CORPORATIONS AND THE
DISCOURSE OF SUSTAINABILITY

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BSc (Biol), BPoliSt (Hons)

Thesis submitted for the degree
Doctor of Philosophy
For Lauren
I declare that this thesis is my own account of my research and contains as its main content work which has not previously been submitted for a degree at any tertiary education institution.
Corporations and the Discourse of Sustainability

Abstract

The contemporary notion of sustainability is emerging as a political response to ecological and social problems associated with human development. It is a contested concept - eco-modernists interpret it as a call to rethink or adjust industrial production systems while others interpret it as a fundamental challenge to the dominant development paradigm.

Corporations are playing a key role in shaping the discourse. Many argue that since corporations have enormous influence in the global political economy, they must take the lead in the search for sustainability. The World Business Council for Sustainable Development (WBCSD) promotes eco-efficiency - an eco-modernist stance - as the primary business contribution to sustainability. However, the potential of the corporate focus on efficiency to contribute to sustainability is a subject of debate.

In this thesis, I use a heterogeneous methodological approach to explore the interaction between corporations (with a focus on multinational corporations) and the discourse of sustainability in order to identify the potential for positive outcomes. I consider the compatibility of aspects of corporate identity and organisational structure to the ethos of sustainability. This leads to an examination of the meeting between corporations and sustainability as a reflexive process, paying particular attention to the ways in which language and mythology serve to uphold or transform existing power relations. I also explore forms of knowledge relevant to sustainability, comparing those that are typically emphasized in corporate enterprise with traditional, Indigenous and local ways of knowing that are essential to sustainability. The knowledge of classical equestrianism is used as an example in this analysis. Practical ways of including all these essential perspectives in the discourse are considered.

The thesis concludes that certain aspects of corporate identity, structure and function are incompatible with the ideals of sustainability and that these disparities must be borne in mind as corporations attempt to embrace sustainability. I contend that sustainability requires network approaches that integrate strong and weak relations as well as diverse values and forms of knowledge. Sustainability can only be achieved with broad civic
engagement that allows the synergistic combination of all values and knowledges relevant to sustainability. Furthermore, I argue that while corporations’ orientation towards market-based strategies has significant potential to support sustainability, it is limited since the market is fundamentally constituted by a network of weak ties. Therefore the thesis argues that while corporations can provide significant benefits in terms of sustainability, they cannot be expected to lead the sustainability agenda as it requires discursive plurality. The efficacy of the corporate contribution to sustainability will be greatly enhanced if companies are guided by strong democratic processes of deliberation and community engagement.
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**References**
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<td>Corporate environmental reporting</td>
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<td>Commonwealth Scientific and Industrial Research Organization</td>
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<td>Dow Jones’ Sustainability Index</td>
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Introduction

The discourse of sustainability is emerging as a global political response to a litany of interrelated social, environmental and economic problems caused by everyday human activity. Environmental problems such as enhanced global warming, pollution, resource depletion, and biodiversity decline link to social issues such as poverty, inequity, health, conflict and security in complex ways. The extent of harm done by the unsustainable development practices which currently dominate the planet makes it clear that significant change is required to ensure sustainability. Since multinational corporations are major players in the global political economy, their engagement with sustainability is critical.

Sustainability is a contested concept - people debate its definition and argue about the extent to which its meaning should be pinned down. Nonetheless, it is valuable and sociologically significant, with laudable aims. It is worth looking at ways of alleviating obscene social inequity. Moral and ethical responsibilities to future generations should be considered. Practices which inflict large-scale damage on the ecological systems that support us must be revised. Concerted action to deal effectively with such issues at global, regional and local scales is long overdue.

The political rhetoric of sustainability itself can act as a barrier to broad community engagement. Common sense imperatives and debates about ethics can be lifted beyond the reach of people at the grassroots when packaged officially as ‘sustainability’ or ‘sustainable development’. The concept may purport to be global in reach, but it remains frustratingly inaccessible to many members of the so-called global community. In many respects, it remains the province of the elite - currency of the upper echelons of political power. The same laypeople who talk with me enthusiastically about concerns they harbor about the environment, democracy, population, social justice and corporate excess, stare blankly when I mention the term ‘sustainable development’: “What’s that?” they say, “I wouldn’t know anything about that.” Such responses demonstrate that in many ways ‘ordinary’ people are excluded from the dominant discourse of sustainability. Meanwhile, those wielding the power lose the opportunity to benefit from the essential knowledge of the grassroots. Everyone is impoverished.
This point was brought home to me during a trip I made as a PhD student to a Greening of Industry Network Conference, held in San Francisco in 2003. I set off, proudly armed with my academic paper on sustainability and corporations, peppered with words ending in ‘-ology’ and ‘-ism’. On arrival, I took my place amongst all sorts of ‘experts’ tussling with the meaning of sustainability. I diligently attended various sessions carefully prepared by professionals who spend many hours torturing the concept in the hope that it might yield its secrets. I presented a paper on behalf of Firoze Siddiqui, a Bangladeshi colleague of mine at the Institute for Sustainability and Technology Policy (ISTP) at Murdoch University, because he could not afford to attend the conference. I quietly congratulated myself for having the sensitivity to note that this highlighted the elitism of such get-togethers.

Ultimately, though, the most profound lesson I learned while in San Francisco did not come courtesy of well-funded elites. I met my wisest sustainability tutor quite by accident, five blocks up the hill and three blocks left, in a laundromat in a less salubrious part of the city. There I met Fran, an older lady and long term resident of San Francisco. We got talking about the city. She was about to move to another part of the country because she felt that life in San Francisco had gone downhill (no pun intended) in recent years. I asked her why she felt that way. Although she had no idea that I was interested in sustainability, she proceeded to tell me a story in her own eloquent and powerful words about themes dear to the hearts of sustainability ‘experts’, such as community decline, pollution, policies that favoured economic development over everything else, over-consumption, greed, and an overemphasis on self-interest. Her analysis carried more impact than any I heard at the conference. There is nothing like hard-won wisdom to clip the wings of cleverness - I was put, charmingly and unwittingly, in my place. I might have been a budding sustainability expert, but Fran knew more than I did in that situation. Fran unintentionally reminded me that if the dominant discourse of sustainability is too tainted by elitism - if it is not owned by all involved - it stands little chance of stimulating adequate change.

1 ‘The ISTP was established in 1988 to help create a better understanding of the roles and effects of science and technology for the benefit of all sectors of society. The ISTP has grown to become Australia’s leading research institute for sustainability and one of the largest in the world. ISTP research focuses on integrating policy for simultaneously creating a better economy, an improved environment and a more just, participative society’ (ISTP, 2004, n.p.)
It was a lesson I knew but that I had forgotten. My own interest in sustainability began well before I had ever heard of the term. I would often sit for hours, thumping the nearest table vehemently, as I voiced my concerns about the latest social injustice or sign of ongoing environmental decline. The problems seemed to me to be endemic, rather than aberrational, and I found it hugely frustrating that little or no energy seemed to be channeled publicly into exploring this possibility. I felt like an outsider whose views were unlikely to be deemed valid according to the standards of the status quo.

Then, on one of my rare forays to Murdoch University in the late 1990s, I happened to pick up the handbook out of idle curiosity. As I flicked through the pages where the course details were listed, the title ‘Development Studies’ caught my eye. I read further. I discovered the term ‘sustainable development’. It was a revelation. Here were the very themes that plagued me, legitimized in academic form. Until that moment I had no intention of taking up further university studies - afterwards, I could hardly wait to enroll. My story illustrates the problem - despite my passion and concern for the issues enveloped by the discourse of sustainability, I stumbled on the official version completely by accident, and only then because of my university background. Furthermore, the only avenue I was aware of at that time through which I could pursue my interest was an elite academic one. My experiences lead me to believe that the discourse of sustainability must be easily accessible to greater numbers of people from a variety of backgrounds if it is to be sufficiently influential.

It dawned on me later that my discontent with the dominant development paradigm was precipitated by a few key influences. For instance, my family’s outlook has been important. I learned respect for other cultures and ways of knowing from stories about our family history passed down through word of mouth. There has always been a healthy regard for Indigenous knowledge, for example. The Loxtons, on my mother’s side of the family, regarded Indigenous knowledge as inherently valuable, not just out of respect, but also as a matter of their own survival. My great aunt, Ellen Loxton, relayed her grandfather’s opinion that Indigenous people greatly helped his family to establish themselves as settlers in South Australia: “We were English, we didn’t know anything - the Aboriginal people taught us everything we knew”. My immediate family also benefited from the knowledge of Indigenous people with whom my parents worked and studied.
Classical equitation - a traditional art of working with horses - has been one of the most profound influences in my life. Like Indigenous knowledge, it has informed my views about human relations with the more-than-human world, a key aspect of the discourse of sustainability. Where corporations adhere to modernist understandings of the more-than-human world, alternative epistemologies, such as that unearthed in classical equitation, can serve to illuminate the underlying belief system of the modernist worldview in order to reconsider its benefits and flaws. For instance, the modernist suggestion that humanity can think of itself as separate from and above the non-human world seems to be a dangerous delusion from my perspective as horse rider. For a start, domestic horses cannot be easily classified as either ‘natural’ or part of human culture - they are hybrids, crossing the arbitrary boundaries between these categories.

Furthermore, I have worked with half a ton or so of willful horse power often enough to know that people are not safely insulated from the more-than-human world, nor are we capable of controlling, dominating, or even understanding it completely according to our own terms. My life depends on my ability to put this realization into practice. So it is with sustainability. So far with horses, I have managed it fairly well, although, as with sustainability, it is a difficult process and there are no guarantees.

As I began to study the discourse of sustainability, I became increasingly aware of the need to embrace these and other forms of knowledge. I wondered how diverse values and forms of knowledge could be integrated. I wondered where the impetus for change might be found and how people could work together most effectively to reach common goals.

**Why corporations?**

I chose to focus on the meeting between the discourse of sustainability and multinational corporations (MNCs) in particular because of the enormity of their global power and reach. I was curious about the opportunities this power offers for sustainability and the ways in which it poses a threat. The interaction between corporations and sustainability has been regarded as being of critical importance by

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3 I prefer the term ‘more-than-human’ world to the more commonly used ‘non-human’ world, because the former conjures images of human participation in something greater than ourselves. References to the ‘non-human’ are too easily interpreted as ‘less-than-human’, leading to a normative displacement of people ‘above’ everything else. This is a dangerous self-delusion, and one which is an anathema to the principles of classical equitation which I describe in Chapter Seven.
many sustainability and/or business analysts, as well as people working within corporations or industry bodies for several years (Dunphy et al., 2003; Griffiths, 2003; Hart, 1997; American Chemistry Council, 2005; ABB, 2004; Aveda, 2005; DeSimone and Popoff, 1998; Elkington, 1999; Freeman et al., 2000; Hawken et al., 2000; Holliday et al., 2002; Kubiak and Nordstrom, 2004; Nattrass and Altomare, 1999; Robbins, 2001; Romm, 1999; Schmidheiny, 1992; Schot and Fischer, 1993; Shrivastava, 1995; Steger, 2004; WBCSD, 2001a, 2001b, 2002c, 2002d). As Shrivastava notes, corporations are ‘the primary engines of economic development’ with ‘financial resources, technological knowledge, and institutional capacity to implement ecological solutions’ (1995, 937). Since the economy is an integral focus of sustainability, corporations’ importance in dialogues of sustainability is implicit.

The degree of influence corporations can and should have in promoting sustainability is debated. Shrivastava emphasizes that corporations are ‘only one of the many wheels of sustainability’ (1995, 937). Others claim that corporations are capable of bearing the primary responsibility for the provision of a compass to sustainability. Organizational theorists Dunphy, Griffiths and Benn, for example, maintain that ‘the crises faced by humanity can only be resolved by the use of concerted corporate action’ (2003, 4). Certainly, consideration of sustainability must involve an appreciation of the potential of corporate involvement, and as a corollary, the potential for the transformation of corporate identity in the process. The reflexivity of the meeting between corporations and the discourse of sustainability is critically important. Dunphy et al. (2003, 3) assert that:

The central question to be answered in this century is whether the current model of the corporation needs to be modified to contribute to the continuing health of this planet, the survival of humans and other species, the development of a just and humane society, and the creation of work that brings dignity and self-fulfilment to those undertaking it. And if so, how?

In the early nineties, theorists such as Shrivastava (1995) and Gladwin (1992) supported the view that ‘If goals of sustainability are to be achieved, corporations must be reformed, redesigned, and restructured to minimize their negative ecological impacts’ (Shrivastava, 1995, 941). As Dunphy et al. emphasize, questions concerning the role of corporations in sustainability must now be answered as a matter of urgency:
'The time to debate abstract theories is past; what we need now is to embed our theories in action and to engage in dialogue around working models' (2003, 4). In this thesis, I do indulge to a degree in abstract theorizing about the discourse of sustainability and the concept of the corporation for example, but it is done in the hope that the insight gained will help to stimulate conception of new practical possibilities. Furthermore, I go on to examine the reflexive processes involved in the simultaneous development of new theoretical perspectives and new praxis for sustainability.

**Previous analyses of the corporation**

Deep critical analyses of the concept of the corporation have been comparatively rare. Questions about the nature of incorporated modes of production have sometimes been roundly and condescendingly dismissed or dealt with superficially. Writing in 1946, Peter Drucker asserted that big business organization is essential for the creation of the industrial technology that modern society is built on, and must therefore be accepted without question:

> The large industrial unit has become our representative social actuality; and its social organization, the large corporation in this country, our representative social institution. In other words, Big Business is the general condition of modern industrial society irrespective of the forms of social organization. Even to raise the question whether Big Business is desirable or not is therefore nothing but sentimental nostalgia (1983, 18).

Drucker wrote three famous books in the years after World War 2: *The End of Economic Man*, *The Future of Industrial Man*, and *Concept of the Corporation*, in which he offered an ideological framework to lead away from the evils of fascism and towards ‘peace, freedom and human development’ (Tarrant, 1976, 19). To Drucker, the war represented the death throes of ‘a scheme of economic, political, and social existence that had been constructed and nurtured since the end of the Dark Ages’. He thought that fascism had gained a foothold in Europe as people rejected the rational economic promises of capitalism (Tarrant, 1976, 20). The ruinous effects of this tussle of ideologies left humanity without a clear path to follow. In response, Drucker attempted to ‘(forge) a philosophy by which he felt free men could live and grow again’ (Tarrant, 1976, 18). He depicted the corporation as a key force supporting humanity’s recovery from this military disaster. This was a bold prediction at the time, given that the dominant institutions then were political and military ones (Tarrant, 1976, 27, 28).
Archibald, a professor of economics, wrote that ‘the subject matter and scope of the “theory of the firm” are neither obvious nor easily explained’ (1971, 9). Similarly, Coase noted a persistent and systemic lack of interest in rigorously analyzing the corporation:

The firm in modern economic theory is an organization which transforms inputs into outputs. Why firms exist, what firms do (the inputs a firm buys and the outputs it sells) are not questions of interest to most economists. The firm in economic theory, as Hahn said...is a “shadowy figure” ’ (1988, 5).

Coase remarked that even ‘In mainstream economic theory, the firm and the market are, for the most part, assumed to exist and are not themselves the subject of investigation’ (1988, 5). Coase considered this to be a crucial oversight given that ‘most people in the United States, the United Kingdom, and other western countries are employed by firms, that production takes place within firms, and that the efficiency of the whole economic system depends to a very considerable extent on what happens within these economic molecules’ (1988, 7). In the mid-1990s, Scott Bowman observed that despite the fact that corporations have had vocal opponents since their inception, ‘the phenomenon of corporate power has only recently gained wide acceptance as a subject that warrants serious political analysis (1996, 27). Bowman noted that at that time, ‘notwithstanding the growing number of studies on the corporation, the theoretical study of corporate power is still in its infancy’ (Bowman, 1996, 27).

The firm has been described as ‘the fundamental (cell) of modern economic life’ and as such, is one of the main culprits blamed for unsustainable practices (Dunphy, Griffiths and Benn, 2003, 3). It is difficult to imagine how their negative impacts might be best moderated without an adequate understanding of what they are and why we need them (if we do at all). Given the theoretical gaps in the study of the most powerful force in the global economy, and given the role they must play in sustainability, it is necessary

Drucker saw the need to develop ‘a new, free and equal noneconomic society on the foundation and from the premises of an existing economic society’ (cited in Tarrant, 1976, 22), an aim that has much in common with the path to sustainability touted by ecomodernists. Unlike today’s corporate ecomodernists however, Drucker felt that on those occasions it is necessary to place social policy before economic policy, with associated economic costs, ‘we would cease pretending that any such policy would be “good for business” ’ (cited in Tarrant, 1976, 22).
to augment the theoretical understanding of the concept of the corporation even if it is done in concert with practical attempts to develop organizational structures that support sustainability. Reflexive⁴, critical awareness of corporate purpose, identity and structure is absolutely essential.

Furthermore, scholars such as Livesey and Kearins have called for studies of the intersection between corporations and sustainability which explore the ‘mutually constitutive effects of language and practice and the reciprocal relationship between knowledge and power’ (2002, 253). These authors note that corporations’ ability and/or intention ‘to use dialogue as a tool to co-opt political debate’ such as that surrounding sustainability ‘is an important topic for future research’ (Livesey and Kearins, 2002, 253).

As an institution, the corporation ‘constantly (legitimizes) its own action by discoursive means’ (Kallio et al., 2007, 44). Since no institution can be permanent, nor survive for a time without ongoing discoursive renewal, ‘both the internal changes of the institution and the external pressures (affecting) it in the long run, (create) space for at least potential counterclaims’ (Kallio et al., 2007, 44). This form of analysis provides the basis for this thesis’ investigation of corporations and the discourse of sustainability. I examine sustainability’s counter-cultural aspects as external forces catalyzing internal changes in corporations and as forces that parallel internal changes occurring within corporations that may be caused by other factors.

