

# Journal of Futures Studies

Volume 3 Number 2

May 1999

- 
- Articles**
- 1 Social Dilemmas in the Discourse of Sustainability  
*Alan Fricker*
- 17 Reaffirming the Limits: A Critique of Beckerman's "Small is Stupid" and Simon's "The State of Humanity"  
*Ted Trainer*
- 35 Futures of Nigerian Women  
*Evelyn L. Wilson & Diane Keithly*
- 43 Valuing Young People's Voices on the Future as if They Really Mattered  
*Frank Hutchinson*
- 53 East Asian Commonwealth in 2025: A Positive Scenario for East Asia Seen from Europe  
*Marc Luyckx*
- Symposium**
- 73 A Symposium on Beyond Capitalism  
The Depression as the Transformation of the Capitalist System  
*Sohail Inayatullah*
- 81 A Commentary on Beyond Capitalism  
*Brenda Hall-Taylor*
- 83 A Commentary on Beyond Capitalism  
*Alan Fricker*
- 87 A Commentary on Beyond Capitalism  
*John Robinson*
- 91 A Commentary on Beyond Capitalism  
*Charles Paprocki*



Tamkang University  
Taiwan



WORLD FUTURES STUDIES  
FEDERATION



# Social Dilemmas in the Discourse of Sustainability

---

**Alan Fricker\***

*Sustainable Futures Trust, New Zealand*

*The law doth lock up both man and woman who steals  
the goose from the common, but lets the greater felon loose  
who steals the common from the goose.*

*Anon 16th century*

*The Western world view has become predominantly rationalist, self-directed and competitive. Against this, cooperation is essential if we are to have sustainable futures in a finite world that is already overcrowded, where resources are diminishing, and the natural environment is deteriorating. That rational, self-interested individuals will not act to achieve their common or group interests is the basic paradox of cooperation. Humanity however has never been and is still not limited by the rational. The research on social dilemmas, ranging from the prisoner's dilemma to resource or commons dilemmas, is summarised and interpreted in terms of real-life dilemmas, particularly the ultimate commons dilemmas. The resolution of these dilemmas is more likely at the local level where communities and groups not only accept the responsibility to achieve resolution but also have the power and resources. Technological developments arising from the Western world view are facilitating globalisation which drains not only the resources but also control from the regions. The re-emergence of localisation strengthens local community, will provide a buffer against the potentially catastrophic effects of globalisation and is more sustainable.*

**Keywords:**sustainability, social dilemmas, localization and globalization

---

\* Direct correspondence to, **Alan Fricker** Sustainable Futures Trust, 30 Akatea Rd, Petone. tel: 04 589 1575, fax: 04 589 0447; email: frickera@actrix.gen.nz

## Introduction

Despite Garrett Hardin's (1968) challenge of almost 30 years ago in the tragedy of the commons, humanity still seems hell-bent on self-destruction. There is a surreal quality about our inertia - an element of Nero fiddling while Rome burns. We are all watching the spectacle instead of realising we could well be in the next act. Joanna Macy, at the height of the super-power nuclear madness in the early 1980s, felt we were .. *caught between a sense of impending apocalypse and an inability to acknowledge it* (Macy 1991). The stirrings of unease appear to be increasing as the drama unfolds, but the inertia remains. More recently Ken Wilber (1996) has suggested that .. *ecological wisdom does not consist in how to live in accord with nature, it consists in how to get subjects to agree on how to live in accord with nature*. The resolution of humanity's ultimate dilemma, the global commons dilemma, is a field of research that is an extension of social dilemmas. Our ability to resolve the global commons dilemma therefore is dependent on our ability to resolve local social dilemmas. Curiously however the research suggests we may be more ready, if not more successful, at resolving ultimate (commons) dilemmas than social dilemmas, probably because the stakes are higher - the very survival of our species. Paradoxically though, the very forces that enable us to recognise the need for resolution simultaneously exacerbates the dilemmas. These forces, notably technological development and globalisation, suggest gross incongruity between our perceptions and our systems of organisation.

