Nevertheless you can still do good science, proposing ideas, pursuing their implications and comparing them with the real Earth. There are more profitable lessons here for the social sciences than in the generally misleading stereotype of laboratory physics.

My own research impinges on many aspects of geology, and this has required me gradually to expand out of my narrow specialty and to learn about other geological disciplines. This has been a challenging and exciting process, and I have learnt to look critically at other people's evidence and arguments, because often their interpretation is based on only a sketchy understanding of evidence from fields outside their own expertise. Also I became fascinated with the story of life on Earth, through the work of colleagues studying the patterns of change and succession in the fossil record.

Studying the Earth has affected my world view in a more personal way as well. I am humbled by the age of the Earth, which requires sustained acts of imagination to conceive of – more than 4.5 *billion* years. Life on Earth is almost as ancient as the Earth itself. Although many people for a long time have found living things to be miraculous, the notion that their miraculous complexity and subtlety has accumulated over the vast age of the Earth is relatively new, and humbling in a different way. It takes more sustained acts of imagination to conceive of how complex any living organism must be.

My father was an important influence. Although he had only about eight years of schooling and was a battling farmer most of his life, he had a strong curiosity about the world, was widely read and had a rebellious streak that conceded little respect to authority, unless it was earned. He was also unusual for his time in being both a farmer and a conservationist. He was active in nature conservation work from the late 1950s through the 1980s, before environmentalism became more widespread and well before a common interest between environmentalists and farmers became widely perceived in Australia.

A formative experience of my father's childhood occurred when his family moved north from Australia's southern coast to what is known as the Riverina district of southern New South Wales. He was five years old in 1913, and a tract of country was made available for clearing for wheat farming. This land had been grazed by the sheep of "squatters" for many years, but much of the original open woodland remained, and it was full of wildlife. There were kangaroos and emus (the large flightless Australian bird), but the abundance and variety of birds struck my father even at such a young age. Like many boys, he collected birds' eggs, and soon had the eggs of about 100 species, still an incomplete sample of the birds known to him. We still have the collection. Within a few years most of the woodland was gone, replaced by wheat fields, and with it much of the bird life.

In 1951, when I was seven years old, my family moved south to the Victorian coast, where the rain is more reliable. There was still quite a lot of bushland of various kinds in the area, and my father resolved to do what he could to ensure not all of it was destroyed, the way the woodland of his childhood had been. Later he travelled through much of central, northern and western Australia, and the perceptions he brought home about our fragile continent were strongly informed both by his early experiences and by his life as a farmer.

I have been struck, in writing this book, by a convergence of many current streams of thought and action. Many people perceive the present as a time of great transition, and many people are redefining how they live and how they want to live. This convergence has been paralleled in my personal life by a confluence of my professional experience, my life experience and various long-standing interests that seemed quite disparate but ultimately have merged into this synthesis.

This might be a less integrated and forward-looking book than it is had my own erratic personal journey been different. In the course of personal crises and transitions, I have learnt that we can step through fears of rejection and reach a clarity of communication and a level of intimacy that I hardly dared to believe was possible. My life is richer and more loving for these lessons. I know, from this experience, that it is possible for each of us to change the way we behave towards each other and, in the words of Stan Dale, to replace ignorance and fear with awareness and love[5].

I have come to believe that irrational fear is at the root of much of the misery that we human beings inflict upon each other, and that irrational fear can be transcended. It seems to me that this is the path to maturity and wisdom. The world will only be changed if each of us makes such deeply personal changes, for it is only as each of us transcends our own fear of change that we will be able together to create a better world.

This is an optimistic book. Optimism is an expression of hope, not a guarantee of good times. There is no guarantee that we can move onto the more positive path I think is opening before us. On the other hand, if we allow ourselves to remain captives of fear and cynicism it *is* guaranteed that we will *fail* to find a better path.

[1] [Toohey, 1994]

[2] [Waldrop, 1992]

[3] [Bronowski, 1973]

[4] [Capra, 1976] , [Capra, 1982]

[5] [Dale and Beauchamp, 1980]

Introduction

This book offers a reconception of how economies work, how they might be managed, and for what purposes. It points to an optimistic prospect. What it says may seem radical at first, but it's not really. Rather, it offers a return to common sense and old wisdom, informed by some useful insights that have become available in recent decades.

We are so accustomed to the current economic regime we don't notice how absurd it has become. We can glimpse some of its absurdity by pondering some of the assertions we regularly hear about it.