The meeting between discourses associated with corporations and sustainability is critical, and its outcome will depend on the relative status the discourses attain in terms of ‘social reality’ and ‘truth value’:

Some discourses have a higher ‘truth value’ than others. They easily become generally accepted, self-evident means of discourse, sometimes considered as absolute truths. At the same time, by their very existence, they limit alternative ways of interpreting social reality. In the end, change is possible through the very realization that even the most established discourses are not perfect and final systems of meaning, the relations of whose parts are perfectly unambiguous and fixed (Kallio et al., 2007, 44).

⁴ Reflexivity in this instance refers to ‘a methodological sense…of the processes of critical self-reflection on one’s biases, theoretical predispositions, preferences and so forth’ (Schwandt, 2001, 224).
In this thesis, I consider the ways in which existing discourse limits alternative ways of interpreting social reality and the potential for subversive interaction between discourses relating to sustainability and corporations.

**Resistance and difficulties**

Corporations’ presence and the hold of the ideology that underpins them is such that the idea of questioning corporate power and identity, or even trying to critically examine the biases lurking beneath the surface beyond the usual vision of economic theory can be unnerving. They are one of the main constituents of the global capitalist system, along with governments, non-government organizations, and supra-national agencies such as the World Bank and the International Monetary Fund (IMF) (Dunning, 2003). The task of studying the corporation is made more difficult by the profusion of rapidly changing forms and limits to research perspectives, with the result that even serious scholars find it difficult to apprehend the full horizon of organizational change, due to academic specialization. No one person, no matter how gifted or industrious, could possibly be an expert on every facet of global enterprise: like the blind men and the elephant, researchers’ perspectives on change are often restricted to particular places, industries, or business functions’ (DiMaggio, 2001, 6).

Clearly I cannot hope to provide a definitive analysis of the corporation. However, sustainability’s emphasis on interdisciplinary approaches can overcome the limitations of academic specialization to some degree.

**Research question**

This thesis focuses on macro-level qualitative analyses of discourses surrounding theories of corporate identity, organizational structure and sustainability. I qualitatively explore issues of power, ontology and epistemology relating to both sustainability and corporations, taking an interdisciplinary approach as advocated by sustainability and management theorists (see for example Gladwin et al., 1995). Informed by this analysis, I proceed to examine ways of equitably incorporating the diversity of perspectives necessary to formulate strategies for sustainability.

The central research question posed in this thesis is:
How can corporations best contribute to sustainability?

Aims
I have a number of aims in tackling the subject of corporations and sustainability. My first aim is to consider the contested concept of sustainability itself - what does it mean to various people in various situations? How and why has it become prominent in the contemporary era? Is it as universally relevant as its proponents claim it is? What philosophical and mythological stories lie beneath its surface? What does all this tell us about the potential for corporations to promote sustainability?

Some assert that corporations should be regarded as key actors in the journey towards sustainability (Hart, 1997; Dumphy et al. 2003; Holliday et al., 2002;). To appraise this claim, it is necessary to consider whether or not the corporate form is inherently compatible with the principles of sustainability. Therefore, one important aim of this thesis is to consider the nature of the corporation itself. What is a corporation? What series of historical events and circumstances lead to its creation, and what does this tell us about its character? Has corporate identity changed over time, and if so, how and why? I also aim to ascertain whether there is anything to be gleaned about the potential for corporations to further promote sustainability by examining the history of corporate attitudes towards environmentalism and sustainability to date.

In addition, I will consider whether the meeting between corporations and sustainability is reflexive, and if so, what sorts of outcomes might be expected. Corporations obviously wield significant political power and therefore significant influence over the discourse of sustainability, but they might also be susceptible to transformation if sustainability acts as a subversive catalyst. Part of my analysis involves using actor-network theory to re-imagine what a corporation actually is. The hope is to move beyond conventional understandings of the firm towards broader interpretations that are more relevant to sustainability.

In looking for ways to facilitate interaction between business and sustainability, I seek to identify existing theoretical parallels and note where there is potential to enhance the
connections between them. Network approaches, for example, crop up in both bodies of literature, and there is significant overlap between the analyses that arise as a result. I set out to consider the potential to make the most of this overlap in order to promote sustainability.

Network themes are central to this thesis. I aim to explore the potential for network approaches to successfully embrace sustainability’s heterogeneity. I will consider a range of knowledge and value systems as constituent threads of sustainability networks. Traditional knowledge, for example, can be included as a complement to scientific knowledge in sustainability strategies (Marinova, 2005; Aveda, 2003). At the same time however, difficult questions exist about intellectual property rights when knowledge spans both realms and there is robust criticism of damaging interactions between traditional and scientific knowledge (Marinova and Raven, Forthcoming; Shiva, 1989; Shiva, 1993). I will also explore the role of ways of knowing and being that emanate from the more-than-human world, a proposal that may appear radical on the surface, but seems to be simply common sense from my perspective as a horse rider.

My final aim is to find practical ways to apply the important theoretical lessons learned during the course of my study. To this end, I explore the scope of deliberative democracy to bring sustainability’s diverse and heterogeneous perspectives together synergistically. I consider whether deliberation between truly engaged citizens can lead to the creation of sustainability strategies that people are prepared to commit to and put into practice.

**Structure of the thesis**

The thesis structure is designed to work through my aims sequentially. In Chapter One I outline the sources of information I have used and why I chose them, and explain the methodologies used to offer critiques.

In Chapter Two, I track the developments which gave rise to the contemporary discourse of sustainability. I consider sustainability as a contested concept and examine the mythologies and assumptions which pervade it. The critique undertaken in this
chapter provides a basis to discern the appropriate role for corporations in promoting sustainability.

In Chapter Three, I briefly review the history of the corporation. I consider the concept of the corporation and its associated power. I examine the philosophies and mythologies which underpin corporate identity so as to provide a basis for comparison with the underlying ethos of sustainability.

In Chapter Four, I trace corporate attitudes to environmentalism and sustainability, from the 1960s to the present day. I examine changes in stance over time and between different sectors. I examine associated shifts in management attitudes and strategies, and evaluate progress towards sustainability to date.

In Chapter Five, I examine the interaction between corporations and sustainability as a reflexive process. I suggest that the way corporations are imagined influences thought and action. I use actor network theory (ANT) to reconsider conventional versions of corporate identity and argue that corporate power is a relational effect. I show that while corporations dominate the discourse of sustainability in certain respects, they are also susceptible to change stimulated by sustainability’s subversive pressure.

In Chapter Six, I note the dramatic and diverse organizational changes occurring within corporations and identify the main catalysts of this transformative process. I look at the growing emphasis on network approaches within business and argue that this provides a conceptual link to sustainability.

In Chapter Seven, I discuss the importance of traditional knowledge. I use equestrianism both as a metaphor and as a form of traditional knowledge in its own right to draw attention to the way we imagine and organize relationships between humans and the more-than-human world. I use equitation to highlight differences between relations based on coercive power and control and those which operate on the basis of synergy and empathy. This analysis supports the contention that the discourse of sustainability must include a diversity of views and ways of knowing to be useful and relevant.
In Chapter Eight, I argue that network approaches which embrace heterogeneity are vital for sustainability. I consider the potential for business to contribute to sustainability in light of the interpretation of the market as a network of weak ties. I endorse the idea that discursive plurality is necessary to engage adequately with the complex networks relevant to sustainability. I suggest that the requisite discursive plurality can be achieved at least in part through the use of community engagement/deliberative democracy techniques.

Chapter Nine draws the threads of my argument together to offer conclusions about how corporations might best contribute to sustainability.
Introduction: research perspectives
Sustainability practitioners must attempt to find heterogeneous solutions to heterogeneous problems. This requires methodological diversity. The analytical scope of this thesis is therefore not strictly confined to one theoretical base. In order to explore the diverse biophysical, cultural, sociopolitical, economic and epistemological networks relevant to sustainability, I employ several distinct but related methodological approaches and access a range of knowledge forms and sources. My argument has been consciously informed by scientific, traditional, personal and experiential ways of knowing. I use primary and secondary factual data and explore important theories and mythologies relating to sustainability. I consider conventional economic and organizational theory, and use actor network theory (ANT) to provide a unique perspective on corporate identity. I examine the potential for deliberative democracy to synthesize diverse perspectives into holistic approaches that promote sustainability.

It is important to note that this study of heterogeneity is not presented in objectivist terms. I claim to present a rigorous and critically sound analysis, but not a completely impartial or objective one. Qualitative research such as this is, as Page notes, ‘no less a social construction than the (cultural phenomena) it studies, and the mediating influence of the researcher is therefore ineluctable’ (2000, 5). I did not start from a neutral position - I set out with a positive view of the principles of sustainability. My analysis is guided by established theory and methodology but coloured by my own perspectives and choices. It is essentially “one human trying to figure out what some others are up to” (Agar [1996] cited in Page, 2000, 7) and in this case, one human trying to make sense of the more-than-human world as well. In the process, I access a range of knowledge forms, not all of which can be easily transmitted via language.

Language and power within the discourse of sustainability
The study of language used in the hegemonic discourse of sustainability forms an important part of this thesis. The French philosopher Michel Foucault (1973, 1997) interpreted the term ‘discourse’ as referring not only to ideas that may be thought, talked about or written down, but also to ‘practices, structures, rules, and norms that
operate in particular institutional and social domains’ (cited in Livesey & Kearins, 2002, 236-237) such as the prison system, the household, the corporation, or the environment. Discourse constitutes both subjects (identities, such as responsible or caring companies) and objects of understanding (knowledge in different domains, such as sustainable development) (cited in Livesey & Kearins, 2002, 236).

Pocock emphasizes the fact that although particular discourses come and go ‘the history of discourse is not a simple linear sequence in which new patterns overcome and replace the old, but a complex dialogue in which these patterns persist in transforming one another’ (1989, ix-x).

The discourse of sustainability both constructs and is constructed by social praxis, existing institutions and power structures and the language used in the process of exploration of its themes. The use of language within this discourse is significant since language is thought to be inevitably related to power structures. In fact, theorists such as Pocock (1989) understand language as power. This view is based on the Whorfian hypothesis that language affects perception (Whorf, 1956). This notion has recently been supported by scientific evidence which shows language influences perception particularly on the left side of the brain - the side that is responsible for language (Gilbert et al., 2006)⁵.

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⁵ The theoretical relationship between language and thought has been contested. Whorf and Sapir offered a theory of linguistic relativity (Whorf, 1956, cited in Vaughan and Hogg, 2002, 423) which has been presented in two forms - strong and weak. The strong version holds that thought is completely determined by language while the weak form suggests that language can constrain or influence thought so that some ideas come more easily to mind than others (Vaughan and Hogg, 423). Scientists from the University of California, Berkeley, suggest the relationship between language and perception is complex, but involves the sort of relationship Whorf described (World Science, 2006; Gilbert et al., 2006). They studied colour perception in order to investigate the implication arising from the Whorfian hypothesis that English speakers would see greater difference between blue and green than non-English speakers, since English is one of the few languages to distinguish between the two colours (World Science, 2006, 1). The researchers further suspected that ‘if language affects perception, it should do so more in the right visual field than in the left visual field’ - i.e. the side governed by the left side of the brain (Gilbert et al., 2006, 489). They concluded that ‘people view the right (but not the left) half of their visual world through the lens of their native language’ and that this ‘pattern was disrupted when participants performed a secondary task that engaged verbal working memory but not a task making comparable demands on spatial working memory (Gilbert et al., 2006, 489).
The conceptual, or cognitive, approach to semantics\(^6\) revolves around the notion that ‘meanings of linguistic expressions are *mental entities* - meanings are elements of the cognitive structure in the heads of the language users. Language itself is seen as being part of the cognitive structure and not an entity with independent standing’ (Gärdenfors, 2004, 154). Gilligan approaches much of her feminist research with the idea that ‘the way people talk about their lives is of significance, that the language they use and the connections they make reveal the world that they see and in which they act’ (1982, 2). Pocock explains that the language systems people\(^7\) use ‘help constitute both their conceptual worlds and the authority structures, or social worlds, related to these’ (1989, 15). He goes on to assert that

The historian’s first problem, then, is to identify the “language” or “vocabulary” with and within which the author operated, and to show how it functioned paradigmatically to prescribe what he might say and how he might say it’ (1989, 25).

In terms of intergroup relations between people, ‘names and labels applied to other persons subtly sculpt impressions of those persons in directions suggested by those labels’ (Perdue et al., 1990, 475). Collective pronouns such as *we, us* and *ours*, or *they, theirs* and *them* instantly indicates people’s in-group or out-group status, and are therefore ‘likely to be especially powerful influences in social cognition and perception’ (Perdue et al., 1990, 475). Since, as a global theme, sustainability encompasses people from different groups, it is particularly important that these cognitive tendencies are recognised and allowed for where relevant. Sustainability must deal with cultural and sub-cultural diversity. Appreciation of the interaction between language, perception and power plays an important part in my approach to the study of corporations and sustainability.

**Qualitative content analysis**

Frankfort-Nachmias and Nachmias describe content analysis as

> a method of data analysis as well as a method of observation. Instead of observing people’s behaviour or asking them about it, the researcher takes

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\(^6\) Gärdenfors defines semantics as concerning ‘the relation between the words or expressions of a language and their meanings’ (2004, 151).

\(^7\) Pocock talks about the language systems ‘men’ use.
In this thesis, I undertake content analysis of publicly available information. Following Bryman ([1988] cited in Heaton, 2004, 55), the aim of this qualitative perspective is to examine social behaviour, events and systems of knowledge and understanding in their historical and social context, and to explore the processes by which social life is accomplished. Qualitative approaches can provide flexibility and an ‘unstructured approach to social inquiry, allowing researchers to modify and adapt their approach as need be in the course of the research’ (Bryman ([1988] cited in Heaton, 2004, 55).

Flexibility was a key element of my research - for example, it took time for me to fathom the existence of certain parallels and networked relationships, and subsequently to grasp that classical equitation provided a useful model to accessibly illustrate key points. In fact, I only came to this realization after trying to explain my research to my colleagues for many hours in the coffee shop. On those occasions, I would often resort in desperation to framing my ideas in terms of what I had learned over many years as a rider with classical training. Until my fellow students at the Institute for Sustainability and Technology Policy (ISTP) coerced me I had never seriously understood the use of this traditional knowledge to be a theoretical option. I was living proof of Wittgenstein’s suggestion that at times that which is the most important, striking and powerful can be hidden from us because of its ‘simplicity and familiarity’ (cited in Brown, 1950, 50).

**Use of secondary data**

My research strategy involves qualitative analysis of secondary data. Although I am predominantly concerned with macro-level theoretical interpretation, I use representative examples where appropriate in order to illustrate key points. This examination of case examples of publicly available communications is in keeping with Frankfort-Nachmias and Nachmias’s argument that it provides a valid basis for alternative analysis that cannot be achieved by simply ‘observing people’s behaviour or asking them about it’ (1992, 311). This type of analysis serves a particular purpose – it may ask and answer different questions to those associated with research based on primary data. I have included case examples, such as the work Aveda undertakes with
Indigenous communities in Western Australia, in boxes in several chapters. Similarly, I examine a range of communications from business people and organisations. For instance, I use Anita Roddick’s views, as published in the popular press, to highlight key insights drawn from her many years experience and written in a form specifically aimed at the general public. Such sources of communication are, after all, the primary means by which many people have to understand and judge corporate sustainability efforts, so their content is of vital importance.

Such secondary data analysis ‘has a rich intellectual tradition in the social sciences’ (Frankfort-Nachmias and Nachmias, 1992, 292). Frankfort-Nachmais and Nachmias list three reasons for employing secondary research methodologies, all of which are relevant to my studies:

1. conceptual-substantive reasons;
2. methodological reasons; and

Secondary analysis is appropriately used where the researcher seeks greater scope and depth of analysis than is achievable in a specifically focused primary research effort. By accessing the data collected by numerous primary researchers, a comparative analysis can be undertaken spanning time, geographical space and a range of theories in order to identify and understand trends and formulate new theoretical perspectives (Frankfort-Nachmias and Nachmias, 1992, 292). This analytical scope is of particular importance when attempting to conduct a rigorous interdisciplinary examination such as mine, where historical contexts are important, and where there is great diversity in form and understanding of, for example, the nature of the corporation and the meaning of sustainability. By undertaking secondary analysis, I can effectively canvas a large sample of data and theoretical opinion and increase the representativeness of my own work to give greater weight to any emergent observations or conclusions (Frankfort-Nachmias and Nachmias, 1992, 292). As part of the exploration of the connections between business and sustainability in these case examples, I consider the relevance of various forms of knowledge and associated language. I also investigate the implications of apparent theoretical parallels between emergent literature in the field of sustainability and that of organizational studies of business.
There are also sound economic reasons to undertake secondary as opposed to primary research, particularly when attempting to formulate macro-level visions. The cost of undertaking sufficient primary research to form a basis for comparison in my research would be prohibitive. Furthermore, it would be logistically impossible to collect enough data in the time available for PhD research. Finally, much of my thesis relates to the examination and comparison of expert theoretical stances and these are easily accessed in archival form. The information I have used in relation to corporations has been gathered from a variety of sources, including:

- corporations’ annual reports and press releases, available on the internet;
- national and international peer-reviewed journals;
- lectures and speeches given by CEOs and other business spokespeople;
- newspaper articles;
- international groups such as the World Business Council for Sustainable Development;
- academic and non-academic books authored by business people and/or analysts with relevant and important first-hand experience;
- publications and websites detailing industry group initiatives.