Interwoven with these forces of creation and solution are our personal attitudes towards social dilemmas. Our attitudes, particularly in regard to matters of equity and justice, may well be noble but they are not always reflected in our behaviours. Appeals to our higher natures may well fall on deaf ears unless we are prepared to understand what makes us behave the way we do, acknowledge those behaviours, and consciously strive to exhibit socially responsible behaviour. Although this is the realm of social psychology, it is not exclusively the preserve of social psychologists. This realm is often counter-intuitive and there is by no means consensus on what constitutes socially responsible behaviour. We have no option but to engage with what makes us behave the way we do, and explore the ways we perhaps should.

We have been a remarkably successful evolutionary species - perhaps too successful. *Human inventiveness has created problems because human judgement and humanity's ability to deal with the consequences of its creation lags behind its ability to create* (Ornstein and Ehrlich 1989). The main scientific discoveries of this century were atomic energy and somewhat later DNA. Most of us probably wish the atomic bomb had not been developed and an increasing propor-

tion are having second thoughts about nuclear energy generation. I wonder what our thoughts will be about genetic engineering in the years to come (Ho et al 1998). The benefits of our inventiveness are undeniable, but have we the wisdom to live with their paradox (Fricker 1997). All future evolution has to be cultural rather than biological. Even that may be too slow if we are to do more than just survive, for survival is not sustainability. Sustainability is about meaning and purpose in life (Fricker and Sculthorp 1997).

### *Social Dilemmas*

Olson (1965) and Hardin (1968) expanded on the underlying challenge within the prisoner's dilemma 'game' of the late 1950s to provide the foundation for research into social dilemmas. The prisoner's dilemma is based on two prisoners who separately and individually are offered a chance to rat on the other and thereby receive a lighter sentence. Each prisoner gains more by ratting (defecting) on the other, but if both defect they both lose more than had they not ratted on (cooperated with) each other. The dilemma illustrates the basic paradox of cooperation: *rational, self-interested individuals will not act to achieve their common or group interests* (Olson 1965). Social dilemmas apply to groups that share a common output in which each individual can decide whether to cooperate or not, eg. union membership, the community picnic. Again the rational and best choice for the individual is to defect (to free-ride) sharing in the benefits at least cost. Public goods dilemmas, and resource or commons dilemmas are special cases of social dilemmas. The former relates to how individuals contribute to a public good, eg. a water supply, public radio or television. The latter relates to how individuals harvest a common resource. *Freedom in a commons dilemma brings ruin to us all* (Hardin 1968). There is a wide, but perhaps not widely known, literature on social dilemmas, eg. the reviews by Dawes (1980) and Messick and Brewer (1983), and the books by Liebrand et al (1992), Komorita and Parks (1994) and Schroeder (1995).

Individuals in such dilemmas are confronted with a choice between cooperation (contribution in the case of public good dilemmas) or defection. The defecting choice is the individually optimal choice because it provides the highest payoff to the individual regardless of the choices of the other members in the group. In small groups anonymity may be impossible, thus putting pressure on would-be free-riders to cooperate, unlike in large groups. Either way the rational choice is still the defecting choice in that one's own self-interest is best served. The challenge to the individual in such dilemmas is to see benefit for the group as a whole, including the individual even if not until the long

term, by being 'irrational'. Surprisingly we often make the cooperative, 'irrational' choice yet are willing to accept a world view where rationality, objectivity, individualism, self-interest and 'trickle down' are paramount.

In many social dilemmas, particularly those pertaining to the global commons, the cooperative choice may be the only sensible long term choice - a single defector can destroy the commons. Cooperation should then become the rational collective and the rational individual choice. This facet is explored by Hofstadter (1985a). Indeed he believes that in all social dilemmas cooperation is the only choice for super-rational thinkers, who to his surprise, do not always choose to cooperate in simulated dilemmas. Thus if super-rational people are not always rational is it any wonder these dilemmas seem insoluble and we could face extinction? How many of us however would see conventional social dilemmas, such as matters of equity and justice, as forerunners of local commons dilemmas or components of global commons dilemmas?

### *Beyond the Rational*

For many, among them Hardin, the cooperative choice (be it 'irrational' or rational) may not be in the best interests of humanity. Such a course in the population dilemma could lead to cooperators breeding themselves out of existence. Some curious but not altogether convincing mathematical arguments, initiated by Haldane and collated by Dawkins (1989), suggest that hawks need doves, 'baddies' need 'goodies', and that even altruism has selfish motivations. Could it really be that an appeal to conscience, for self-restraint within a commons dilemma, could lead to the elimination of conscience? There is an implication here that conscientious people are more cooperative and intelligent than others. It may be that their relatively advantageous circumstances, rather than any inherent qualities, engender these propensities. If they are advantaged because they or their forebears were defectors, can we expect them to be altruistic? That leaves intelligence - it may have improved our condition but it has not as yet improved our fate. *Man is too clever by far to get by without wisdom* (Fritz Schumacher).