The economy must grow. Why? Well, so unemployment and poverty can be eliminated. I've been hearing that line for about four decades now, and within this time the material wealth of Australia, my native country, has nearly tripled, but unemployment is still with us. In fact unemployment is several times higher than when I was young. Growth obviously does nothing, by itself, to reduce unemployment, but you still hear this line from politicians and economists almost every week. The poor probably do have more stuff than they did in 1950, but are they happier? Probably they are a little bit happier, but if we really wanted we could improve their lives much more quickly and easily than by waiting decades for economic throughput to triple.

So, the economy must grow, but what exactly is it that grows? Most of us have the impression it is our collective material wealth that grows, but this is not what economists and politicians are actually talking about when they boast "the economy" has grown. Rather, they are talking about the total amount of paid activity, whether that activity is useful, useless, harmful, or trying to fix the harm caused by other activity. The "growth" we hear so much about is actually growth of the Gross Domestic Product, and the GDP is calculated basically by entering all transactions in the credit column of the ledger, regardless of whether they are income or expenses, and adding them up. No shopkeeper or farmer would survive for long if he kept his accounts this way, but this is how our national accounts are kept.

There are many other absurdities to be discovered as you probe the workings of our economic system, like money that is created out of nothing but then loaned with interest due, as though it were hard-earned cash. In fact our monetary system never supplies enough currency to cover the ever-growing debt attached to it, so is it then surprising if there is a fierce scramble for scarce currency and the world's indebtedness to money lenders seems always to increase? Then there is the economic theory that is supposed to justify the whole regime. It is so irrelevant to what is actually happening that its application can only be called pseudo-science.

Perhaps the most telling absurdity of our present economic system is that we are acting collectively as though we are desperately poor, while in fact we have material wealth beyond the wildest imaginings of our recent forebears. If we are so rich (and free), then why are we so enslaved by the daily rat race?

It is no coincidence that key "modern" economic ideas arose in England around the time of the industrial revolution, which birthed our modern era. This was a time of extreme poverty, child labour, and severe exploitation of the poor. It was the time of William Blake's "dark Satanic mills", and of Thomas Malthus' famous essay on population increase, which led to economics being called "the dismal science". Yet, curiously, all of the productivity of the English countryside was intact but under-

used. It was a time of "poverty amidst plenty". Curiously also, there is historical evidence that the common people of Europe were considerably better off during the late middle ages than they were during the early industrial revolution. Is it possible that our industrial/economic system *creates* poverty?

A grave deficiency of modern economic thinking, indeed of modern societies, is that we tolerate the exclusion of people from reasonable means of supporting themselves. Many willing people find themselves in the desolate state of having no employment, no means of production, no land, no access to credit, and no *home*. The exclusion occurs through our rules of ownership and the issuing of money, which are social inventions and not as simple and benign as is widely believed. The claim that unemployment is the fault of the unemployed is an indefensible myth. In Australia, for example, the official number of unemployed has been about seven times the number of jobs available, yet Government policy is to treat the unemployed as indolent. Government ministers regularly indulge in verbal abuse of the unemployed. I think no society can call itself civilised unless it ensures *all* of its citizens have access to the means for a dignified livelihood.

This book ranges more widely than a book on economic systems might be expected to do. It does so in order to build a different picture of our place in the world than the picture that has underpinned Western culture for centuries, or millenia: we are totally and inextricably dependent on the living world around us, and our prosperity depends on other life coprospering with us. This view is the heart of a reconception of the role of economic systems in our lives and in the world. Many people already perceive this view in various ways, intuitive, aesthetic, moral or spiritual. I offer here a scientific case to complement those perceptions.

Absurdity is coming to be experienced in more personal ways as well. For many people life is unsatisfying and doesn't make sense. Daily life seems to alternate between stress and flight. The rat race only seems to intensify, and people yearn for a simpler, more fulfilling life. However the more we flee the less we seem to escape. Television advertisements show large gleaming vehicles carrying people through pristine landscapes, but when we seek out these places we find that others have preceeded us, and the signs of their presence are all-too evident. Glossy brochures tempt us with houses in idyllic neighbourhoods or in secluded hideaways, but many of our problems and messes seem to follow us wherever we live, and as well we have to drive further through more congested, unhealthy and enraging traffic to get from our hideaway to our work, to stores or to visit our friends.

Meanwhile, the world is slowly disappearing before our eyes. Some of us notice, some do not. Birds no longer sing. Frogs fall silent. A shopping mall stands where fields used to be. Farmland becomes salt pans, silent and dead. Coral reefs sicken. Rain forest gives way to monocultures or weeds. Wild chimpanzees, our nearest living relatives, may be gone within ten years, or perhaps five, victims of logging, indiscriminate hunting and political anarchy in the Congo forest.