In the study of multinational corporations and sustainability, analysis of the content of publicly available literature such as corporate press releases and annual reports has particular relevance. Since these communications are an important source of information for citizens wishing to make sense of corporate attention to issues of sustainability, it is important to examine their tone and content. What sort of language do corporations use? What does this tell us about the attitudes towards sustainability of those in corporate management positions? What tensions are evident? What are the effects of their communications?

The selection of appropriate communications to examine is guided by parameters set in theoretical analyses. For example, trends in changing business attitudes to environmentalism and later sustainability have been comprehensively studied by
researchers such as Hoffman (2001), Dunphy et al. (2003) and Robbins (2001). Informed by this research, representative communications can be identified and interpreted so that existing theory can be reviewed. My aim is not to personally provide an exhaustive quantitative analysis of large numbers of corporate communications, but to consider the implications of various forms when they arise. I ask ‘what tensions may be evident?’, for example, rather than ‘how often are they evident?’ This forms a useful starting point for identification of the conditions and attitudes that may be necessary for successful integration of sustainability planning into corporate activity. The aim of this qualitative study is to construct analytical, rather than statistical, generalizations pertaining ‘to concepts, theoretical propositions, or models and not to universes or populations of cases or instances’ (Schwandt, 2001, 5).

The network: a popular approach

My research draws heavily on network approaches. Some believe the notion of complex networks is likely to be the ‘next big thing’ in social science research, primarily because it incorporates ‘several other current intellectual fashions under the “network and complexity” conceptual umbrella’ especially the notions of the information society and globalization (Thompson, 2004, 411). There are numerous interpretations of different systems or entities as networks, including:

- networks within and between companies, (Senge, 1997; Kelly, 1997; De Man, 2004);
- networked systems of production, e.g. industrial ecology (Korhonen, 2004; Seuring, 2004);
- the networked interrelationship between technology and society - as investigated by actor network theorists such as Bruno Latour (1993; 1999) and Michel Callon (1986a, 1986b);
- the need for systems thinking in the formulation of sustainability strategies (Hjorth and Bagheri, 2006).
It would be interesting to know whether the ascendancy of network theory in fields which are typically examined in isolation from one another is a result of the influence of universally experienced conditions or whether it is more a case of interdisciplinary osmosis of fashionable view points. Some suggest, for instance, that the broad ranging interest in networks has been catalyzed by a shared fascination in the emergence of the world wide web (WWW) and the internet, with all their attendant technological and sociological implications (Thompson, 2004, 417). On the other hand, DiMaggio asks whether in business studies in particular the interest in network models within firms is driven by a tendency for management consultancies to focus on them, thereby generating a self-fulfilling prophecy:

Are trends that coincide connected by logical necessity? Is their simultaneous appearance merely coincidence? Or are the intrinsically unrelated elements united discursively into a package promoted by business consultants and academic management programs? (DiMaggio, 2001, 6)

Whatever the underlying reasons behind the popularity of network analyses, they are significant and useful.

**Actor network theory**

My analysis is informed by the conviction that habitually used ontological and epistemological categories, which are often dichotomous, limit responses to unsustainable practice and should therefore be deconstructed. Therefore, I have used actor network theory (ANT) as part of my analysis because it aims to dissolve dichotomous distinctions such as that between scientific and traditional knowledge and enables a sensitive appreciation of complex heterogeneity. In particular, I use ANT to explore corporate identity and function in the hope of exposing the web of relationships from which corporate power is derived. My intention in the case of corporations is to use ANT to challenge atomistic models of corporate identity which often prevail in economic theory.

Actor network theory (ANT), or the ‘sociology of translation’, as described by theorists such as Callon (1986a, 1986b), Law (1992, 1994, 1999), Latour (1993, 1999) and Castree and Macmillan (2001) offers a useful critical framework for application in sustainability research. It is described as a ‘semiotics of materiality’ where the
understanding within linguistics that words gain their meaning from the context in
which they are used is extended to all materials (Law, 1999, 4). According to the theory
‘entities take their form and acquire their attributes as a result of their relations with
other entities’ (Law, 1999, 3). Furthermore, if the relations do not adhere to one another
without effort, they must be ‘performed’ - in other words effort must be expended to
perpetuate the actor network. This element of ANT is referred to as ‘performativity’
(Law, 1999, 4).

Actor network theory expressly, and subversively, attempts to find a way around
dualistic constructs, and refuses to accept a priori categories - it tries to ‘imagine the
unimaginable’, as Castree and MacMillan put it (2001, 214). The idea of an ‘actor
network’ is itself oxymoronic, as Law (1999) admits, but the tension within the term is
deliberate. It brings attention to the way ‘fractals’ can be referred to as singular entities
and/or in a way that highlights their heterogeneity. The ANT ambition to liberate its
subjects from the boundaries of ontological dichotomies such human/non-human,
social/natural or traditional versus scientific knowledge makes it invaluable for
sustainability research where acute sensitivity to relationships within heterogeneous
reality, and ways of knowing about them, is essential.

In keeping with this desire to appreciate various knowledge forms my conclusions were
informed by both traditional and scientific knowledges. My own different ways of

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8 Law is drawn to the metaphor of the fractal for use in ANT, since it avoids the dualism of individual
versus collective (1999, 12). As Law says, the objects studied in ANT are ‘always more than one and
less than many’ (1999, 11, emphasis in original). An object is ‘not a single thing…not singular. But
neither is it a random heap of bits and pieces’ (1999, 12). He stresses the need to avoid the dualism
between ‘the single on one hand and the plural on the other’ (1999, 12). He describes a mathematical
fractal as ‘a line which occupies more than one dimension but less than two. So a fractional object?
Well, this is something that is indeed more than one and less than many. Somewhere in between’ (1999,
12, emphasis in original). He goes on to warn that the thinking associated with this notion is difficult
‘precisely because it cannot be summed up and reduced to a point, rendered conformable and docile’
(1999, 12).

10 ANT methodology echoes other theoretical perspectives which attempt to look beyond formed
identities. Deleuze, for example, talks about ‘reality as a continuum of interplay, interpenetration and
interconnectedness’, depicting ‘things’ as interplays in this continuum (cited in Hipwell, 2004, 360). He
interprets ‘separate entities (as) mutually constitutive and interdependent, and warns that ‘treating them
as entirely separate inevitably does intellectual and physical violence to the world’. Deleuze would have
us view the world holistically: he argues that ‘While we may, for practical purposes, speak of a tree’, a
fish’, the human species’, etc., awareness of ontological difference reminds us that it is a mistake to
abstract such things from their dynamic and continuous context’ (Hipwell, 2004, 360). Deleuze and
Guattari maintain that ‘prior to striation by identitarian forces, the world is made of smooth space’ (cited
knowing are compared and contrasted, and their fit together explored. The more conventional facets of my PhD research were undertaken over a few short years in the manner of academic ‘experts’. The traditional knowledge I invoke is classical equitation, developed over thousands of years, and in this case my knowledge was gained theoretically and experientially over decades.

Actor network theory can be applied to examine social relations as network effects that extend beyond the merely human. It considers the way society, organizations, agents and machines can be understood as interactive effects. According to ANT, the corporation, for example, can be understood as both an actor as a patterned network of heterogenous relations, and an actor within a heterogenous network. Examination of the ways networks are consolidated helps us to consider ‘how it is that networks may come to look like single point actors: how it is, in other words, we are sometimes able to talk of “the British Government” rather than all the bits and pieces that make it up’ (Law, 1992, 380). As Law explains,

This, then, is the core of the actor-network approach: A concern with how actors and organizations mobilize, juxtapose, and hold together the bits and pieces out of which they are composed; how they are sometimes able to prevent those bits and pieces from following their own inclinations and making off; and how they manage, as a result, to conceal for a time the process of translation itself and so turn a network from a heterogenous set of bits and pieces each with its own inclinations, into something that passes as a punctualized actor (1992, 386).

Actor network theory can help to look beyond the precarious simplification of these networks into punctualisations such as ‘corporations’, providing the opportunity to reveal their complexity as unencumbered as possible by previous assumptions, thus removing certain limits to innovation. As Law notes, ANT is ‘a semiotic machine for waging war on essential differences’ (1999, 7). It insists that in principle an object or entity given form by relations within a network is just one of the permutations that are possible, and could therefore be re-ordered. Since the corporation, for instance, is just one possible configuration of networked constituents (and not necessarily the inevitable one), the corporate actor network can be reordered into something else.
There are three core tenets of ANT: generalized agnosticism, free association and generalized symmetry (Callon, 1986b, 196). Generalized agnosticism refers to an ‘analytic impartiality to whatever actors are involved in controversy’ (Singleton and Michael, 1993, 228). Free association is ‘the repudiation of a priori distinctions between the social and the natural or the technological’ (Singleton and Michael, 1993, 229). In order to achieve generalized symmetry, actor network theorists try to use ‘abstract and neutral vocabulary to understand the conflicting viewpoints of actors’ (Singleton and Michael, 1993, 229). This is a difficult task, requiring keen awareness of the hidden agendas accompanying language used. It is a particularly important task when investigating corporations and sustainability – if the loaded and powerful corporate lexicon dominates in the discourse of sustainability it may translate the interests of other actants in ways which cannot be accepted at face value.

Two other important concepts within ANT are ‘translation’ and of course the ‘actor network’ itself. Translation refers to the ‘mechanism by which the social and natural worlds progressively take form’ (Callon, 1986b, 224). It is a process where roles are defined and distributed, and a scenario is delineated (Callon, 1986a, 26). Law describes translation as ‘a verb which implies transformation and the possibility of equivalence, the possibility that one thing (for example, an actor) may stand for another (for instance a network) (1992, 386). Actor networks are ‘network(s) of simplified entities which in turn are other networks’ (Callon, 1986a, 32).

Simplification is a key function used to establish the actor network. It can be thought of as the first step in reducing infinite complexity to singular identities that the human mind can manageably process and secondly, juxtaposition of those entities. Callon describes simplification as

the first element necessary in the organization of an actor-world: indeed it is an inevitable result of translation. In theory, reality is infinite. In practice, as a result of the translations that it brings about, an actor-world is limited to a series of discrete entities whose characteristics or attributes are well defined. The notion of simplification is used to account for the reduction of an infinitely complex world by means of translation (1986a, 28-29).

John Law offers the ‘modest sociology’ of actor network theory as a way to
avoid taking order for granted. Thus if there appear to be pools of order it will treat these as ordering accomplishments and illusions. It will try to think of them as effects that have for a moment concealed the processes through which they were generated. And - the commitment to symmetry suggests this - it will try not to take their pretensions at face value. Organisations, captains of industry - it will try to see these as more or less precarious recursive outcomes. So it will burrow into them, taking them apart, seeing how they were achieved, and exploring the hurts that were done along the way (1994, 15).

The symmetry Law refers to relates to the idea that all concepts must be dealt with in a manner that affords no privilege to a priori categories. All phenomena must be investigated with the same vigour and assumptions should be swept away. No categories of ideas or objects are permitted to pass without analysis, and the form of analysis is the same for all. ANT emphasizes the processes of ‘ordering’ rather than identifying the existence of ‘order’.

Law describes the ‘crucial analytical move made by actor-network writers’ as ‘the suggestion that the social is nothing other than patterned networks of heterogenous materials’ (1992, 381, emphasis in original). This is a useful methodology for analysing networks for sustainability that may be comprised of human as well as other actants.

**ANT and the generation of power**

Actor network theory is explicitly concerned with the mechanics of power - in particular the way ‘size, power or organization are generated’ (Law, 1992, 380) and maintained by interactive, heterogenous network effects. This is a useful methodology to investigate the corporation as a nexus of power. Actor network theory suggests that power is generated in a relational and distributed manner - in other words that power is a shared capacity that is contestable and often contested. Castree and MacMillan observe that

Once power is seen as a relational achievement - not a monopolizable capacity radiating from a single center or social system - then it becomes possible to identify multiple points…at which network stability can be contested (2001, 214).
Murdoch also rejects the idea of power as something an actor can possess freehold and describes it as an effect generated within relationships:

Those who are powerful are not those who ‘hold’ power but are those able to enrol, convince, and enlist others on terms which allow the initial actors to ‘represent’ the others (1995, 748).

In ANT, the powerful are subjected to the same form of analysis as any other subject. The powerful, says Law, ‘are no different in kind sociologically to the wretched of the earth’ (1992, 380 emphasis in original). Sheer size is achieved via the processes of network extension. As Law explains,

This then, is one of the core assumptions of actor-network theory: that Napoleons are no different in kind to small-time hustlers, and IBMs to whelk-stalks. And if they are larger, then we should be studying how this comes about (1992, 380).

Latour himself does not expect nor desire ANT to endure to the point that it becomes immodestly large - that would be a travesty for a ‘modest sociology’. He wishes to ‘abandon the (ANT) creature to its fate but continue all the way in developing its strange potential’. He looks forward to ‘life after ANT. Once we have strongly pushed a stake into the heart of the creature safely buried in its coffin - thus abandoning what is so wrong with ANT…some other creature might emerge, light and beautiful: our future collective achievement’ (1999, 24).

Perhaps Latour would therefore understand why, in this case, I have attempted only a rudimentary foray into the complexities of ANT. My aim is simply to draw attention to the significance of networked heterogeneity in sustainability, with particular focus on the potential for corporations to become sustaining. Broadly, I endorse the notion that a priori categories carry conceptual baggage with them that can debilitate sustainability analysis generally, and that such categories can helpfully be re-described in more neutral terms. Actor network theory also makes it clear that methodological and theoretical choices can impact on research outcomes and strategic practice respectively. Finally ANT, like sustainability, is concerned with tensions and oxymorons and therefore requires a ‘modest willingness to live, to know, and to practice in the complexities of tension’ (Law, 1999, 12).
Classical equitation

In keeping with actor network theory’s insistence on the importance of appreciating scientific and traditional (and other) knowledge as epistemological equals in the name of sustainability, I offer classical equitation as an illustration of traditional and experiential knowledge. Actor network theory has relevance to the study of equitation, as it can be applied to interpret the horse, as well as the horse-and-rider, as ‘NatureCulture’ hybrids. Furthermore, the use of neutral language in ANT could be seen as an attempt to model the neutrality of those rare moments of union in equitation where words recede to the back of the human mind and riders know of their interactions experientially. Reality becomes more fluid and interrelated than language is capable of describing. At such times, distinctions - even ethical ones - between human and non-human, social and natural can be not only irrelevant but actually non-existent from the rider’s perspective. (I would not presume to guess what the horse’s perspective on such matters is.)

This section has its own methodological emphasis beyond ANT however. I refer to classical texts of equitation, as well as knowledge gained as a result of my own lived experience working with horses and studying equitation over decades, benefiting from the experience of horses and ‘horse people’, handed down over generations. My academic understanding of equitation is complimented by lived experience of working with horses gained over more than 30 years of riding. While I cannot claim to be a master of the art, I have been privileged enough to receive formal training from many elites of the classical art of riding, including Olympic coaches such as Franz Mairinger, Wolfgang Hölzel, and Christopher Bartle. In addition to these luminaries, my most

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10 There is a tradition of support for the importance of intuitive or non-linguistically expressed knowledge. Deleuze, for example, following early-twentieth-century philosopher Henri Bergson, calls for the epistemological rehabilitation of intuition. He describes this intuitive epistemology as 'transcendental empiricism' or 'wisdom of the body'. Prior to intellectualisation, our instincts respond to and process the sensory data received by the body as a continuous and multiplicitous flow. Thus, the way humans perceive the world through 'wisdom of the body' is better attuned to ontological difference (and therefore better capable of understanding smooth space) than through the intellect. This 'libidinal epistemology' provides us with an understanding of a continuous, mobile, fluid and interconnected world (Hipwell, 2004, 361).
important teachers have arguably been my equine partners. This allows me to make a unique contribution to knowledge since

in our postmodern world the horse and its attendant bodies of knowledge are an oddity, uncommon in the extreme. To write anything intelligent on the subject of the horse, it is often necessary to combine training in the academic professions with training in, or at least substantial exposure to, the arts and nuances of horsemanship; yet few people now ride…and even fewer of those are also academically trained scholars (Raber and Tucker, 2005, 2)

Of course, my representation of equine knowledge, and human/equine knowledge in combination, represents a translation in the actor network sense, and this must be recognised in the interests of symmetry. As rider and researcher, I have translated the interests of horses, and therefore of the non-human world in general metaphorical terms, to suit the purposes of this thesis. In the form in which this research is presented, horses cannot speak for themselves, and I must mediate their contribution.

**Deliberative democracy**

My interest and knowledge in this area is drawn from an extensive literature review as well as practical experience with deliberative techniques. I contributed to the Innovations in Community Engagement Conference, run by the Department of Planning and Infrastructure in Western Australia (2005), by collecting information and preparing posters on a range of deliberative techniques used internationally. I also worked as an assistant moderator and information specialist on a Citizens’ Jury run concurrently with the conference by Ned Crosby (the creator of the process) and Pat Benn (The Jefferson Center and the Department of Planning and Industry, Government of Western Australia, 2005). Since then I have been a facilitator in the processes of community engagement for the Perth Coastal Planning Strategy (Western Australian Planning Commission, 2006), and have participated as a randomly selected community member in an Energy Futures Citizens’ Panel run by the CSIRO in 2005. The panel was given the job of evaluating a range of energy scenarios produced in the Energy Futures Forum (CSIRO, 2005). These experiences made it clear to me that deliberative democracy has the potential to find a way through the complicated tangle of values and knowledges relevant to sustainability.
Reflexivity

Analyses such as this are reflexive in the sense that they are not just ‘about something but are also doing something’ (Schwandt, 2001, 223). DiMaggio (2001) notes social science’s propensity to mould the shape of culture and practice. To illustrate this, he points to Weber’s modeling of hierarchy, which ‘informed normative ideas about management, in all likelihood making companies more bureaucratic than they might otherwise have become’ (2001, 240). Similarly, he argues that the prevailing economic theoretical abstraction, *homo economicus*, is normative in its justification and promotion of self-interest (2001, 240). By extension, he considers it likely that the current theoretical fascination with network and complexity theory in organizational studies (and this thesis) may increase the likelihood that more businesses will adopt a network structure (2001, 240). DiMaggio contends that

at a time in which university-based scholars are drafting legal codes for newly capitalist economies and consulting with large firms as experts on corporate strategy and structure, what scholars believe to be true may actually influence the shape of change (2001, 210).