To Jonathan Ralston Saul (1993), reason is no more than a very useful structure but a potentially dangerous one. To the biologist William Jordan (1991) reason can be even more insidious, because of the power of its success. He sees reason, rather than politics or nationality, as the threat to society. *Homo sapiens* is not a rational animal - it is a rationalising one. The pursuit of scientific thought has diminished empathy, compassion, reverence and love, and lies at the root of Nazi, institutional, medical, and political atrocities.

Fortunately we seem able to bring faculties other than our rationality to

these dilemmas, faculties which perhaps are innate from a time when we intuitively put the common good above self-interest. *All specifically human faculties, the power of speech, cultural tradition, moral responsibility, could have evolved only in a being which, before the very dawn of conceptual thinking, lived in well-organised communities* (Lorenz 1964). Lorenz perspectives are not acceptable to deterministic sociobiologists, such as Richard Dawkins (1989), who ascribe our behaviour to our genes, which forecloses our ability to consciously evolve whilst simultaneously excusing our anti-social behaviour. There are internal contradictions in this reductionist thinking as articulated by Steven Rose (1998). For instance, is Dawkins himself machine or rebel when he says .. *We are built as gene machines .. but we have the power to turn against our creators. We, alone on earth, can rebel against the tyranny of the selfish replicators*. Rose argues a case of nature and nurture. Whereas the capacity to put the common good above self-interest may not be in our genes, we have had and hopefully still have the capacity to do so. The capacity isn't necessarily conscious rationality. How do we explain, for instance, our ability to suddenly and inexplicably get out of bed on cold dark mornings as delightfully described by the psychologist William James a century ago (Hofstadter 1985b).

Rationality itself however is somewhat a moveable feast. As our understanding of ourselves and our behaviours improves and with it those behaviours, then what was a seemingly 'irrational' act can become a rational one. That is, there is an evolution in the consciousness of rationality that mirrors evolution in human consciousness.

### *The Implications of the Literature on Social Dilemmas*

'Laboratory' studies cannot accurately reflect the real life complexity of social dilemmas. Nevertheless they provide pointers for us in the ways that we should perhaps behave and direct to which we should organise ourselves. What is appropriate behaviour is of course a value-laden term, that derives from our upbringing, our experiences, our conscious decisions, but can only be agreed upon collectively. The findings of a selection of the literature are presented in a manner appropriate to real life dilemmas. The selection draws from Cass and Edney (1978), Messick and Brewer (1983), Messick and McClelland (1983), Rutte and Wilke (1987), Caporael et al (1989), Mannix (1991), Parks (1994), Dijk and Wilke (1995).

The most salient pointers are:

- Appropriate action is more likely in small groups where people know or are encouraged to get to know each other.
- Appropriate action is more likely when the issues are discussed fully and openly

without suspicion that some information is being withheld or distorted.

- Conforming (not necessarily appropriate) action is more likely when group members are aware that their choice could become known to the group and that there could be some retaliation (a potential for negative consequence).
- Individual decisions are influenced by the perception of what will be the group decision, which may not be the appropriate decision.
- Appropriate action is more likely when the individual and the group benefits are optimised.
- Positive feedback on the group goal engenders further cooperation and vice versa.
- One's own perception of trust and social values tends to be projected onto the group as a whole in making the individual choice.
- There is a tendency to be both more critical and more protective of one own group (a potential for negative consequence).
- Communally controlled resources are depleted faster than personally owned resources.
- Openness and transparency in the management of resources (the commons) is more important than whether they are in private or public ownership.
- The financial technique of discounting the future depletes the commons at a faster rate.

Many of these observations may seem self-evident in retrospect. They beg the question as to whether the original research was necessary. Perhaps 'Yes' to the objective rational mind that needs the evidence. Perhaps 'No' to the intuitive mind from where perhaps the decisions in social dilemmas comes.