Two thirds of adult Americans agree we will destroy our environment if we don't change the way we live. Two thirds agree that humans are part of nature, not rulers of nature, and *three quarters* agree we have a moral duty to protect and preserve all God's creatures. Two thirds of Americans are concerned their children will inherit a degraded world, and *four fifths* agree we should change the way we live now so future generations can enjoy a good quality of life.

The pervasiveness of these attitudes may be surprising, but they have been gleaned from in-depth polling, focus groups and interviews and reported by Paul Ray and Sherry Ruth Anderson in their book *The Cultural Creatives*[1]. Comparable results have been found in Europe, and would probably be found in all wealthy

nations. In Australia, four out of five adults agree that Australian society is too materialistic, and one out of four has in the past decade voluntarily chosen lower income in order to improve the overall quality of their lives[2].

There have been major shifts in many peoples' values during the late twentieth century, and the media, which focus on the sensational, the transient and the superficial, have not been reporting them. Because the shifts are not reported, many people feel isolated and different, and so they have been reluctant to confide their change of heart. Their reluctance has made the shifts even less visible.

Fully *nine tenths* of Americans think economic growth and protecting the environment should be compatible. Yet politicians, big business and most economists claim that slowing environmental destruction would be hideously expensive, and many of them deny there is any environmental crisis at all. In the face of the seemingly-overwhelming power of governments, corporations and the media, most people feel helpless to stop the decline in quality of life and the drift into crisis they perceive. Even the most concerned and aware people, those whom Ray and Anderson call *cultural creatives*, show little sign of knowing how to change our techno-industrial economic system so it delivers what people really want.

However there is good news. There are people who are developing sensible national accounts that monitor our *quality of life*, rather than measuring the rate at which we pump resources through our wasteful system. There are others who have been inventing stable and healthy monetary systems. Our unstable (and parasitic) financial markets can be stabilised and brought back into the service of commerce and industry.

A few inspired people are demonstrating how we can use resources very much more efficiently, so we can live better even as we reduce our devastating effects on Earth's living systems. For example, a major U.S. carpet manufacturer now makes its carpets out of completely recyclable material invented to its own specifications. As of 2002 German car manufacturers are required to take back most parts of their cars after they are worn out, and to take responsibility to recycle or safely dispose of the materials in the parts. Agriculture is being reinvented as stable, healthy and productive polycultures instead of the vulnerable, polluting and machine-intensive monocultures of industrial agriculture.

As is suspected by many people, the environment *can* be protected as our economic development continues. However *economic development* would mean something different and better than it did in the twentieth century: it would mean improving *quality*, for rich and poor, rather than just ever-greater *quantity*, inequitably distributed.

The prospect offered by these promising new developments is of a less erratic economy, a less wasteful and destructive industrial system and a less stressful life, if we can implement them widely. Yet surely we can aspire to more. Surely we don't have to settle for ruining our lives and the Earth more slowly.

Indeed the full potential of the new developments is likely still to be subverted, unless we also understand the larger functioning of our total economic system. Its internal connections and feedbacks are just as important to its overall behaviour as are the actions of myriad individuals. The old theory of free markets, it turns out, is useless as a guide at this level. We therefore need to build a new understanding of how modern industrial economies work. This is the major theme of this book.

The new view presented here grows out the phenomenon of *self-organisation*, which came to be well understood only in the latter half of the twentieth century. Self organising systems exhibit a range of behaviours from simple and repetitive to

chaotic. Short of chaos there is a regime of behaviour called *complexity* that is neither simply ordered nor chaotic, but rather a continually shifting interplay between the two. This book develops the idea that economies, human societies and living systems are all examples of complex self-organising systems. This insight implies there are many ways in which viable economic systems might be organised. It also implies there is no reason, in principle, why economic systems can't be compatible with the living environment.

This new understanding of how an economic system works combines with the new attitudes, methods and technologies already mentioned to open a powerful new prospect: stable economies, healthier societies and new kinds of technologies and industrial systems that support human values and that promote a flourishing biological world.