The analysis presented in this thesis should be approached with DiMaggio’s observations in mind. The aim of this thesis is to expand the theoretical basis for consideration of processes that enable corporate contributions to sustainability, not to narrow it.

Conclusion

These distinct but related methodological approaches come together to enable a novel exploration of corporate engagement with sustainability. In combination, they provide an expansive vision which enables me to consider biophysical, cultural, sociopolitical, economic and epistemological networks relevant to sustainability in appropriate ways. I access a range of knowledge forms, including traditional, personal, experiential, and scientific, using a range of sources. My work encompasses primary and secondary factual data, theoretical insights and important mythologies. This methodological diversity is appropriate for sustainability, since it is just this sort of synthesis which is needed in the formulation of sustainability strategies themselves.
Chapter Two
The Concept of Sustainability: History and Contest

J. R. McNeill concludes that by the twenty-first century “we have created a regime of perpetual ecological disturbance.” Perpetual is probably the wrong word for a system premised on indifference to the long term. Some apparently believe that science and technology will save us from the brink, with wonderful inventions we cannot presently imagine (Allen, 2004, 283).

Introduction
In this chapter, I chart the emergence of the discourse of sustainability in its contemporary form. I provide a brief overview of various interpretations of the meaning of the concept of sustainability, and outline key points of the debate about just how precise the definition of sustainability ought to be. I also consider the question of whether the terms ‘sustainability’ and ‘sustainable development’ are synonymous. The dominant discourse of sustainability has many underlying mythologies and assumptions which I examine in order to consider whether it is in fact as universally appropriate as it purports to be. As part of this estimation of sustainability’s reach, I investigate the extent to which the language used to describe it is related to power. I explore aspects of ‘geometry of thought’ in relation to sustainability. The critique undertaken in this chapter provides a basis for consideration of the most appropriate role for corporations in promoting sustainability.

The emergence of the contemporary discourse of sustainability
The discourse of sustainability became popular in the last decades of the twentieth century as a result of international political efforts to address the failures and limitations of conventional development policies. Issues relating to sustainability are often outlined in terms of their ecological, social and economic aspects - a rudimentary attempt to highlight the need to promote sustainability by seeking heterogeneous responses to problems, which are themselves heterogeneous.

The pursuit of sustainability is an undertaking of global proportions - a concept formulated in response to threats thought to be faced by the planet’s entire human ‘family’. There is no general agreement as yet about whether we are talking about mere reform of the status quo or substantive, fundamental change rooted in philosophical revolution. Sustainability can be thought of as a contested and metamorphosing concept
(Davison 2001; Irwin 2001; Jacobs, 1999), formulated according to a far-reaching geographical and temporal vision and characterized by a shadowy morphology.

The idea of trying to find stable and resilient ways of organizing human activity is, of course, not a new one. Many past and present cultural practices may seem recognizably sustainable to modern sustainability theorists, even though they may not necessarily be readily described according to the terms of the contemporary discourse of sustainability. People from many cultures in many eras have arrived at different ways of knowing about, revering and preserving the network of relationships that support spiritual and physical existence without employing the English word ‘sustainable’ or an equivalent.11

The sustainability agenda of the late-twentieth and early twenty-first centuries has its own particular dynamics however. It is influenced by the environmental movement that began to emerge in the 1960s, with scientists such as Rachel Carson, Paul Ehrlich and Garrett Hardin as its main spokespeople (Hay, 2002, 173). At that time, Carson’s book *Silent Spring* helped stimulate awareness that the activities of industrial society were accompanied by alarming and unforeseen ecological damage. Issues such as pollution of rivers, air pollution in cities from industry and roads packed with cars, resource depletion where abundance had been previously taken for granted, and the destruction of forests by acid rain became increasingly difficult to ignore (Runyan and Norderhaug, 2002, 30). Paul Ehrlich (1972) offered frightening predictions about the negative ecological impacts of a booming human population. Ehrlich was uncompromising in the way he framed the threats he saw - we were facing potentially catastrophic devastation caused by *The Population Bomb*, as his book was titled. Garrett Hardin (1968) delivered a speech about *The Tragedy of the Commons* in which he asserted that political rather than purely scientific answers must be sought for the population problem, and that human nature being what it is, people will tend to exploit community-owned resources in order to maximize their own gain.

The warnings about the consequences of this human-derived ecological disruption were often dire, if not apocalyptic, and they were beginning to emerge with force in the

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11The word ‘sustainable’ *has* been used in similar contexts in the past. A few hundred years ago for example, a strategy was conceived in Germany to enable foresters to preserve the forests that gave them their livelihood. This was referred to in English as ‘sustainable-yield forestry’ (Sutton, 2000, 2).
1960s, an era famous for counter-cultural rebellion in many parts of the world. As a result, the environmental movement that began in response to the challenging claims made by people such as Carson and Ehrlich was itself a counter-cultural project - one that questioned the bases of consumerism and technocratic faith (Jamison, 2001, 16). The mood of environmentalism was one of bunkering down to survive the ensuing onslaught, with few prospects for hope, and a somewhat anti-democratic tendency to appeal to authoritarian methods to limit disaster (Hay, 2002, 175). Established institutions were prompted to react. Governmental and educational departments concerned with the environment were set up, while new legislation was enacted to support environmental protection (Jamison, 2001). In 1968, The United Nations held the Biosphere Conference, to discuss a range of environmental problems with global reach.

David Korten suggests that in the US, where the new generation of ‘flower children’ was highly visible and vocal, the corporate establishment was clearly unnerved by the challenge issued to the consumerism underpinning corporate success. This generation, says Korten, was protesting the ‘excesses of affluence’ rather than simply exploitation and poverty, and in this way posed a ‘more fundamental threat to the system than had earlier generations of angry workers seeking a living wage and safe working conditions’ (1997, 63). They questioned the very promises of the pleasures of accumulation. In this climate in the US:

The names of consumer activist Ralph Nader and environmentalist Rachel Carson were becoming household words. Liberal democrats had firm control of Congress and were passing important legislation that extended the scope of governmental regulation (Korten, 1997, 63).

Since then however, says Korten, the radical influence of sixties environmentalism has been diluted. Korten claims that American-based corporations for example - simultaneously unnerved by the challenge to their market position emanating from corporations from Japan and Asia’s newly industrializing countries (NICs) - responded to the cultural unrest of the sixties by exerting significant political leverage (1997, 63). Over the following decades, considerable political force was applied in order to swing the pendulum away from radicalism and back towards neo-conservatism. Korten
identifies the beginning of Reaganism in the 1980s as a key moment in this effort (1997, 63).

The environmentalism that Rachel Carson epitomized had a scientific orientation and was therefore not particularly radical in terms of philosophical analysis. However other environmental perspectives such as deep ecology, social ecology and ecofeminism subsequently emerged which attempted to re-examine the foundations of ecological problems. They discussed the need for ecocentrism, for example, which was remarkable since as Fox notes, ‘For virtually the entire duration of Western intellectual history ethical discussion has not had any direct concern with moral obligations that humans might be thought of having toward the nonhuman world’ (cited in Hay, 2002, 29).

Deep ecologists such as Naess (1974, 1988) and Sessions (1974) rejected the ‘shallowness’ of the environmentalism that left industrial society’s supporting philosophies untouched and challenged many of its anthropocentric ethical assumptions. Ecofeminists such as Maria Mies (1993), Vandana Shiva (1989, 1993) and Val Plumwood (1993) engaged with subjects such as the relationship between the subjugation of both women and nature and the modernist tendency to rely on dualistic categories and reductionist thought. Murray Bookchin, a social ecologist, identified ‘hierarchy and domination as the source of all political pathologies - including environmental degradation, which is a consequence of the domination of some people by others’ (Hay, 2002, 289). While they have their critics, these radical theorists helped to set precedents for sustainability in terms of the need to attend to complex heterogeneity and to rethink familiar categories.

Thus, as embryonic notions of late twentieth century sustainability began to take shape they were pulled in various directions by this tussle between the radicalizing impetus of counter cultural voices and inertial dedication to the dominant modernist worldview. This dynamic between the radical and the conservative was (and still is) played out not only between individuals and groups with contrasting views, but also within them. As this contest continued, powerful political and economic organizations took tentative first steps towards reconciling the need to avoid the problems associated with development with their desire to perpetuate their own activities. By the early 1970s ‘protecting the
environment had become an expanding public-policy sector’, while ‘some even referred to the emergence of a “pollution industrial complex” that was trying to make money out of the cleaning up’ (Jamison, 2001, 17).

In 1972, the *Stockholm Declaration* was produced at the UN Conference on the Human Environment. Here, the term ‘ecodevelopment’ was used as a way to discuss the importance of the environment as a development issue (Dresner, 2002, 28). One hundred and thirteen nations agreed to begin to alleviate environmental degradation and pollution, the impacts of which were seen to often extend beyond the boundaries of individual countries to the global level (Newman and Kenworthy, 1999, 1). This effort was not without its critics however. Although the participants of this conference were particularly concerned with poverty in the developing world, the idea of ecodevelopment was met with suspicion from people from developing countries who thought it hypocritical of wealthier nations to counsel them about environmental damage. It was feared that environmentalists’ desire to stem the tide of environmental damage they saw as intimately connected to economic growth represented an attempt to condemn developing countries to permanent economic disadvantage (Newman and Kenworthy, 1999, 2).

According to Simon Dresner (2002), the notion of ecodevelopment was ultimately abandoned because of its association with the ideas Fritz Schumacher (1974) promoted in his seminal book ‘Small is Beautiful’. Schumacher lauded the benefits of ‘appropriate technology’ and criticized development strategies that largely ignored rural development while concentrating on western style urban development, says Dresner. Schumacher advocated the use of small-scale technology where appropriate, able to be constructed and used by local people, rather than relying on imported technologies aimed at macro-level projects. While practitioners such as enterprise facilitator Ernesto Sirolli (1999) have repeatedly demonstrated the merits of Schumacher’s ideas in grass roots community development strategies all over the world, Dresner suggests that to many ambitious leaders of so-called developing nations such strategies seemed to
condemn them to a future that did not include the benefits of modernity they desired (2002, 29)\textsuperscript{12}.

The Hardin-style ‘life-boat’ ethic of the early 70s, where it was thought that some would survive at the expense of the less fortunate, gradually yielded to the acceptance that it is not possible to separate people’s fates in such a ruthless manner, for moral as well as practical reasons (Hay, 2002, 177). This perspective within environmentalism was shared by other groups. In 1974, the World Council of Churches tabled a version of sustainability that foreshadowed the form to emerge in the late 1980s. This was an attempt to respond to charges emanating from the developing world in particular that concern for the environment often seemed to take precedence over concern for people (Dresner, 2002, 1). Social equity and the need for democracy were key considerations at this conference. The idea of a ‘just, participatory and sustainable society’ that emerged in the World Council of Churches was informed by concerns about the conditions people in developing countries faced, and a reluctance to deal with concerns about the environment that were seen as a ‘distraction from justice and development’ (Dresner, 2002, 30).

The idea of sustainability was referred to in documents such as The Cocoyoc Declaration on Environment and Development (1974) and The World Conservation Strategy: Living Resources for Sustainable Development written by the International Union for Conservation of Nature and Natural Resources in 1980 (Dresner, 2002). The World Conservation Strategy defined development as ‘the modification of the biosphere and the application of human, financial, living and non-living resources to satisfy human needs and improve the quality of human life’ (cited in Dresner, 2002, 30). Sustainable development was defined as ‘the integration of conservation and development to ensure that modifications to the planet do indeed secure the survival and

\textsuperscript{12}Ernesto Sirolli (1999) draws inspiration from the idea of appropriate technology, be it of a large or small scale, and the modesty of Schumacher’s approach to development strategies. Sirolli talks about two key ideas he gained from Schumacher:
1) If people don’t ask for help, leave them alone.
2) There is no good or bad technology to carry out a task - only an appropriate or inappropriate one. Something big, modern, and expensive is not necessarily best; it all depends on the circumstances (1999, 11).

The call here to adopt a modest rather than patronizing role, and to keep an open mind about what form of technology might prove most appropriate seems to be good advice for sustainability practitioners. Nonetheless, Dresner may be correct in his suggestion that Schumacher’s ideas did not fit comfortably with the modernist ambitions of certain influential people in the South.
well-being of all people’ (cited in Dresner 2002, 30). In order to accommodate development, conservation strategies were seen as necessary to manage ‘the human use of the biosphere so that it may yield the greatest sustainable benefit to present generations while maintaining its potential to meet the needs and aspirations of future generations’ (cited in Dresner, 2002, 30).

This definition bears a strong resemblance to the description of sustainable development offered by the Brundtland Report (WCED, 1990) seven years later, where the late-twentieth century notion of sustainable development was launched as a political ideal. However, Dresner suggests that the attempt to link environment and development in the World Conservation Strategy was not as politically acceptable as that conceived in the Brundtland Report because it was thought to be written by people representing the environmentalism of the elite, and did not attend to the sort of economic and political shifts that would be required to effect change (2002, 31).

**The Brundtland Report**

The World Commission on Environment and Development (WCED), chaired by Norwegian Prime Minister Gro Harlem Brundtland, was explicitly set the task of searching for a ‘global agenda for change’ (WCED, 1990, xiii). The Commission’s focus was globalising from the outset, concerned with the potential of the ‘international community’ to respond to various challenges. The WCED was also concerned with the long-term – in particular the rights of generations of people to come. The Brundtland Report ‘Our Common Future’, which the WCED first published in 1987, contains the most widely cited definition of ‘sustainable development’. Almost immediately it gained solid footing in political ground.

The central message of this report was that sustainable development is development that ‘meets the needs of the present without compromising the ability of future generations to meet their needs’ (WCED, 1990, 89). This idea of sustainable development represents an attempt to draw environmentalism into the mainstream in a more politically relevant form, and explain why it should be an essential focus of all those concerned with human welfare. Within sustainability, the various counter-cultural notions and sometimes radical analyses of the environmental movement of the late-twentieth century meet orthodox views of economics, development and progress,
resulting in a dynamic contest of meaning. The Brundtland definition of sustainability is therefore pliable and can be viewed through a radical lens or interpreted to support the activities of industrial society, albeit with some refinement. Newman and Kenworthy list four principles of sustainability they feel capture the essence of the Brundtland Report’s aims:

- the elimination of poverty, especially in the Third World, is necessary not just on human grounds but as an environmental issue;
- the first world must reduce its consumption of resources and production of wastes;
- global cooperation on environmental issues is no longer a soft option;
- change towards sustainability can occur only with community-based approaches that take local cultures seriously (1999, 23).

The Brundtland Report has radical elements. For example, the moral issue of equity that is an essential and explicit ingredient of sustainability poses a fundamental challenge to the ideology of the global political economy. The doctrine of neo-classical economics invests faith in the mechanism of the ‘invisible hand’ to provide the best outcome for society (Smith, 1991). It focuses on the individual as the critical locus of action, suggesting that individuals guided by enlightened self-interest in a market accompanied by perfect information, will inevitably lead us to an optimal outcome. It emphasises the desirability of competition rather than cooperation. Equity is not an ambition of neo-classical economics. By contrast, sustainability sets out to consciously evaluate the likely effects of human action on systems and groups, and to remain sensitive to the need to adjust individual behaviour when it results in negative cumulative effects. Equity matters in sustainability.

At the same time, it is argued that the Brundtland Report is in many respects reformist rather than radical since it is used to support the idea of ‘ecological modernization’ - that is, the view that ecological problems are best dealt with by refocusing the rational tools of modernity with a greater degree of environmental sensitivity (Robbins, 2001, 25). In this way, the counter-cultural environmentalism of the 60s is redirected so that the confronting task of grappling with the hidden values of modernity is avoided to some
Although it was geographically and temporally expansive in certain senses, the Brundtland Report was primarily informed by convention in its treatment of basic concepts such as development and economic growth. Gro Harlem Brundtland described the WCED’s members as coming ‘from widely differing backgrounds’. However contributors tended to be drawn from amongst ‘Foreign ministers, finance and planning officials, policymakers in agriculture, science and technology’ – in fact, ‘Many of the Commissioners (were) cabinet ministers and senior economists in their own nations’ (WCED, 1990, xvi). The resultant report emphasized the importance of pursuing sustainable development by utilizing rather than overhauling or replacing existing institutions and systems of modernity. The hegemonic political economy retained centre stage. The report states:

In practice, and in the absence of global management of the economy or the environment, attention must be focused on the improvement of policies in areas where the scope for co-operation is already defined: aid, trade, transnational corporations, and technology transfer (WCED, 1990, 119, 120).