The dynamics within social dilemmas, particularly of large and diverse groups, is complex. Extensive computer modelling is carried out by Bernado Huberman and colleagues at the Xerox Palo Alto Research Center. Decisions to cooperate depend on a host of variables, particularly the length of the individual's time horizon, ie. the time the effects of the dilemma will be a major issue to the individual (the young rather than the old). The choices are made based on beliefs and expectations. The dilemma is compared to the stability function in statistical thermodynamics and the tendency to occupy and oscillate around an equilibrium point. Whereas it is easier to obtain equilibrium within a small group, more stable equilibrium points with higher thresholds can be obtained with larger groups. As time horizons lengthen in homogenous groups more individuals cooperate until it is widespread and rapid (similarities to the thousandth monkey concept). Small homogenous groups (eg. students) with long time horizons (most of their life ahead of them) can trigger cooperation within large heterogenous groups even if higher in the hierarchy (lecturers, employers, community leaders, etc). Cooperation can



develop spontaneously even when the groups have been non-cooperative for long periods. Where information is unavailable, or withheld, the group dynamics can acquire a wide range of behaviour, ranging from opportunistic oscillations to bursty chaos, thus excluding the possibility of sustainable cooperation. (Glance and Huberman 1994).

Implicit in all the above is the assumption that such groups not only have the responsibility, but also the power and the resources to implement their decisions. Local communities in modern systems of democratic organisation have ceded power and the control of resources to local and national governments, and more recently to international structures (institutions, corporations) and systems (financial markets). Much of the responsibility however has remained with, or is being returned to, local communities (hence voluntary organisations and initiatives), but often without the power and the resources to resolve the dilemmas.

### *Balancing the Global and the Local*

The demise of communism has also seen a retrenchment of democratic socialism and a strengthening of the global free market economy (the modern equivalent of capitalism). A recognised failure of the market economy is the provision of public goods. What is not yet recognised is the inability of the market economy to lead to sustainability, ie. to solve commons dilemmas. Survival perhaps, but not sustainability. The market economy is founded on growth - but in a finite and rapidly depleting world. Furthermore it has no memory, conscience or foresight. Some research however suggests the management (not necessarily the ownership) of the commons may best be effected through privatisation provided it is open and transparent. The enclosures of the commons in the Middle Ages may well have been an ecologically wise move even if socially ill-conceived.

According to Gunning (1997) .. *There is a widespread belief that a democratic government can succeed in correcting for what economists have labelled market failures, including efficiently supplying public goods. Careful reasoning should convince the reader that the prospect for what we now call 'government failure' is high enough to raise serious doubts about a democratic government's ability to correct for many practical cases of market failure at the national level in a large democracy. The prospect is brighter at the local level.* There can be little doubt that good social democratic government has corrected for many market omissions (eg. health, education, water, and sewerage services), if no failures. Many others see the whole thrust of regulation (by democratic governments) in modern times as the redistribution of resources more equitably, and the generation of an inclusive society.

Surely the role of government is not only to attempt, at least, to correct for market failures, but also to curb the excesses of the market.

Now that the free market has gone global so has the power of national governments - but to what or whom? Since the value of money is no longer pegged to 480 grains of the middle ear of corn nor to one troy ounce of gold, its value can only be assessed against other national currencies. There is however little real money as such because most of it is imaginary money created on the strength of some real money elsewhere (leverage) and the prospect of growth (interest or usury). Since the removal of the last money anchor (gold in 1973) the proportion of speculative global transactions (ie. purely monetary transactions) in world trade has increased from perhaps 20% to over 95% today. Real goods and services don't seem to matter any more. The imaginary money must eventually extract some real money from those that hold it to repay those who loaned you the imaginary money. To win someone has to lose. In such unregulated and burgeoning circumstances real money and wealth flows from those with least to those with most. Thus the poor get poorer and more numerous and the rich get richer and fewer, and the whole system becomes progressively unjust and unstable (Lietaer 1997a,b). This is hardly a responsible or sustainable foundation to society.