During the 1970s, James Lovelock developed the scientific theory that Earth's living organisms and physical environment long ago became a strongly coupled system[3]. He named the system for the Greek goddess of the Earth, *Gaia*. Through the feedbacks within and between the parts of the system, life has stongly modified the physical environment even as the physical environment has constrained the kinds of life that proliferate. Life and the physical environment change together, they *co-evolve*. A startling feature of Lovelock's theory is his idea that the system has been *self-stabilising*, but there is good evidence that Earth's physical environment has indeed been remarkably stable for very long periods, despite a steady increase in the sun's brightness and an overall increase in the oxygen content of the atmosphere. Humanity's worst prospect is that our folly could disrupt Gaia's stabilising mechanisms, the surface environment could go into runaway instability, and the earth could become inhospitable and sterile, like our neighbours Mars and Venus.

The most abundant animal group on Earth is not human beings, it is the ants, which probably exceed other groups both in numbers of individuals and in total body weight[4]. There are few environments where ants will not be found in large numbers. Yet rapacious hordes of ants are not destroying the world's forests, degrading the soil, poisoning the environment from pole to pole, fouling their living places and killing every species that gets in their way. Ants' presence is to us and to most species only a marginal intrusion and occasional annoyance. They certainly have a large effect on the earth's biosphere, which would be different in many ways without them, yet other life forms thrive around them and with them. This is possible because ants live according to the imperatives of the biosphere.

This book may be seen as utopian by those reluctant to admit the possibility of a better world. However I don't imagine all human conflict and suffering can be eliminated, by these or any other reforms. I merely propose that we can do better than we have done for the past century or two. We could do a lot better than we did in the twentieth century and still be well short of Utopia.

Because the book is very critical of the current regime, it may at first seem to be socialist, but it is not, because markets are at the core of the vision that emerges from it. Neither does this book offer a variation on or apology for traditional capitalism, because it advocates explicitly managing markets and mechanisms to encourage more distributed ownership. The vision that emerges from this book transcends the old ideological divides.

Out of this enquiry emerges a clear set of roles for governments. It leaves open the possibility of some public ownership (by which I mean collective ownership through the government). In fact the enquiry suggests roles for various forms of ownership, some public, some individual, and some in various forms of collective ownership, including ownership by "employees", customers, suppliers, and

members of the community served by an enterprise. All such forms exist already. On the other hand I will argue that one particular form of collective ownership, the corporation, is in need of major reform.

If all of this sounds like the mixed economies of social democracies, those would indeed be the nearest historical relatives. However the vision of the market side of the economy is so different here from past experience that the whole can be recognised as more than just a mixture of not-very-compatible capitalism and socialism. The so-called *Third Way*[5] advocated by the Blair Government in Britain is the most recent and perhaps the least comfortable of such couplings, and it amounts in my view simply to Thatcherism with some token social-welfare bandaids. I think we can do better than harnessing a brumby with a plough horse and then fighting to get them to move in any coherent way at all.

This work is written for a general audience, though I hope academics and professionals will also read it. Thus I do not observe all of the conventions of academic prose, though important sources are documented. When I talk about a "reconception", I don't mean to imply any particular claim to academic priority, but rather that the general approach is relatively new to public discourse, and the particular synthesis offered here has no close counterpart that I am aware of. I continue to discover people and groups who are working very actively on various topics covered here, and undoubtedly there are many more within the vast realm of ideas and activities covered by this book. Though I'd love to have cited all those whose work might deserve to be mentioned, my goal has been to portray the big picture I perceive, rather than to pursue more detailed familiarity with existing work. I hope this book will help to bring all such deserving efforts to greater prominence and influence.

Finally, let's look at this from the other direction. This enquiry has something to offer almost everyone. To the business person offering a product or service of genuine value, it offers a much more stable economic climate and potentially, as we learn smarter ways, a less intrusive, more consistent and better-directed set of rules to play by. To the socialist concerned for the welfare of the common people, it offers an alternative and more effective means to the same end. To those who believe in individual initiative and self reliance, it offers a fair deal: plenty of freedom coupled with well-defined responsibilities. To those concerned for the health of our social fabric and for family values, it offers to replace the contest between social welfare and the economy with a synergy. To those who want to live according to their own beliefs, it offers reduced economic pressures to conform and more options for viable lifestyles, so long as others' options are respected. To those concerned for the living environment, it offers the radical prospect of a synergy between our economies and the preservation and nurturing of the environment.

This enquiry has nothing to offer those possessed by a need to control their fellow citizens in a vain quest to assuage their own insecurities. In other words it has nothing to offer the power-hungry and the greedy. Of course few of us will readily concede there is anything wrong with our chosen lifestyle, so this will be one arena of continuing human strife, particularly while we are recovering from the collective obsessions that have gripped us for the past century or two. I believe the remedies for these unhealthy conditions and attitudes lie in persuasion, maturity, refusing to play their game, possibly in legal restraint, but not in violent conflict.