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13 It is often suggested that sustainable development is a project of modernity. Postmodernists have defined modernity as project that ‘was an idealisation of society which sought to build on Enlightenment thought. It focused on universal values, and drew nourishment from the belief that history is a process of advancement towards the realization of those values…modern social theory epitomized the belief in history as progress’ (Dodd, 1999, 1). Like Dodd, I support the use of the terms modernity and postmodernity as ‘generic terms which refer to normative projects’, that is, ‘a system of thought and belief which is concerned in some way with improving society…(with) values and ideals that are not only implied but in question’ (1999, 2). He explains that ‘In normative terms, the project of modernity is primarily concerned with the achievement of synthesis or universal consensus’ (1999,7). Dodd uses the term modernity to refer to the associated normative project, rather than to a particular society or period of history (1999, 3).

Dodd proposes that we reject the project of modernity for theoretical reasons. He argues that modernity ‘can only be sustained by a theoretical approach which generalizes historical outcomes and cannot deal with contingency’ (1999, 214). This is a vital observation to come to terms with in regards to sustainability, which purports to deal with specific local outcomes as well as global ones, and aims to cope with contingency.

In terms of historical periods, Giddens suggests that ‘modern’ society can be defined as ‘those modes of social life or organisation emerging in Europe from around the seventeenth century, and which subsequently have become worldwide in their influence (Dodd, 1999, 1). Dodd’s description of postmodern society also provides an interesting perspective relevant to discussions of sustainability. He defines postmodern society as ‘those modes of reorganization of social institutions and social life which began to emerge during the late 1960s, and which primarily consist of a growth in information technology, global communications media and the service sector; an expansion of exchange relations in consumerism and financial markets; and increasing cultural pluralism’ (1999, 3).
The view of sustainable development most closely linked to the dominant political economy relies on the promises of ‘ecological modernisation’, or ‘ecomodernisation’, which stresses the structural character of environmental problems, while advocating that change can come from a more ‘benign’, more environmental development process. It acknowledges in certain respects that the previous character of socio-economic growth was flawed. It maintains that ecological problems can only be remedied through further economic development, through further ecologically intensive modernization. Society, including corporations, governments and consumers among others, can therefore modernize itself out of the ecological crisis (Robbins, 1999, 24).

From this perspective, problems of environmental destruction and social disruption were brought about by the mis-application of modernization strategies, a situation that should be remedied by a more sophisticated deployment of the engines of modernization.14

The idea that institutional learning will facilitate the move to a more ecologically and socially sensitive mode of development is a central theme of ecomodernization. It assumes that institutions as they exist, such as corporations, are able to ‘internalize ecological concerns or at least influence new types of transnational management that can deal with relevant issues’ (Robbins, 1999, 26). This view depicts sustainability as something to be installed by corporations as an added internal feature in order to better equip them to cope with new challenges, rather than as a new outlook challenging organizational identity itself. Taking up this theme, Davison suggests that a central aim of ecomodernist sustainable development is to ‘vigorously defend a form of biosphere management that maximizes market freedoms and corporate efficiencies’ (2001, 42). In other words, sustainable development is to be used to sustain corporations and other artifacts of modernity, rather than the other way around.

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14 This follows Huber’s suggestion that there are three stages in the development of industrial society: 1. The industrial breakthrough 2. the construction of industrial society; and 3. the ecological shift of the industrial system through the process of what he calls ‘superindustrialization’ linked to the development of new technologies (Huber cited in Robbins, 2001, 24).
While the authors of the Brundtland Report were prepared to level criticism at the negative effects of some development strategies, they adhered to hegemonic modernist notions of progress and development as indispensable. While they felt that their view of development had ‘broadened’, they continued to appeal to concepts and terminology from the old paradigm to describe the way forward:

We came to see it not in its restricted context of economic growth in developing countries. We came to see that a new development path was required, one that sustained human progress not just in a few places for a few years, but for the entire planet into the distant future (WCED, 1990, 4).

This quotation displays the spatial and temporal ambitions of the Brundtland Report - we need a (single) development path (the same march forwards for everyone) for the entire planet (geographically speaking for the global human population) into the distant future. It is a universalizing outlook.

The WCED did include input from public hearings in order to give voice to the concerns of a variety of people, some of which challenged dominant ideas of progress and development. Jaime de Silva Araujo pleaded for people to be allowed to live their lives outside the parameters of modernist progress:

When they think of falling trees, they always think of building roads and the roads bring destruction under a mask called progress. Let us put this progress where the lands have already been deforested, where it is idle of labour and where we have to find people work, and where we have to make a city grow. But let us leave those who want to live in the forest, who want to keep it as it is (WCED, 1990, 102).

In other words, Araujo counsels us to pursue ‘progress’ only where progress has already damaged life support systems, unraveled social systems and where it can do comparatively little further harm, and do not inflict progress on otherwise healthy traditional systems if people choose them. It is a radical cry that directly challenges the hegemonic version of development and sustainable development.

Araujo’s comments are a warning that sustainability’s ambition in terms of its geographical and political reach should not be confused with universal cultural appropriateness. The Brundtland Report offers sustainable development as a vehicle
capable of encompassing the concerns of everyone from grassroots activists to the CEOs of multinational corporations (MNCs). It offers ethnocentric endorsement of the scope of western science and economics, and the corporations that arise at the junction of the two, to deliver sustainability to a single global community unified in its concerns. The way in which the report refers to countries being at different stages of economic development and, with alarming condescension, different stages of social development demonstrates bias (WCED, 1990, xiii). Juxtaposing countries as more or less ‘developed’ leaves Indigenous culture at the bottom of a hierarchy and undervalues local knowledge, an act that undermines our potential to live sustainably. As Jull reminds us:

*Sustainable development* is not an idea, let alone a white man’s idea imposed on indigenous peoples or their territories - it is a daily lived reality, an organic part of evolved and evolving indigenous economies, societies, cultures, and self-identifying political communities. Sustainable development did not need reports or even written language to be established in hinterlands, being integral to indigenous oral knowledge and sheer survival (2002, 18).

Jull asserts that the discourse of sustainability, rather than being a gift from the modernized to the yet-to-be-modernized, offers an opportunity for Indigenous people to explain ‘the sustainable development concept and its implications to non-indigenous authorities and experts’ (2002, 19). Jull deconstructs the hierarchy of ‘development’:

Of itself sustainable development has turned the tables on the White Man’s previously assumed cultural superiority and knowledge, e.g., by revealing that old illiterate hunters from the High Artic in Greenland or Canada may know quite a lot which gobsmacks and re-orient dark-suited and expensive regulatory board project inquiries full of university experts and…professionals (2002, 19).

Clearly, the arguments outlined in the Brundtland Report are by no means perfect, nor are they always consistent. Despite its problems, however, the Brundtland Report is a watershed document that is politically acceptable enough to promote the sustainability agenda. Governments and international agencies quickly adopted the term and it continued to be explored and endorsed at the 1992 United Nations Conference on Environment and Development (UNCED) - referred to as the Earth Summit - in Rio de Janeiro.
The Earth Summits

The novelty of the Earth Summit held in Rio de Janeiro was, according to Wolfgang Sachs, that ‘for the first time, the governments of the world jointly acknowledged the threat of the ecological crisis and moved to formulate common obligations for conducting politics in the future’ (1993, xv). Newman and Kenworthy (1999, 2) note that one of the essential differences in approach between the Earth Summit and the 1972 UN Conference in Stockholm was that in Rio the environment was tied to the economic agenda, whereas twenty years earlier it had been restricted primarily to the political arena. In 1992, sustainability was presented as a call to simultaneously address environmental problems and facilitate the economic development of poorer nations. In this way, the attempt was made to recognise the concerns that were voiced after Stockholm by representatives from developing countries. Participants in the Earth Summit underscored the need for inclusive and broad participation from the grassroots up, rather than reliance on expert knowledge and top-down approaches.

At Rio, the central themes of the Brundtland Report were extensively explored. Three pillars of sustainability were identified: economic development, environmental development and social development. People wanted to preserve the environment, they saw the moral and political need to safeguard societies, and tried to respond to the concerns of developing countries that wished to increase their economic capabilities. However, critics argue that the divisions between categories of economy, environment and society are the result of a particular cultural reading of the world - that of the North - rather than something real that has been discovered, however. As feminist author Judy Wajcman cautions: ‘even where the nature/culture dichotomy exists, we must not assume that the Western terms ‘nature’ and ‘culture’ are adequate or reasonable translations of the categories other cultures perceive’ (1991, 10). Furthermore, concern for the ‘global environment’ is not shared by all to the same degree, for instance. Redclift argues that ‘Poor communities … are principally occupied with establishing sustainable livelihoods within their local environments. Such communities are only rarely occupied with, predominantly Northern, concerns about the sustainability of the “environment” ’ (cited in Davison, 2001, 45).
Several significant documents were produced at the Earth Summit such as The Framework Convention on Climate Change, The Convention on Biological Diversity, and The Statement on Forest Principles (UNCED, 1997). The Rio Declaration in Environment and Development outlined 27 essential principles of sustainability. Agenda 21, and The Commission on Sustainable Development created to oversee the implementation of Agenda 21 strategies, provided a blueprint to explore the practical aspects of sustainability (UNCED, 1997). However, these documents have not been roundly hailed as successful. Some of the most successful outcomes in terms of promoting sustainability have emerged from Local Agenda 21 (LA21) strategies, a subsidiary of Agenda 21. Here, the main focus for action is at local government level.

Corporations at the Earth Summit

Nicholas Hildyard (1993) is highly critical of the corporate sector’s influence on the proceedings of the Rio Earth Summit. He alleges that people representing corporate interest had privileged access to the summit’s Secretariat and were therefore able to promote their own agenda more powerfully than other groups. As a result Hildyard asserts that transnational corporations (TNCs) were ‘treated with kid gloves’ and appeared in the final documents ‘as key actors’ in the promotion of sustainable development (1993, 22). The best that can be said for the Earth Summit, says Hildyard, is that ‘it made visible the vested interests that stand in the way of the moral economies that local people are seeking to re-establish in the face of day to day degradation of their rivers, lakes, streams, fishing grounds, rangelands, forests and fields’ (1993, 23).

Critics also point to the way that prior to the Earth Summit, the International Chamber of Commerce (ICC) and the Business Council for Sustainable Development (BCSD) - a group formed specifically to participate at Rio - successfully lobbied to avoid the regulations proposed by the UN Center for Transnational Corporations (UNCTC) in favour of a voluntary code of conduct. Not only were its suggestions defeated, the UNCTC itself was closed down before the Earth Summit began (Davison, 2001, 48, 49).

One important outcome of the Rio Summit was the creation of the World Business Council for Sustainable Development (WBCSD), which was intended to facilitate input from business into the implementation of Agenda 21 (DeSimone and Popoff, 1998,
The WBCSD merged two organizations: the Business Council for Sustainable Development and the World Industry Council for the Environment (WICE). DeSimone and Popoff, authors of *Eco-efficiency: The Business Link to Sustainability*, identify two broad aims of the WBCSD: “one is to develop closer cooperation among business, government, and all other organizations concerned with the environment and sustainable development. The other is to encourage high standards of environmental management in business itself” (1998, xxii).

Since the Earth Summit, eco-efficiency has become an important focus for sustainability. At Rio, the BCSD promoted the idea as a strategy for business to promote sustainability. Eco-efficiency refers to business strategies that promote economic gain while minimising resource use and environmental pollution. Maurice Strong, as head of the World Business Council for Sustainable Development (WBCSD), described eco-efficiency as being able to help developed countries improve their resource productivity, encourage developing countries to reach their full potential without depleting their material resource heritage, and provide governments with the essentials to develop innovative and pragmatic policies that energize and enable society to become sustainable (cited in DeSimone and Popoff, 1998, viii).

The emphasis here is on technocratic solutions to environmental problems that simultaneously enhance business profitability. This orientation offers the tantalising promise of ‘win-win’ solutions and the relative comfort of being able to focus on objective measurements of improvements in efficiency, thus avoiding the unquantifiable ethical quagmires of sustainability. However, notions of ‘resource productivity’, and ‘encouraging’ the ‘full potential’ of ‘developing’ countries are rife with value judgements. In fact, one could disappear into a critique of the subjectivities underlying DeSimone and Popoff’s comment (1998, viii) and not re-emerge until well into ‘the distant future’ the Brundtland Report refers to.

Wolfgang Sachs suggests that only a very few people believe that the Earth Summit was a success, while many more feel that it was at least a worthwhile start on a long journey, and some people consider it an outright failure (1993, xv). Sachs himself is highly critical of the way ecological concerns seemed to be co-opted by the powerful to the
extent that once radical opposition stemming from environmentalism lost its sting, or worse still, was transformed into as instrument of domination. Sachs alleges that

ideas and concepts - like 'risk', 'eco-system', 'sustainability' or 'global' - which were once hurled from below to the élites at the top, began now to bounce back from the commanding heights of society to the citizens at the grassroots (1993, xv).

The World Summit on Sustainable Development

The World Summit on Sustainable Development (WSSD) took place in Johannesburg in 2002. Authorised by the United Nations General Assembly, the Summit was convened in the knowledge that sustainable development as touted in the Rio Summit had not been implemented adequately. The General Assembly expressed the hope that the WSSD would provide actions and results rather than another political or philosophical debate (United Nations, 2002).

The Johannesburg Declaration on Sustainable Development (WSSD, 2002b) and the Plan of Implementation (WSSD, 2002a) were both produced at the Summit. These documents reaffirmed the commitment to sustainable development, and the Rio principles in particular. The Plan of Implementation included the promise to ‘further build on the achievements made since UNCED and expedite the realization of the remaining goals’ (WSSD, 2002a, n.p.). A number of targets were set at the Summit, including the need to:

- halve the proportion of people without access to basic sanitation by 2015;
- use and produce chemicals by 2020 in ways that do not lead to significant adverse effects on human health and the environment;
- maintain or restore depleted fish stocks to levels that can produce the maximum sustainable yield on an urgent basis and where possible by 2015; and
- achieve by 2010 a significant reduction in the current rate of loss of biological diversity (United Nations, 2002, n.p.).

More than 300 voluntary partnerships created to implement sustainable development arose from the WSSD’s meetings. A change in the level and type of interaction
between people and groups from governments, the private sector and society was noted: ‘participants in the Summit were forced to confront the needs and the arguments of other actors in a truly interactive dialogue’ (United Nations, 2002, n.p.).

The business contingent approached the Summit with the aim of participating under the understanding that ‘whatever our contribution to complex problems, we also (represent) a substantial and necessary part of the solution’ (Holme, 2003, 1). Corporate sector organizations wanted to ‘upgrade business participation and representation from the levels achieved at Rio’ (Holme, 2003, 1). This contrasts with Hildyard’s (1993) evaluation of corporate influence at UNCED as being too great.

Evaluations of the WSSD’s success varied widely, and there were many criticisms. Some NGOs argued that it failed to support a shift to non-polluting, renewable sources of energy ‘and to provide the many companies taking action to reduce emissions with a secure framework for their actions’ (Lash, cited in United Nations, 2002, n.p.). Representatives from Small Island Developing States (SIDS) also expressed concern about the lack of action to encourage the production and use of alternative energy sources, and worried about the difficulties of dealing with the trade impacts of globalization (United Nations, 2002, n.p.). Members of the business community were frustrated by what they saw as a lack of focus associated with attempts to ‘include every sort of interest and preoccupation’, and identified serious tension between the Summit’s environmental and social agendas (Holme, 2003, 1). Corporate representatives also expressed disappointment at most NGO’s failure to acknowledge the business case for economic growth, provided that it protects the environment and benefits society (Holme, 2003, 1, 2).

Despite the efforts of participants at the Earth Summit and subsequent meetings such as the review summit Rio +5 held in New York and the World Summit on Sustainable Development (WSSD), criticism continues to be levelled at the lack of satisfactory adoption of more sustainable practices worldwide and the need to live more sustainably remains urgent. To this end, the UN Decade of Education for Sustainable Development (UNDESD) began in December 2002, with the hope of achieving a ‘world where everyone has the opportunity to benefit from education for societal transformation’ (Tilbury and Wortman, 2004, viii).
**Sustainability’s appeal**

The notion of sustainability has proven to be politically palatable to a wide range of people. Somehow, the idea of sustainability has, as sociologist Alan Irwin puts it, ‘managed to construct an apparent unity out of a divergent set of environmental voices’ (2001, 27). Some critics suggest that this appeal is largely based on the concept’s amorphous character, which they suggest renders it impotent. Donald Worster, Professor of Environmental History at the University of Kansas, asserts that the kind of unity Irwin refers to is unsatisfactory and illusory and relies on shallow thinking. Under the banner of sustainability, says Worster, it is implied that

> The North and the South…(can) now make common cause without much difficulty. The capitalist and the socialist, the scientist and the economist, the impoverished masses and the urban elites (can) now all happily march together on a straight and easy path, if they (do) not ask too many potentially divisive questions about where they (are) going (1995, 133).

How did the discourse of sustainability come to be politically influential in the contemporary world?15 Some people suggest that the comforting ‘motherhood’ qualities of sustainable development explain the attraction and acceptance of the concept. In other words that we want to believe in promises of long term ‘human well-being and ecological security in a world of peace, goodwill, and cultural tolerance - not brought to heel by ecological collapse, militaristic anarchy or debilitating greed’ (O’Riordan, cited in Davison, 2001, 39).