The global economy is removing power from national governments, particularly small ones. They are beholden to the money speculators, the transnationals, the World Bank, the International Monetary Fund, and the World Trade Organisation. All these organisations are wedded to the concept of growth through the global free market. Even if governments wanted to change they could not. Somehow this globalisation is expected to lead to social responsibility and sustainability, whilst many believe it is tottering towards collapse. By weakening the power of governments the global free market economy is undermining its own rationale. The free market can only be viable if it enjoys an element of relative monopoly, a condition that only a government can provide. Modern capitalism will have to evolve if it is to have a role within a viable sustainable future (Wallerstein 1984).

Last century the majority (perhaps 90%) of our essential needs (energy, food, clothing, housing) of the developed world were obtained locally. Today the proportion may be less than 10%. We would be in a stronger position to withstand the possibility (some say probability) of global economic collapse if we were to reinstitute a greater degree of localisation. Not only would our essential material needs be more protected but we would be strengthening our social bonds. Globalisation has not only drained power and capital from the local community, it has destabilised it. Social capital is fixed in geographic place whereas financial capital is mobile. Local businesses have been absorbed

into national companies which in turn have been absorbed into international corporates. The demise of social capital in North America is attributed by Heying (1997) to this phenomenon rather than to a more abstract phenomena proposed by Putnam (1995a,b). Deregulation and the free market have led to rural depopulation, urban growth and then decay, and denied local people the use of their capital locally and as they think fit. Once out of investors' control the only interest they can then have is the rate of return - the higher the better, and who cares if it is in a sweat shop or logging indigenous forests. If it is used in community the investors have other interests to satisfy - jobs for themselves, their children, their neighbours, their basic needs, local facilities and environment (Douthwaite 1992 and 1996). Indeed it is within these books by Douthwaite where we see the resolution of social dilemmas in action.

### *The Resolution of Social Dilemmas*

The research suggests that the resolution of real-life social and commons dilemmas is facilitated when:

- People have the power to effect solutions. (In its absence people can be assumed to have considerably less inclination to participate in finding, let alone in effecting, solutions.)
- People can come to know the members of the affected community (group) and to fully tease out the ramifications of the dilemmas before they will cooperate. (Indeed any attempt to withhold or distort information is very counter-productive.)
- People have the opportunity to mutually explore in depth whether their personal decisions or actions will have payoffs both for themselves (or their progeny) and the community and the greater collective good (beyond their own community) in the long term if not in the short term.
- The communities can effectively implement solutions to issues. (This implies resolution and implementation are more likely when resources are available and more likely within local, rather than regional, national, or global communities.)

All of the above suggest a need to strengthen local communities. Douthwaite (1992 and 1996) argues strongly for re-creating local currencies, local banking, and local enterprises to complement, as well as to counteract some of the undesirable, national and global trends. Globalisation will continue, desirably so in non-material terms, such as knowledge and communication. Material initiatives at localisation however swim against a very strong tide which adds to the dilemmas such initiatives experience. There are excellent models and case histories both for localisation and for the resolution of social (inc. public

goods and commons) dilemmas. This is truly creative, as distinct from reactive, social responsibility. They are drawn from Douthwaite (1996).

*Philipstown Trust, Dundalk (p296)*

This is the most ambitious community-supported agriculture (CAS) project in Britain and Ireland producing vegetables from a 13 acre garden. The trustees are the members who have contracted to buy specified quantities at stated prices. Half the subscription is paid in advance, the remainder monthly, together with an interest free loan for three years to cover the start up costs. The two proponents of the scheme (both highly qualified and motivated) were the workers who had no proprietary interest in it. Production went well in the first year even though there was the forecasted loss. There was an unprecedented and prolonged drought in the second year. Membership began to drop off. An extraordinary meeting was held to consider the future. The most fiercesome critics, however, swung right around when the motion to liquidate was put. The membership converted the loans into grants, wrote off the amounts for missed deliveries, and contributed to the shortfall in subscription income. Clearly there was a suite of factors that went beyond the balance sheet - a belief in the project; a confidence and a trust in each other; a desire for fresh, locally-grown vegetables.

*Indian Line Farm, Massachusetts (p284)*

The State dairy industry went into massive decline from 1980. Many left the land, their farms and the districts. Robyn van En saw an opportunity to farm the land in a better and more cooperative way. With two others she established a system of CAS using organic farming principles. Members were required to pay in advance for a given quantity and frequency of vegetables. At the beginning of the third season membership had grown to 135 full season shares. At this stage the option for the group to buy the land from Robyn became due. All were keen this should happen but a disagreement on valuation led to the group setting up independently in the same area. Robyn continued her promotion of CAS throughout the country. Now there are 100,000 people in 600 operations.

*The Other Way, Hamburg (p342)*

Dorit Seeman opened a wholefood business selling organic food in 1968. She persisted for five years knowing that in order to be competitive and have a sufficient turnover her mark-up was likely to be too little for the

business to be viable in the long term. In that time she had established the credibility of the scheme and of herself. She relaunched the business inviting customers to help cover her overheads by paying a monthly subscription in return for buying goods at cost. The business survived because she had changed her relationship with her customers to one of a partnership and where she was more subservient to their interests. The tension inherent in the shopkeeper-customer relationship had gone. The potentially malign influence of competition had been replaced by cooperation.

*Rural Resettlement Ireland Ltd (p355)*

In 1845, just before the Great Famine, 13,000 people lived on Loop Head, a bleak headland in County Clare. Today there are only 1300. For 20 years, Jim Connolly, a sculptor, had watched the gradual depopulation, the boarding up of houses, the abandonment of the elderly and decided to act. He reckoned that if 50 families resettled, even if they had no craft or means to provide an income, the unemployment benefit would pump half a million pounds into the local economy. At least the children would be brought up in a cleaner, healthier and safer environment than the cities. Through radio and other publicity 6 families with 21 children had moved in by the end of the first year (1990). By the end of 1995, 161 families had been resettled, some elsewhere in Clare, and there were 3000 people on the waiting list. RRI has the support of local and national government. Many families are buying their houses, schools and shops are opening, and work through mutual help and local currencies is being generated.

*Origin of Danish Wind Energy Generation (p203)*

A Danish family wanted to erect their own wind turbine to generate their own energy. To share the benefits and the risks they invited three immediate neighbours to join them. They came up with a business plan and a design. They wanted to use the local grid as a battery, selling all the generated energy to the supply authority and buying from them in the usual manner. The authority didn't want to know. After much patient and persistent talking with local and national politicians and the authority, agreements were eventually drawn up that enabled not only their syndicate but other syndicates to do the same. Thus began the wind energy industry in Denmark - a community initiative. Now there are 50,000 syndicates. Each syndicate must be immediate neighbours and each neighbour must be an investor. They sell at around 85% of the price they buy at. Within five years they effectively get their energy free because most syndicates generate more than they consume.

*Stonesfield Community Trust, England (p303)*

This is but one example of several initiatives to place the ownership of land neither with individuals nor with governments but in trust with democratic community organisations. Tony Crofts was concerned about the way outsiders were driving up rents and property prices at Stonesfield. He wanted to ensure there would always be affordable housing for young couples from the area, so that they would be encouraged to remain, raise their families there and maintain the community. With two friends he established the Trust which has built 11 dwellings with eco- and co-housing features on two sites. There is no government money in the project, although there was an interest free council loan for one year. The houses are let to local people at less than market rates but tenants are not able to purchase them. When the loans are paid off, the rents can be reduced to council-house levels whilst still having a good income to boost social services the council has cut back.

Most of these initiatives may be seen as ecologically sustainable commercial opportunities. They are far more, for they have evolved against the tide where the proponents have been as much motivated by their perception of social responsibility. This is proactive and creative social responsibility, as distinct from reactive social responsibility which tends to address the symptoms of inequity and injustice rather than the causes. Both are necessary. The exercise of creative responsibility is as a consequence of a recognition or a vision by an individual or a group. A recognition that the system is wrong and needs to be changed, where a more appropriate system evolves out of the actions rather than from a preconceived concept. Or a vision of a better, and a more sustainable, way to do things (eg. organic farming and/or CAS) from which flows social benefit. The ancient parallel would be the Chinese parable of which goes "*give a man a fish and you feed him for a day; show him how to fish and you feed him for a lifetime.*"

***Commons Dilemmas and the Discourse for Sustainability***

The ultimate social dilemmas are resources or commons dilemmas but at the global scale. These dilemmas are at least about the survival of the species and if engaged upon early enough are about sustainability. Thus the discourse of sustainability includes the resolution of social dilemmas. A discourse that explores how we agree to live in accord with nature, from which we must individually and collectively seek meaning and purpose in life.