Simon Dresner (2002) feels that the concept of sustainability has gained popularity as a way of linking environmental and development issues partly as a result of a perceived lack of rhetorical power associated with purer forms of environmentalism. Sustainability has political marketability that environmentalism by itself does not, argues Dresner. While it is true that since marine biologist Rachel Carson stoked the fires of environmentalism in 1963 with her book *Silent Spring* the environment has become a serious political topic, it remains peripheral and unfashionable in many quarters. Sustainability, on the other hand, can be packaged in a far more unavoidable way, particularly when dressed as ‘sustainable development’, particularly because

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15 See Simon Dresner (2002) or Aidan Davison (2001) for useful summaries of the recent emergence of the concept of sustainability.
development, like ‘progress’, is a normatively positive aim of modernity. In this context, to call for a ‘sustainable’ form of development is to imply that the option is to develop ‘unsustainably’. To admit you are willing to continue to behave unsustainably is ‘tantamount to admitting you are intellectually incoherent’, says Dresner (2002, 1). Furthermore, the notion of sustainable development offers the chance to sidestep dichotomies of choice such as that between development and environment - an arrangement of categories that has proven to be limiting and diversionary.

This repackaging of environmentalism is regarded by many as a problem rather than a solution - a way of avoiding the most challenging questions posed by environmentalists and retreating into familiar territory. Critics such as Worster (1995) feel that sustainability is built on shaky conceptual ground because of this. Worster feels that it would be more appropriate to seek ‘an environmentalism that talks about earth ethics and aesthetics rather than about resources and economics, that places priority on the living world of plants and animals on which our own survival depends, and that focuses on what nature’s priceless beauty can add to our emotional well-being’ (1995, 133). The bottom line for critics such as Worster is that whatever human social systems we devise, economic or otherwise, we simply must have a healthy biosphere to run them in, as a prerequisite.

As the discourse of sustainability has evolved, the difficult philosophical dilemmas that come with the territory have been acknowledged and dealt with to varying degrees, ranging from critical indifference and acceptance of a status quo more or less fine-tuned, to interpretations that emphasize the need for radical change. Many people have attempted to summarize the core ideas of the concept of sustainability and anchor it in the ‘real world’. The Commission on Education and Communication (CEC) states simply that ‘Sustainable development is about seeking a better quality of life’ (Tilbury and Wortman, 2004, 8). Simon Dresner suggests simply that ‘the debate about sustainability could be defined as the ideas that emerge when concern for the global environment and concern for global justice meet’ (2002, 30). In their work on cities and sustainability, Newman and Kenworthy suggest that in its most basic form, sustainability ‘means simply that in a global context any economic or social development should improve, not harm the environment’ (1999, 1). Similarly, Pope emphasizes the need to achieve positive environmental, social and economic benefits in
the name of sustainability rather than simply to minimize harm, with the potential for synergistic improvements in these areas being one of the ‘great opportunities that sustainability offers’ (2004, 3).

Jacobs identifies three core areas of meaning of sustainable development as being ‘the entrenchment of environmental considerations in economic policy making; a commitment to equity; and an appreciation that ‘development’ is wider than growth’ (cited in Springett, 2003b, 73). In his discussion of the sociological aspects of sustainability discourse, Alan Irwin identifies sustainability as a Club of Rome style ‘global problematique’ (2001, 35). He focuses on four main underlying themes:

- a presentation of the kinds of social and institutional change being required (in terms of both scale and form);
- notions of globality and, linked to this, of togetherness in the face of environmental threat (both embodied within the notion that this is our common future);
- an argument for democracy, empowerment and participation as an essential means of achieving sustainable development;
- and, at the broadest level, an evocation of the crisis with which we are confronted (2001, 34).

Both Dresner and Irwin note the way in which social and environmental concerns are explicitly merged in much sustainability discourse, although the ontological distinction between these two categories usually remains intact. Irwin also brings attention to the crucial reliance on the ‘scientific’ forms of environmental knowledge predominantly relied upon to guide decision making processes. As Irwin notes, this tendency has important ramifications in terms of the social aspects of sustainability discourse (2001, 35).

Keith Pezzoli (1997) offers a political ecology of sustainable development. Like Irwin (2001), he identifies four main areas of concern for sustainability, although these have slightly different emphases. The model he drafts is built on the ‘articulat(ion) of four key challenges concerning: (1) holism and coevolution, (2) social justice and equity, (3)
empowerment and community-building, and (4) sustainable production and reproduction’ (1997, 10).

Newman and Kenworthy adhere to the three-pillared model of sustainability. They describe it as

a global political process that has tried to bring together, simultaneously, the most powerful needs of our time: (1) the need for economic development to overcome poverty; (2) the need for environmental protection of air, water, soil and biodiversity, upon which we all ultimately depend; and (3) the need for social justice and cultural diversity to enable local communities to express their values in solving these issues (1999, 4).

The point that the current discourse of sustainability emerged as the result of a global political process enacted by powerful members of the ‘global community’ is an important one in terms of understanding its original emphasis and subsequent attempts to refine or transform it. It was formulated largely by disciples of modernity using familiar models. It is thus presented as a reconfiguration of old ideas. Critics of the form of sustainability tabled in the Brundtland Report must challenge views propelled by the weight of enormously powerful organizations of the global political economy.

Carrying his analysis further, Peter Newman identifies two groups of principles essential for sustainability: foundation and process principles. In his list of foundation principles he includes items such as long term economic gain; access, equity and human rights; biodiversity and ecological integrity; settlement efficiency and quality of life; community, regions, ‘sense of place’ and heritage; net benefit from development and; attention to the common good. The process principles he identifies to achieve these aims are: the integration of economic, social and environmental factors; accountability, transparency and engagement; precaution and; hope, vision, symbolic and iterative change (2003, 3).

The way these categories are often represented in Venn diagrams is revealing (see Figure 2.1). They are usually depicted as interlocking circles of equal size, with sustainability lying at the intersection of the three (sometimes four, if culture and society are included separately). This three-pillared model is just that - a model, and it does serve a purpose. It is a useful introduction to sustainability. However it reinforces
particular mythologies and implies certain things about their relative importance if regarded uncritically. The cultural origins of the idea of ‘environment’ are also underplayed by visually separating culture from environment, for example. The ontological distinction between people in their societies and the environment arises from cultural visions of the West. Meanwhile, the economic circle rests largely outside the environmental and socio-cultural spheres as if economics was not a socio-cultural construct and could exist without a healthy environment, and as if the neo-classical version of economics was universally desirable.

Informed by the long history of the planet, however, we know that ecological systems can exist in the absence of human economic systems, whereas the opposite scenario is virtually impossible to imagine. Perhaps the circle of economics should reside within the environmental circle, or since it is after all a cultural project, perhaps it should be included without direct reference within the socio-cultural sphere as just one of a multitude of other concerns. Perhaps the environmental circle should be the largest, incorporating the socio-cultural sphere, of which the neo-classical economic sphere would in turn be a subset. Perhaps the circles themselves should be discarded and a more appropriate model provided, or at least a wider array of models might be utilised. Many of the people supposedly of central concern when pursuing sustainability objectives may not be familiar with this type of symbolism, nor limited by the ideas its form suggests.

**Weak and strong sustainability**

A distinction has also been made between ‘weak’ and ‘strong’ sustainability according to how radical their requirements for reform are, and in their analysis of the causes of unsustainability (Kallio et al., 2007; Jacobs, 1999; Davidson, 2000; Giddings et al., 2002). The boundary between the two versions of sustainability is not absolute – it is more of a continuum than a dichotomy (Kallio et al., 2006). It is argued that weak and strong sustainability can be differentiated according to their interpretation of what constitutes capital stock and the interchangeability of natural and human-made capital (Jacobs, 1999; Kallio et al., 2007). The weak version of sustainability is based on the idea that human made capital can act as a substitute for natural capital, whereas the strong version insists that only ‘natural’ capital stock should be considered (Jacobs 1999; Ayres et al., 2001; Kallio et al., 2007). Jacobs (1999) also identifies a slight
distinction between weak and strong *sustainability*, and weak and strong *sustainable development*, although he concludes that they are essentially the same.

**Figure 2.1: Three pillars of sustainability**

![Three pillars of sustainability](image)


According to Jacobs, weak *sustainable development* aims to protect the environment where it can, provided the imperatives of economic activity are not unduly compromised. Weak sustainability focuses on environmental issues as opposed to questions of development (Kallio, 2007, 42). As Jacobs notes, ‘No aspect or ‘level’ of the environment is regarded as inviolable, at least until countervailing economic benefits have been assessed’ (1999, 31). Governments and corporations tend towards this stance. Weak sustainability is informed by an anthropocentric world-view in which consideration of intragenerational equity is largely absent. The non-human world is treated as a ‘resource to be mastered and deployed’ (Kallio, 2007, 42). Weak sustainability tends to support ‘authoritative and coercive structures, such as market
forces’ while stronger versions of sustainability endorse ‘participatory, transparent and
democratic processes’ (Kallio et al., 2007, 42).

The strong interpretation of sustainability emphasizes the idea that there are
unavoidable environmental limits to the expansion that economic agents can expect to
achieve (Jacobs, 1999, 31). Strong sustainability emphatically rejects normative
distinctions between humans and the more-than-human world and attempts to
simultaneously achieve appropriate development where it is required while maintaining
environmental integrity (Davidson, 2000; Kallio et al., 2007; Ayres et al., 2001).
Supporters of strong sustainability tend to reject corporate eco-efficiency strategies as
inadequate methods of promoting sustainability by definition (Welford, 1997; Kallio et
al., 2007). Weak sustainability focuses on *means* while strong sustainability focuses on
*ends*:

For the advocates of strong sustainable development, the concept above all
stands for a radical change regarding the *ends* of social actions. On the
other hand, for corporations and business conservatives, sustainable
development primarily stands for a *means* to their traditional, never-
questioned ends: an increase in profits and shareholder value (Kallio et al.,
2007, 49).

Both perspectives contain flaws. Weak sustainability ‘cannot have (its) roots in the
ideal of balance between the economic, ecological and social dimensions of
development, even if the rhetoric claims the opposite’ (Kallio et al., 2007, 42). Strong
sustainability favours deep structural change which may be impractical in the short
term (Kallio et al., 2007, 43).

**Dissatisfaction with the concept of sustainability**

At the Greening of Industry Network (GIN) Conference in San Francisco in 2003, the
story of NASA’s achievement in reaching the moon was offered as inspiration to
supporters of sustainability. NASA fulfilled the request from the American President to
reach the moon even though at the time the task was set they lacked the technology or
knowledge to complete their mission. In the face of seemingly insurmountable odds,
and starting from a very uncertain position, they succeeded. So too can we achieve
sustainability, it was argued. Someone responded by dryly pointing out that NASA
knew where the moon was, and we have no idea where sustainability is. The speaker
was referring to the confusion and disagreement about what sustainability actually means. Sustainability has been described as ‘slippery, ill-defined and self-contradictory’ (Irwin, 2001, 34).

The lack of an immutable definition of the notion of sustainability is often identified as a crippling deficiency. The argument is that until we know exactly what the term ‘sustainability’ refers to, and how best to measure it, we cannot achieve it. However, theorists such as Michael Jacobs (1999) and Aidan Davison (2001) suggest that the problem for those wishing for objective definitions is that sustainability is a contested political concept, as it should be. Jacobs places sustainability in the same conceptual family as other widely accepted normative concepts such as democracy, liberty and social justice (1999, 25). These complex concepts, he says, have ‘two levels of meaning…The first level is unitary but vague’ – a shorthand signifier that is easily recognizable and involves an idea that is readily endorsed by many people (Jacobs, 1999, 25). The second level is where the complexity lies. Here, the interpretative work begins - we ask questions about how we should implement the central themes of the concept in a practical sense. According to Jacobs, ‘Such questions reflect alternative conceptions of the concept’ (1999, 25). Davison argues that despite the fact that the language of sustainable development is ‘conceptually incoherent and politically compromised’ it is a ‘culturally rich discursive domain’ worth exploring (2001, 41).

Jacobs (1999) observes that even people who disagree on the nuances of such concepts can agree on extreme examples where the core ideas of such concepts are not in place. It may be easier to identify practices that are blatantly undemocratic than to be confident that the purest form of democratic governance has been implemented in a given situation, for instance. In the same way, it is often easier to identify extremely unsustainable practices than ones that are irrefutably sustainable.

Jacobs (1999) insists that the elasticity necessary to permit a unitary statement of such contestable concepts should not be interpreted as an indication of either lack of intellectual substance or likely usefulness. Not everyone finds this standpoint reassuring, however. Springett’s (2003b) research in New Zealand highlighted some business peoples’ concerns about the meaning of sustainability. Here it was suggested by some that the notion of ‘sustainable development’ should be ‘translated into
something more meaningful’ so that it is useful. This view is held by many people who draw their inspiration from liberal free-market approaches underpinned by a trust in rational objectivity (Springett, 2003b, 77; Kallio et al., 2007). Some of the people contributing to this research expressed dissatisfaction with what they perceive to be the pejorative aspects of sustainable development associated with an ‘element of religion’, something like a ‘fashionable international movement’, ‘buzz words’, with ‘emotion’ dominating the science in the debate (2003b, 77).

Such technocratic views suggest that ‘sustainable development can only be made ‘operational’ in policy terms if a single and precise meaning can be agreed upon’ (Jacobs, 1999, 24). From this perspective, the awkward ethical and moral questions posed by sustainability are lamented as being too difficult to process by rational means. What if we have to choose between saving someone’s leg and preserving biodiversity? How do you measure quality of life? How are we to get where we are going when we cannot map our destination? How are we to cope with such uncertainty?

**Progress and development**

Concern about the elusive meaning of sustainability is no reason to abandon the concept in favour of a more orthodox version of Truman-style development, since careful analysis of what constitutes ‘development’, even unencumbered by the extra confusion of sustainability, leaves us in no less a contested position. What actually constitutes development? What do we mean by progress? Despite their amorphous character, notions of progress and development are so deeply ingrained in the modern world that it is almost heretical to criticize them. José Mariá Sbert describes this quasi-religious dedication eloquently:

progress is more than just a journey or an ideal. It is modern destiny. To modern man, and to those who want to share his identity, rejecting faith in progress is unbearable. Modern man is defined by progress. His self-esteem is rooted in it and it is his deepest justification for the ruthlessness he displays towards his fellow men and nature (1996, 195).

Sbert warns that the idea of progress - to which ‘development’, and hence ‘sustainable development’, are intimately related - has its ‘proper home base on earth (in) the First World’ (1996, 195). The attempt to transpose the agenda of sustainable development to
every corner of the planet is therefore seen by many as a colonizing move that spreads responsibility amongst people who have been unequal recipients of the gains and harms of development to date. The point is not that change and novelty are undesirable in themselves, but that the term ‘development’ is often taken to refer to a specific form of change with roots in particular and not universally accepted conceptions of the purpose and direction of human existence.

In its cultural home territory ‘development’ is normatively positive. To say something is developed is to suggest that something good happened to it. Some countries are developed, others are still working on it, and when development is uncritically assumed to be inherently desirable, it follows that some countries are better, or at least more advanced, than others. From this limited, ethnocentric perspective it is very tempting for the ‘more developed’ to assume patronizing relationships with the ‘less developed’. This view is inappropriate for sustainability, since it subordinates Indigenous or local knowledge, values and priorities. Carley and Christie suggest using terms such as ‘higher income’ and ‘lower income’ in preference to ‘developed’ or ‘developing’, in order to challenge such mistaken perceptions (1994, 41).

Sbert describes progress as the fruit of ‘false consciousness …ethnocentric, class-orientated and self-interested self-deception’ (1996, 201). It is shallow arrogance, as he sees it. The eschatological lie of progress - the false confidence in progressive emancipation and revelation of truth - is exposed, says Sbert, by the way it actually ‘annihilates the world as it is.’ Far from bringing us closer to reality and affirming ‘sense of place, rhythm, duration and culture’, he says, it deifies a ‘world of abstractions, a non-world - of homogenous space, linear time, science and money’ (1996, 201). Sbert contends that ‘Progress explains current phenomena inconsistent with its promise by reference to future perfection’. Sustainable development may not claim to seek a permanent utopia but it certainly reiterates the modernist desire to progress to a less imperfect future.

Development, sustainable development and neocolonialism

The risk of promoting neo-colonialism accompanies sustainability at every turn. Sustainable development is ambitiously offered as a concept with global reach, identifying unsustainable practices of development as a problem that ‘we’ all share.
Sustainable development plots the same linear course into the future for all cultures, including those that may not invest the same faith in economically orientated ‘progress and development’ as the defining projects of humankind, or draw the same confident ontological distinction between humanity and everything else.

Edward Goldsmith (2001), founder of The Ecologist Magazine, portrays the hegemonic form of development as simply a continuation of forms of colonialism on which the material advantages enjoyed by the supposedly ‘more developed’ have been built. Goldsmith, contends that ‘Development is just a new word for what Marxists call imperialism and what we can loosely refer to as colonialism - a more familiar and less loaded term’ (2001, 20). If Goldsmith is correct in his view that ‘development’ is a synonym for ‘colonialism’, then promoters of sustainability face a hard task if they are to avoid the simple translation of the term ‘sustainable development’ into ‘sustainable colonialism’.

The contributors to the Brundtland Report and the Earth Summit explicitly focused on local communities as a vital locus of action. However, this in itself has not been sufficient to avoid charges of neocolonialism. In fact, the goals of social justice and freedom promoted within the discourse of sustainability can be thought to be related to the application of power. Sbert explains: ‘As Hobbes understood long ago, freedom can only be guaranteed by the capacity to dominate others’, in other words, by wielding power of some description (1996, 196). Sbert continues:

Progress defines reality through the manifold influence of power. Those who have progressed more, and continue progressing, are stronger and wealthier and inexorably prevail, no matter whether the instrument be missionary and educational institutions, or the East India Company, or Commodore Perry or, equally well, simply the spontaneous and overpowering desire to imitate the rich and the famous (1996, 196).