Sustainability is more than biophysical sustainability; that is just survival. What sustains us is more intangible. The word *sustain* has an Indo-Aryan

etymological origin and means to hold together with tension - not coercion, but tension. Its meaning is still as pertinent today as it was 3000 years ago. Sustainability is about finding meaning and purpose in life and is found through our relationships with ourselves, our families, our neighbours, other species, the environment, and the earth. There is in fact a crisis of perception around this concept of sustainability (Fricker and Sculthorp 1997).

The most common definition of sustainability comes from the Brundtland report. It is based on the needs of present and future generations. Others are based on ecological integrity and biodiversity. All defy objective definition and operational interpretation. More useful are the perceptions of sustainability, for they suggest the need for discourse. A discourse that explores our inner subjective selves and draws on our experiences as well as our knowledge, and our aspirations and visions for the future and on our creativity. Where the journey may even be the destination. Instead of asking how we measure sustainability we should be asking ourselves how we measure up to sustainability (Fricker 1998).

This is a discourse and a journey we should all take part in. We know the problems we are facing in broad terms. We can pursue analysis to paralysis. Indeed much R&D is a surrogate for social action (Sarewitz 1996), for the solutions are not technical but social and political. The wisdom of how to agree on how to live with nature will not be found in objective rational debate but in deep intersubjective discourse that taps the very essence of our beings, about meaning and purpose in life. Governments and communities should push for this discourse through citizens' juries, consensus conferencing (Joss and Durant 1995), search conferences (Weisbord and Janoff 1995), and public conversations (Becker et al 1994). Somehow we need to rise above personal interest and consider the common good, and seek consensus in social action. But the psychological hurdles we have to overcome in solving these social and commons dilemmas have to be faced, accepted and transcended.

Indeed the whole of history, and therefore the future, is a process of evolution or transcendence (Wilber 1996). That evolution must now be cultural rather than biological in the Darwinian sense. Evolution through the development of human consciousness, not only on the personal plane but on the social and cultural planes too. However, we need to do so collectively. The process of transcendence is an inclusive process. Problems that appear insoluble at a given level of consciousness become soluble at higher levels of consciousness, where no doubt a different suite of problems may emerge to be transcended by a further evolution of consciousness. According to Wilber we are stuck in flatland, the exterior physical world of location, the world of objective nature. Within this world the ego-camp (those who see man as apart

from and above nature because of our moral capacity) do battle with the eco-camp (those who see man as a part of nature). Both, according to Wilber are mistaken. They overlook the interior subjective world without location - the world of subjective mind. We will evolve consciously if we are able to transcend and include objective nature and subjective mind to find Spirit.

The necessary public and community discourses will not be philosophical explorations of this nature, but discourses on real issues. We need to seek mutual understanding of the dilemmas grounded in sincerity from which solutions will emerge. Whether philosophical or pragmatic the processes and the paths however will be similar, these discourses can only be undertaken by all or most of us at the local and community level. They can't be conducted entirely by political representatives, whether at the local, regional, national, or global levels. The developed nations, particularly the individuals with power, privilege and wealth, need to set the example by using their advantages to facilitate a wider engagement in this discourse to serve the global commons.

### References

- Becker, C et al. 1994. "From stuck debate to new conversation on controversial issues: a report from the Public Conversations Project", JFFT, June:1-13.
- Caporael, L R et al. 1989. "Selfishness examined: cooperation in the absence of egoistic incentives". *Behavioral and Brain Sciences*. 12(4):683-699.
- Cass, R C and Edney, J J. 1978. "The commons dilemma: a simulation testing resource visibility and territorial division". *Human Ecology*. 6:371-386.
- Dawes, R M .1980. "Social dilemmas". *Ann. Rev. Psych.* 31:169-193.
- Dawkins, R .1989. *The Selfish Gene*. 2nd edn, Oxford, OUP.
- Dijk, E van and Wilke, H .1995. "Coordination rules in asymmetric social dilemmas: a comparison between public good dilemmas and resource dilemmas", *J Exper. Soc. Psych.* 31:1-27.
- Douthwaite R .1992. *The Growth Illusion*, Green Books, UK.
- Douthwaite, R. 1996. *Short Circuit*, Lilliput, Dublin.
- Fricker, A G.1997. "Technology that liberates", *Futures*, 29(7): 661-666.
- Fricker, A G. 1998. "Measuring up to sustainability", *Futures*, 30(4):367-375.
- Fricker, A G and Sculthorp, B. 1997. Sustainability: a crisis of perception, XV World Conference, World Futures Studies Federation, Brisbane, Sept.
- Glance, N S and Huberman, B A. 1994. "Dynamics of social dilemmas", *Sci. Amer.*, March:58-63.
- Gunnel, P J .1997. *Understanding Democracy: An Introduction to Public Choice*, Nomad Press, Taiwan.
- Hardin G. 1968. "The tragedy of the commons", *Science*, 162:1243-1248, 1244.
- Heying, C H .1997. "Civic elites and corporate delocalisation", *Amer. Behav. Scientist*,



- 40(5):657-668.
- Ho, M-W, Meyer, H and Cummins, J. 1998. "The biotechnology bubble", *The Ecologist*, 28(3):146-153.
- Hofstadter, D R. 1985a. Irrationality is the square root of all evil, Chap 31 in *Metamagical Themas*, Viking, NY, Pp.756-766.
- Hofstadter, D R .1985b. *Metamagical Themas*, Viking, UK, Pp.794.
- Jordan, W. 1991. *Divorce Among the Gulls*, San Francisco, North Point Press, Pp.203-205.
- Joss, S and Durant, J (eds).1995. Public Participation in Science: The Role of Consensus Conferences in Europe, London British Science Museum.
- Komorita, S S and Parks, C D.1994. *Social Dilemmas*, Madison, William C Brown, WI.
- Liebrand, W B, Messick, D M and Wilke, H A M (eds). 1992. *Social Dilemmas: Theoretical Issues and Research Findings*, Oxford Pergamon Press.
- Lietaer, B .1997a. "Beyond greed and scarcity", *YES! A J of Positive Futures*, Spring:34-39.
- Lietaer, B. 1997b. From the real economy to the speculative, International Forum on Globalisation, Summer, 2.
- Lorenz, K. 1964. *On Aggression*, Methuen, London, Pp.246.
- Macy, J .1991. *World as Lover, World as Self*, Parallax Press, Calif., 15.
- Mannix, E A .1991. "Resource dilemmas and discount rates in decision making groups", *J Exper. Soc. Psych.*, 27:379-391.
- Messick, D M and Brewer, M B. 1983. "Solving social dilemmas: a review", *Rev.Pers. and Soc. Psych.*, 4:10-43.
- Messick, D M and McClelland, C L. 1983. "Social traps and temporal traps", *Personality and Soc. Psych. Bull.*, 9:105-110.
- Olson, M .1965. *The Logic of Collective Action*, Harvard Univ Press, Cambridge, 2.
- Ornstein, R and Ehrlich, P. 1989. *New World New Mind*, Doubleday NY, 9.
- Parks, C D.1994. "The predictive ability of social values in resource dilemmas and public goods games", *Person. Soc. Psych. Bull.*, 20(4): 431-438.
- Putnam, R D. 1995a. "Bowling alone: America's declining social capital", *J Democracy*, 6(1):65-78.
- Putnam, R D. 1995b. "Tuning in, tuning out: the strange disappearance of social capital in America", *PS*, 28(4): 664-683.
- Rose, S. 1998. *Lifelines: Biology Beyond Determinism*, OUP, Oxford, Pp.213.
- Rutte, C G and Wilke, A M. 1987. "Scarcity or abundance caused by people or the environment as determinants of behavior in the resource dilemma", *J Exper. Soc. Psych.*, 23:208-216.
- Sarawitz, D.1996. *Frontiers of Illusion: Science, Technology and the Politics of Progress*, Arizona Temple Univ. Press.
- Saul, J R. 1993. *Voltaire Bastards*, Viking, NY
- Schroeder, D A (ed).1995. *Social Dilemmas: Perspectives on Individuals and Groups*, Westport, Praeger, Conn.
- Wallerstein, I. 1984. *The Politics of the World Economy: The States, the Movements, and the Civilisations*. London CUP.

- Weisbord, M R and Janoff, S. 1995. *Future Search: An Action Guide to Finding Common Ground in Organisations and Communities*, Berrett-Koehler Pubs, through World Future Society, Washington.
- Wilber, K. 1996. *A Brief History of Everything*, Boston, Shambhala, Pp.292.