The Brundtland Report emphasizes the need to achieve ‘common and mutually supportive objectives’ and ‘define shared perceptions of long-term environmental issues’ (WCED, 1990, xiii). This view, while it has certain merits, is lopsided. How are we to accommodate perceptions that are not shared, and may never be shared? It is a thorny issue, and one that is not resolvable by simply throwing up our hands and
abandoning global responsibilities. In many important senses we are of course linked in networks that have global aspects, and we do need to find ways of referring to such links. Perhaps, however, we should apply terms such as ‘the global community’ with caution since they misleadingly suggest a uniform cultural cohesiveness that simply does not exist at all levels, and camouflage other networks that co-exist with the recognizably global. The menacing presence of terrorism and reaffirmations of national and religious differences should be evidence enough to remind us of the folly of overly simplistic assumptions about a ‘global community’.

Lohmann describes the way the ‘shared vision’ promoted by globally orientated concepts such as sustainable development can subjugate the local to the universal and conceal vital differences:

> According to this vision, nature, human beings and sentences are characterized not by their roles in more or less self-contained, discrete communities or cultures but by their roles in single, universal, overarching systems. Conflicts which arise when one culture encounters another are regarded as either trivial or resolvable by translation into a master language in which all conflicts are resolvable according to criteria acceptable to all sides...local areas become mere spots in a universal grid. Everyone everywhere is assumed to be playing, if only they knew it, roughly the same game (1995, 160).

The globalising tone of the discourse of sustainable development often emphases the opportunity for the local to nourish and support the global rather than the other way around. ‘Think global, act local’, we are told, but in practice this often amounts to the local being subordinated and afforded value according to how usefully it can be reinvented and inserted into the global marketplace. Why should people from every cultural space be expected to think in global terms as defined by powerful alien cultures for their own benefit? As Lohmann points out,

> The possibility of instituting the reverse process, that is, dissecting and cannibalizing the so-called ‘global’ system to provide repair or caretaker services for thousands of local systems, is seldom raised. Few Northerners are proposing that Senegalese peasants be allowed to have a say in American energy consumption, or that Ecuadorian tribal peoples form groups to help protect German forests (1995, 159).
Serge Latouche remarks that if we were genuine in our desire to promote a truly equitable international system, we would have to ‘invite “experts” from the last remaining “primitive” regions of the world to draw up a list of the deficiencies from which we, the people of the developed countries, suffer’ (1996, 258). Accusations about neocolonial attitudes within sustainability represent serious challenges to its credibility, particularly as the need for equity is one of its key tenets.

The idea of equity is in many respects antagonistic to the principles of competitive individualism that underpin the economic system where ‘developed’ countries have the upper hand. How soluble this dilemma is remains to be seen. As Jacobs notes in the North…equity is much the least emphasized of the core ideas, and is often ignored altogether. The dominant (‘non-egalitarian’) conception of sustainable development generally includes only a passing and non-committal mention of global resources distribution, and frequently fails to refer to intra-country equity at all. This reflects both the ‘radical’ (and therefore less widely appealing) nature of the idea of equality in industrialized countries, and the uncomfortable challenge to consumption patterns and international economic relations implied by the global-egalitarian interpretation (1999, 33)\(^{16}\).

Some people from economically poorer nations have interpreted this as evidence of bias towards environment rather than development, an imbalance which they say allows the wealthy to sidestep the need to redistribute resources more equitably (Jacobs, 1999, 33).

Along these lines, ecofeminist writer Maria Mies dismisses sustainable development as a euphemism camouflaging the tacit acceptance of ‘the colonial structure of the so-called market economy’ by disingenuously suggesting that ‘all poor countries can and will reach the same living standard as that of the affluent countries’ (1993, 60). Mies maintains that such catching-up is categorically impossible, and that

\(^{16}\)Equity relates to access and participation, while equality relates to people’s value.
Wolfgang Sachs is another critic harbouring serious doubts about the promises of the dominant development paradigm. He traces the beginning of the current era of development to the 20th January 1949, when President Harry Truman gave a speech in which he condemned the ‘South’ to the ignominious fate of being ‘underdeveloped’ (1999, 25). Sachs charges uncompromisingly that ‘it is not the failure of development which is to be feared, but its success’ (1996, 3). He contends that not only are the catch-up promises of the dominant development paradigm demonstrably untenable, they are disastrous, even in purely economic terms:

After 40 years of development, the state of affairs is dismal. The gap between frontrunners and stragglers has not been bridged; on the contrary it has widened to the extent that it has become unimaginable that it could ever be closed. The aspiration of catching up has ended in a blunder of planetary proportions. Since 1960, according to the 1996 Human Development Report, the distance between industrial and developing countries in regards to per capita income has tripled (1999, 25).

Sach’s vehement rejection of development as a normatively positive idea leads him to the conclusion that the concept of sustainable development is an oxymoron. He asserts that given its origins, the concept of development is unsalvageable even when redressed in the garb of sustainability. Sachs describes sustainable development as a response to ‘the hunch that the era of infinite development hopes has passed, giving way to an era in which the finiteness of development becomes an accepted truth’ (1999, 29). He contends that ‘recognizing the finiteness of the earth is a fatal blow to the idea of development as envisaged by Truman’ (1999, 26), and that the deficiencies in the development paradigm run so deep they cannot be rectified by merely adding the qualification ‘sustainable’ (1999, 27). According to Sachs, the hegemonic notion of development is inconsistent with the core themes of sustainability, and no amount of intellectual athleticism can bridge the gap.

Sachs feels that the Brundtland Report’s ‘canonical’ definition of sustainable development that initially appeared to successfully hybridize apparently conflicting concerns has ultimately failed under the weight of compromise. The Brundtland formula is designed to ‘maximise consensus rather than clarity’ he says, with the result that ‘dozens of definitions are being passed around among experts and politicians,
because many and diverse interests and visions lie behind the common key-idea’ (1999, 28).

In contrast to critics such as Sachs, Michael Jacobs believes that sustainable development is intrinsically different to the development paradigm that preceded it. Jacobs maintains that in the old notion of development, environmental concerns were not ‘integrated into economic planning and policy (and) the impact of current activity on future generations (was) assumed to be benign, not explicitly considered’ (1999, 27, emphasis in original). He is convinced that in accepting the terms of Agenda 21, most countries accepted at least theoretically that ‘sustainable development does represent a new trajectory for development’ (1999, 27, emphasis in original). Importantly, Jacobs also asserts that the sustainability discourse has had a clear, positive impact on political attention to environmental issues, by introducing a new conceptual model that has begun to redirect policy (1999, 29). He notes that

In nearly every industrialized country, the period since the Brundtland Report, and then again since the Earth Summit, has seen much greater levels of activity and debate in the environmental policy field than before (1999, 28).

In Western Australia for instance, the state government produced a State Sustainability Strategy (Government of Western Australia, 2002), a world first in terms of policy innovation, and one that may be widely emulated.

Whether or not this trend has resulted directly and solely from the output of the Brundtland Commission and the Earth Summit is not clearly established. There may be other contributing forces at work here as well. However, if the relationship between increased levels of political activity and the introduction of the idea of sustainable development to the political centre stage is a direct one, it provides food for thought, given sustainability’s commitment to community empowerment and democracy. After all, the organizations which produced the contemporary notion of sustainability included large numbers of people representing the global elite.

Jacobs may be correct in his contention that sustainable development is intended to reform rather than embellish the idea of development, but the struggle to re-direct the
conceptual trajectory of development to somewhere more sustainable is by no means over. Critical theorist Aidan Davison - who, like Jacobs, supports the idea that sustainability is a contested concept - laments the way in which ‘the discourses of sustainable development are…becoming increasingly dogmatic, technocratic, and hegemonic’ (2001, 4). The ideal of sustainability, Davison says ‘is becoming steadily refined by the modernist orthodoxy of technological progress’ (2001, 4). Davison also criticizes the way evidence of unsustainable practices is used to support the need for more judicious commitment to the same old ideas of technological progress and the conflation of ecological efficiency with economic efficiency (2001, 4,5). He sees this enrolment of new ideas into the hegemonic paradigm leading to

a great diversity of cultural concerns about sustainability…being usurped by the global agenda of sustainable development. The appearance of either consensus or intellectual clarity in embracing rhetoric about “our common future” is superficial and deceptive. Those who see the ideal of sustainability as a prompt for challenging political and moral questions, those who see it as latent with contested moral meanings, are finding themselves either enclosed within the stifling language of efficiency or pushed toward the margins of global environmental politics (2001, 5).

Davison criticizes the lack of intellectual depth and breadth in much of the discourse of sustainability. He describes the language of efficiency as ‘stifling’, in that it represents an attempt to distill the goals of sustainability down to the ‘quantification of quality’ (2001, 5). Roland Barthes identified this use of rhetoric as a technique where ‘by reducing and quality to quantity, myth economizes intelligence: it understands reality more cheaply’ (1980, 153). Reliance on quantification such as triple bottom line accounting means that sustainability is depicted as a ‘determinable characteristic [rather than] a social goal to be accepted and advocated on normative grounds’ (Peterson [1997], cited in Livesey and Kearins, 2002, 253). It also leads to the assumption that sustainability should be left to experts, thus alienating it from laypeople (Livesey and Kearins, 2002, 253).

Subversive questions about just how rational our current economic and political practices are can be sweepingly delegitimized by Foucauldian applications of power associated with particular ways of knowing. Such exclusion does not exist only in the domain of the dominant political economy. Millions of people have undoubtedly never
even heard of the terms ‘sustainability’ or “sustainable development’, even if they are only too familiar with many of the subjects of its concern. How can they participate fully in its discourse, and how can sustainability claim to be truly a child of a global community until they can?

**Sustainable development or sustainability?**

Should the terms ‘sustainability’ and ‘sustainable development’ be understood as synonyms? Simon Dresner points out that in Agenda 21 the terms were both used to represent the same thing, and argues that to make a distinction ‘drives a wedge into the consensus that formed the basis of the Brundtland Report and Agenda 21 around the mutual need for environmental protection and development’ (2002, 65). Newman and Kenworthy (1999, 1) have suggested that ‘sustainability’ is just an abbreviation of ‘sustainable development’. In contrast, Philip Sutton, from the Green Innovations organization, contends that sustainable development is not the same as sustainability. He sees sustainable development as ‘a compound concept that combines concerns for continuity (sustainability) with concerns for change (development)’ (2001, 1).

Sachs is concerned about the way the ‘semantic ambiguity’ of sustainable development seems to have hauled the conceptual centre of gravity of sustainability away from ‘nature’ towards development, so that

> the perceptual frame changes; instead of nature, development becomes the object of concern, and instead of development, nature becomes the critical factor to be watched. In short, the term sustainability slides from conservation of nature to conservation of development … The term has become inherently self-referential, as a definition offered by the World Bank neatly confirms: ‘What is sustainable? Sustainable development is development that lasts’ (1999, 33).

The World Bank’s definition is unsatisfactory. This tautology, demonstrates what Barthes might see as an attempt by a bourgeois institution to defend itself, using the

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17 The World Bank’s tautological definition of sustainable development illustrates one way the powerful can attempt to dodge probing questions about their own existence by resorting to linguistic trickery. Tautology used in this way is an evasion that is only successful when backed by some form of power. Tautology is, as Roland Barthes said, an ugly word referring to an ugly thing:

> We can view it as one of those magical types of behaviour…(where) one takes refuge…as one does in fear, or anger, or sadness, when one is at a loss for an explanation: the accidental failure of language is magically identified with what one decides is a natural resistance of the
tautology as a form of rhetoric designed to perpetuate the ‘dream of the contemporary bourgeois world’ (1980, 150). Sustainable development is indeed interpreted by many as just such a dream.

Some people, in an attempt to counter the loss of emphasis on environmental issues of concern, have adopted the term ‘ecologically sustainable development’. Diesendorf and Hamilton, for example, promote ecologically sustainable development as the appropriate vehicle for ‘reconcil(ing) economic development with the natural world’ (1997, iii). The explicit reference to ecological concerns here is encouraging, although the dominant development paradigm’s position of privilege has not been relinquished.

Ecofeminist Vandana Shiva is critical of the concept of sustainable development - as opposed to sustainability - because of its association with the colonizing forces of the development paradigm. Both the old development paradigm and the revamped idea of sustainable development tend to give Western scientific knowledge a privileged position, says Shiva. Techno-scientific strategies are frequently offered in an attempt to promote sustainability, while development is often seen as ‘synonymous with the introduction of Western science and technology in non-Western contexts’ (1993, 135).

Shiva warns however, that the introduction of ‘Western’ science and technology in the name of development is in itself a colonizing act. The ‘magical identity,’ says Shiva, ‘is development=modernization=Westernisation’ (1993, 135), an unsatisfactory equation if notions of cultural diversity associated with sustainability are to be treated seriously.

Furthermore, Shiva contends that

While development as economic growth, and commercialization are now recognized as the root of the ecological crisis in the South, they are, paradoxically, offered as a cure for the ecological crisis in the form of object. In tautology, there is a double murder: one kills rationality because it resists one; one kills language because it betrays one. Tautology is a faint at the right moment, a saving aphasia...Since it is magical, it can of course only take refuge behind the argument of authority: thus do parents at the end of their tether reply to the child who keeps on asking for explanations: ‘because that’s how it is’, or even better ‘just because, that’s all’- a magical act ashamed of itself which verbally makes the gesture of rationality, but immediately abandons the latter... (1980, 152,153).
‘sustainable development’. The result is that the very meaning of sustainability is lost (1993, 270).

In a strategic sense, positioning development itself as either sustainable or unsustainable is arguably a clever move that makes it more difficult to sweep social and environmental concerns under the carpet as irrelevant to homo economicus. At the same time however, the need to attempt to rescue ‘development’ from a fate worse than underdevelopment by qualifying it with the adjective ‘sustainable’ is indicative of the development mentality’s inherent flaws. After all, if the quest for progress and development is an unequivocally desirable activity with inevitably positive outcomes, it would hardly be necessary to add the proviso that it must be ‘sustainable’.

Sutton, on the other hand, feels that sustainable development is a more appropriate ‘aspirational goal for society’ than sustainability precisely because it explicitly includes reference to progressive change. ‘People are motivated,’ he says, ‘quite reasonably, by more than just maintaining/saving certain environmental, social or economic values (the focus of sustainability). They are also motivated by novelty and by the desire for genuine progress. It is sustainable development that combines the pursuit of sustainability and progress’ (2001, 1, emphasis in original).

People are, however, not always motivated by a desire to pursue ‘progress’, and even when they are, their interest in putting effort into the cultural project of progressing will vary. Therefore, sustainable development, as Sutton (2001) defines it, can be interpreted as an aspect of sustainability. The concept of sustainability has greater potential to be inclusive of a wider range of knowledge and aims than the concept of ‘sustainable development’. Sustainability is also more elastic and nuanced in terms of spatial and temporal range, than sustainable development. Like development, sustainable development conjures images of an inexorable, progressive forward-march to somewhere better and relegates other considerations to obscurity. In the process it tends to rely on technological process and related economic growth as a barometer of success. Sustainability is less encumbered by the residual flaws of the hegemonic development paradigm, and therefore more adaptable.
Corporations and sustainability

Edward Woolard, former Chief Executive Officer of Du Pont, asserts that

The green economies and lifestyles of the twenty-first century may be conceptualized by environmental thinkers, but they can only be actualized by industrial corporations. Industry has a next-century vision of integrated environmental performance. Not every company is there yet, but they are trying (cited in DeSimone and Popoff, 1998, 1; my emphasis).

This dominant vision is a product of the interaction between the uppermost echelons of power in nation states, influential international organizations like the International Monetary Fund (IMF), the World Bank and the World Trade Organisation (WTO) and of course MNCs.

Sustainability’s political purchase derives in large part from its attraction to the most powerful actors in the global political economy. The explicitly globalising reach emerging from the deliberations of powerful members of the ‘international community’ represented in the Brundtland concept of sustainable development, and the retention of economics as a key element of sustainability lends itself easily to the global outlook of big business. Sustainability clearly has capitalist marketability. For Earth-spanning multinational corporations (MNCs) the universalizing language of green globalism often associated with Brundtland-style discourses of sustainable development is comparatively easy to digest and assimilate.

For these groups, the discourse of sustainability is a way of restating business’s role as the primary provider of societal well-being by stretching its mandate of enlightened individualism as ‘best for society’ to include ‘best for the environment’ as well. In sustainability it is not deemed sensible to choose between economics, society and the environment. They should be thought of as interrelated and their synergy considered. From this basis, it is possible to imagine a central, performance-enhancing role for business in the pursuit of sustainability. After all, if economics and environment are indeed linked then if business organizations drive economic success, business can be presented as the most effective guardian of environmental health. The linearity of this idea is problematic, however - sustainability places such concepts such as environment and economy side by side, the market places them in order - with economics first.
There is inconsistency in the idea that the co-operative aspects of sustainability can be promoted by working with institutions of modernity such as corporations that are founded on the mythology of the virtues of uncompromising individualism in a neoclassical economic system. Portraying MNCs as important vehicles for co-operation is therefore problematic. Of course, corporations’ meeting with sustainability may herald the formation of a new conception of corporate identity and a new, more sophisticated story to replace the old dichotomy of individual versus collective action that was played out during the last century as a contest between the titanic projects of capitalism and communism.

**Language, power and mythology**

Language and power are linked within the discourse of sustainability. Wolfgang Sachs notes that ‘Different actors produce different types of knowledge, they highlight certain issues and underplay others. How attention is focused, what implicit assumptions are cultivated, which hopes are entertained, and what agents are privileged, depends on the way the debate on sustainability is framed’ (1999, 29). Several theorists have noted the significance of language in perpetuating power relations within sustainability (Beder, 1996; Livesey, 2001; Springett, 2003a). Delyse Springett, who bases her research on business and the discourse of sustainability in ‘the Critical Theory of the Frankfurt School and in Foucauldian Theory’, ‘explores the genealogy of the discourse of development, the manifold and contested perspectives that characterize its dialectics’ (2003a, 2). She notes that

self-appointed élites are attempting to dominate the discourse…just as the North has taken charge of the discourse in the global debate…and…the ensuing hegemony that brings about accommodation to the dominant interests of corporates, government, business organizations and intellectual élites (2003a, 2).

Donald Worster sees sustainable development primarily as a popular slogan that ‘compel(s) us to adopt a narrow economic language, standard of judgment, and world view in approaching and utilizing the earth’ (1995, 133). Sachs (1999) notes that the waters are often muddied by ‘semantic confusion’, whereby the adjective ‘sustainable’
is added as a prefix to concepts such as ‘growth’, ‘corporations’ or even ‘armies’ in what amounts to a misdirection of the core themes of sustainability.

**Rhetoric**

Much of this confusion stems from the fact that sustainability is a political discourse, which uses the language of rhetoric, rather than the ‘language of a single disciplined mode of intellectual inquiry’, like ‘science’ (Pocock, 1989, 17). Such political rhetoric is designed to include ‘a diversity of goals and values - that is, the same utterance will simultaneously perform a diversity of language functions’ (Pocock, 1989, 17). Since sustainability is a political discourse, the range of interpretations that will be sparked from a single political statement is unavoidable. As Pocock explains:

> What is a statement of fact to some will symbolically evoke certain values to others; what evokes a certain cluster of factual assertions, and value judgements concerning them, to one set of hearers will simultaneously evoke another cluster and recommend another resolution of conduct in the ears of another set (1989, 17).

Sustainability, as political rhetoric, is what Pocock describes as a multivalent paradigm ‘simultaneously performing diverse functions in diverse contexts’ which ‘must simultaneously designate and prescribe diverse functions and distributions of authority’ (1989, 18). Hence, contests arise between people with differing opinions who are all, as they see it, following the principles of sustainability in good faith. Tension exists between the radical nature of sustainability as a political discourse, and the modernist desire to pin sustainability to eco-efficiency and scientifically measure progress towards it, for example. Many people within corporations interpret the political rhetoric of sustainability in a way that supports business and suggests a particular role for it to play, while those who have reservations about the rationale underpinning business conclude that more radical strategies are called for. The ‘confusion and clarification’ that Pocock (1989, 19, 20) notes inevitably accompany such processes clearly co-exist within the discourse of sustainability.

Sustainability shares the requirement for careful critical reassessment of habitually held models with many other moments of tumultuous change in human history - paradigm shifts, to borrow the term Thomas Kuhn (1970) applied to periods of revolutionary
scientific change. In such transformational times, assumptions held at a sub-ideological level are brought to the surface and revised (Hay, 2002, 278). However, in comparison to the intellectual effort which supports scientific paradigm shifts, the political discourse associated with sustainability is more intellectually diverse. Amongst the scientific community, ‘the extent to which the language and thought…will be disciplined by the paradigms of a single mode of intellectual inquiry, as that is from time to time redefined, is quite high’ (Pocock, 1989, 16). In comparison, the intellectual contributions to the discourse of sustainability are not as susceptible to singular discipline.

George Monbiot puts the need to differentiate between mythology and people as central concerns of sustainability beautifully. In analyzing the phenomenon of climate change, he wisely reminds us that as we take action to remediate it, the aim should be to save the ‘people rather than the people’s fantasies’ (2005, n.p.). He draws attention to the pathological mythologies of the global economic system, suggesting that

> Our economists are exposed by climatologists as utopian fantasists, the leaders of a millenarian cult as mad as - and far more dangerous than - any religious fundamentalism. But their theories govern our lives, so those who insist that physics and biology still apply are ridiculed by a global consensus founded on wishful thinking (2005, n.p.).

**Sustainability’s ‘geometry of thought’**

Gärdenfors suggests that ‘a study of the basic metaphors of language can reveal the geometrical structure of the underlying conceptual origins’ (2004, 178). He explains that a metaphor ‘expresses an identity in topological or geometrical structure between different domains’ (2004, 176, emphasis in original). In this way,

> A word that represents a particular structure in one domain can be used to express the same structure in a different domain. Metaphorical mappings preserve the cognitive topology (that is, the image-schema structure) of the source domain, in a way consistent with the inherent structure of the target domain (Gärdenfors, 2004, 176-177).\(^\text{18}\)

\(^\text{18}\) Gärdenfors uses the term ‘the peak of a career’ as an example:

> The literal meaning of *peak* refers to a structure in physical space, namely the vertically highest point in a horizontally extended (large) object, typically a mountain (2004, 177).
Descriptions of time reveal the mental maps that lay behind them, for instance. Terms associated with spatial length are often used as metaphors for time: “longer,” or “shorter” periods of time, the “distant” future, “in front of” and “forward” (Gärdenfors, 2004, 177). Time itself can be imagined as moving along a line: Sunday “following” Saturday, Monday “after” Sunday, and so on (Gärdenfors, 2004, 177). Gärdenfors explains that ‘the structure underlying the length dimension is transferred to the time dimension. Since we can identify the corresponding structure on the conceptual time dimension, we know what the words mean as expressions about time’ (2004, 177), or at least we imagine time in a manner consistent with the physical metaphor.

Questions must be asked about the use of languages of western origin to frame sustainability. What geometry of thought, as Gärdenfors (2004) terms it, are we promoting? What barriers are erected where metaphors are not transferable or culturally relevant? Such barriers are likely to exist since language of sustainability does not inevitably find purchase in all corners of the world today. The English word ‘sustainability’ cannot be directly translated into Bulgarian, for instance (Dora Marinova, 2003, pers. comm.).

The eco-modernist mind map which dominates sustainability is that of a linear progression of time, “forwards” into the future. In modern western conceptual space, says Gärdenfors, ‘the time dimension has the same structure as the real line’ representing geometrical length (2004, 178). This representation of time is especially influential because it is ‘so idiomatic in our language we no longer think of (it) as (a) metaphor’ (Gärdenfors, 2004, 178). The aim of the Brundtland report to ensure more sustainable ways of living into the distant future represents a particular cultural depiction of time. Even the notion of sustaining relates to modern western ideas of movement along a linear path “forwards”. It promotes western ideas of progress and

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A ‘career’, on the other hand, exists only as an abstract entity, with no physical structure, and certainly no physical peak, says Gärdenfors (2004, 177). Why do we relate it metaphorically to a physical structure then? that the same geometrical structure is applied to a two-dimensional space that consists of the time dimension (of the career), which is mapped on the horizontal spatial dimension, and a dimension of social status. The latter dimension is usually conceived of as being vertical: we talk about somebody having a “higher” rank, “climbing” in the hierarchy, and so forth (Gärdenfors, 2004, 177).
development, and diverts attention from the need to consider the importance of traditional knowledge and experience for sustainability.

Wolfgang Sachs contends that in Brundtland-influenced definitions of sustainable development ‘attention to the dimension of time is not counterbalanced by an equal attention to the dimension of space’ (1999, 29). Sachs argues that sustainable development’s specific temporal focus means that it is plagued by spatial biases which privilege some and leave others behind (1999, 27). Sustainability is more concerned with notions of time than justice or equity, says Sachs, since ‘It invites the reader to raise his eyes, to look at the future, and to pay due consideration to the generations of tomorrow’ (1999, 28-29). Sachs alleges that the responsibility for perpetuating the ailing western notion of development through time has is thereby been foisted upon the entire world (1999, 29).

**Time as mythology in sustainable development**

Sustainable development is closely aligned to Newtonian linear ideas of time that have been interpreted to suggest that the human race can advance in a linear fashion. According to such ideas the events of physical reality universally follow a time progressing forwards. But where is ‘forward’? Linear ideas of time are, as physicist Paul Davies (2001) notes, a pervasive cultural myth. According to the new physics of the West, the idea that a single ‘now’ moment of time exists everywhere is a fallacy (Davies, 2001). As Albert Einstein himself commented, ‘the distinction between past, present and future is only an illusion, even if a stubborn one’ (cited in Davies, 2001, 28).

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19 Sachs sees choice between spatial and temporal concerns as a distinguishing feature of various discourses of sustainability (1999, 29, 30). He outlines three perspectives of sustainable development separated by their orientation in this regard - the ‘contest perspective’, the ‘astronaut’s perspective’, and the ‘home perspective’ (1999, 30). According to the contest perspective, development will inevitably remain spatially restricted, leaving millions of people ‘behind’, but that ‘it can be made durable for the richer parts of the world’ (Sachs, 1999, 30). The ‘astronaut’s perspective’ recognizes the finiteness of ‘development’ and ‘seeks global adjustment to deal with the crisis of nature and the crisis of justice... it favours the extension of the range of responsibility, until it covers the entire globe’ (Sachs, 1999, 30). The ‘home perspective’ accepts that development is a finite concept and, noting that ‘the range of effects produced by the North has vastly outgrown the radius of northern responsibility’ it proposes that the effects of the North’s excesses should be reduced until they can be contained within the geographical radius of responsibility (Sachs, 1999, 30).
The western sense of linear time was supported by Isaac Newton’s theory that time was ‘Absolute, true and mathematical…flowing equably without relation to anything external’ (cited in Davies, 2001, 3). However, some 200 years later relativists demolished this Newtonian ‘commonsense’ notion of past, present and future and showed us that time is not separate from physical space, and that space-time is distorted by gravity. Such apparent oddities can be confirmed even on Earth, by comparing the different rates at which atomic clocks at different positions and velocities run (Davies, 2001).

It is not necessary to completely abandon such powerful and useful cultural myths. As physicist Paul Davies says, while the concepts of past, present and future ‘have no absolute physical significance’, they are ‘convenient linguistic devices in the realm of human affairs’ (2001, 28). They are true enough in certain contexts, such as the chronological history of the science of physics I offered in the last paragraph in order to underscore the limitations of notions of linear time. This apparent logical tangle makes sense, I hope, if the reader interprets each concept in light of the contexts in which it applies.

Sustainability’s notion of concern for future generations is valid. It is not of particularly concern in everyday existence that an atomic clock on an airplane might be 59 nanoseconds slow when compared to an identical clock left on the ground. My point is to emphasize the need for humility and constant wariness about the basis of many of the supposedly scientifically based myths being peddled. Caution should be exercised when proclaiming the universality of concepts such as sustainable development or presuming to invoke the power of science to provide ‘absolute truth’.

The new physics
Defenders of the hegemonic theory of economics often try to deter critics by portraying economics and its associated mythologies as ‘scientific’, and therefore beyond reproach. Enlightenment rationalism - particularly the reductionist tendencies of Newtonian physics and the associated ideas of Darwinism - has had a profound influence on our economic and political ideologies. The notion of competitive individualism that lies at the heart of the hegemonic economic system draws from the
work of reductionists such as Adam Smith, Newton, Descartes and Darwin (Capra, 1983).

The reductionist divide between mind and matter is encapsulated in Descartes’ dictum ‘Cogito ergo sum’ – ‘I think, therefore I exist’ (Capra, 1983). Here, ‘mind’ is assumed to be more certain than the ontologically distinct category ‘matter’. From this detached position it seems as though the mind can objectively observe and analyze the separate ‘world’, viewed as a clockwork-like mechanism best understood by reducing it to its basic building blocks. Such reductionism is not concerned with any synergistic links that might exist between these building blocks - it is assumed that the essence of the whole can be ascertained by examining the nature of the parts themselves rather than any interaction between or within them.

This reliance on the logic of reductionist science has been heavily criticized, while many observers are convinced that even the translation from reductionist theory to economic practice has not remained entirely true to its origins. David Korten, for instance, maintains that the substance of Adam Smith’s ([1776] 1991) ideas about robust market interaction have been contorted ‘beyond recognition to legitimate an ideology in the service of a narrow class interest’ by ‘selectively culling out bits and pieces of market theory to argue that the public interest is best served by giving globe-spanning mega corporations a license to maximize their profits without public constraint’ (1999, 40).

An important argument in favour of the need for more sophisticated models than those spawned by the logic of reductionism comes from science itself. The new physics of quantum mechanics beckons us, as reluctant as we appear to be, to rethink the foundations of our most influential mythologies. Historian of science Robert Nadeau and physicist Menas Kafatos (1999) contend that ‘there is no basis in contemporary physics or biology for believing the stark Cartesian division between mind and world that some have rather aptly described as the “disease of the Western mind” ’ (viii). The pull of reductionism is strong however - perhaps its comfort is difficult to relinquish, given the difficulties involved in confronting complexity. The founding CEO of Visa, Dee Hock feels that
We are all closet Newtonians, deep down convinced that someone is in control, or ought to be. Mechanistic thinking dominates our most formative institution, school: “right (versus wrong) answers” to artificial problems, fragmentation of interconnectedness into largely academic disciplines, and avoidance of making mistakes, which is the only way any living system learns. By the time we enter our adult, professional lives, we are master reductionists (cited in Senge, 2002, 3).

It is not surprising, perhaps, that economists and other experts have been slow to appreciate the philosophical implications of the new physics. As Nadeau and Kafatos observe, for a long time even physicists themselves continued to ‘unwittingly (appeal) to the seventeenth-century assumption of metaphysical dualism and the idea that the physical laws that are foundational to physical theories exist “prior to” or “outside of” physical reality’ (1999, 11). This stance ‘is no longer in accord with our understanding of the actual character of physical reality’ (Nadeau and Kafatos, 1999, 11).

Alain Aspect, and later Nicolus Gisen, each completed experimental work that finally appears to have resolved the famous debate about classical epistemology between Albert Einstein and Niels Bohr in Bohr’s favour. In doing so, they have laid to rest all hope that faith in ‘classical or Einsteinian epistemology and in the doctrine of positivism’ is justified (Nadeau and Kafatos, 1999, 11). As Nadeau and Kafatos explain ‘what we have only recently begun to fully recognize and properly understand is that the description of physical reality in the new physics effectively resolves or eliminates the two-world Cartesian dilemma’ (1999, 10). This suggests the need to

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20 This debate, which continued over 18 years, centred on whether the doctrine of positivism, based on classical or Einsteinian epistemology could be believed or not. Positivism assumes that ‘the full and certain truth about physical reality is disclosed in the mathematical description of this reality’ (Nadeau and Kafatos, 1999, 11). Einstein was determined to show that ‘it was theoretically possible to measure, or at least determine precise values for, two complementary constructs in quantum physics, like position and momentum, simultaneously’ (65), an idea that ran counter to that suggested by quantum physics. Furthermore, while classical physics assumes that reality is ‘local’, quantum theory predicts that it is ‘non-local’ (2). According to classical physics ‘a measurement at one point in space cannot influence what occurs at another if the distance between the two points is large enough so that no signal can travel between them at light speed in the time allowed for the experiment’ (2). This is the principle of ‘locality’. Ultimately, Aspect showed that ‘quantum physics is a self-consistent theory and the character of physical reality as disclosed by quantum physics in non-local’ (3). In 1997, Gisen confirmed this in his twin photon experiments, where detectors were placed 11km apart, an enormous distance in relation to those involved in quantum mechanics. Gisen’s team was able to influence one photon and observe a corresponding change in the other, 11km away. This finding cannot be explained by the transfer of information from one to another at the speed of light or less. The photons were simply too far apart. Neither can it be explained by suggesting that information traveled between the photons faster than the speed of light. The correlations between the photons occurred instantly or in ‘no time’ (79). This suggests that physical reality is ‘non-local’ and that the same results would be obtained even if the experiment was run with the detectors light years apart (3).
reconsider the ideological commitment to the hegemonic economic system, since it rests on Cartesian foundations.

**Sustainability as an eschatological myth**

Sustainability might be seen as an eschatological myth - the promise of a safe plateau at the end of the climb to development where the ills suffered by humankind are finally defeated. Like the communist and capitalist revolutions of the twentieth century, the revolutionary movements of the eighteenth century and the millennial movements of late-mediaeval Europe (Cohn, cited in Gray, 2003, 42), sustainability might be seen to be aiming to ‘solve the riddle of history’ (Gray, 2003, 42). It aims to do so by invoking the power of science and technology. Carl Frankel, one of America’s foremost authorities on issues relating to business and sustainable development, thinks that

The term “sustainable development” describes how we would like the world to be - fair, healthy and secure. As such, it belongs to a venerable tradition: utopian thinking (1998, 21).

Sustainability does seek to stave off cultural and environmental death. It aims to perpetuate currently existing societies and the specific cultural notions of progress and development for an indeterminate period. Newman and Kenworthy stress that sustainability’s moral commitment to the future should not be interpreted as a promise to try to ‘create some infinitely durable means of managing society so that it can be sustained indefinitely’ (1999, 4). These authors have an eminently pragmatic desire to avoid diversionary forays into ideal or eternal visions, and to remain focused on ‘more real world issues’. Yet it is difficult for sustainability to avoid infection by the promise of the eternal. As noted earlier in this chapter, the authors of the Brundtland Report expressed the hope that sustainable progress would be achievable for the ‘entire planet into the distant future’ (WCED, 1990, 4). Kubiak and Nordstrom, who are both involved with the business community in America, make the even bolder claim that aim of sustainability is to perpetuate a healthy environment, society and economy ‘forever’ (2004, 1).

Utopia might not be a desirable destination, however. Simon Gray (2003) fires criticism at what he calls the ‘forbidden truths’ of eschatological hope, by showing how it is more related to mythology once associated with religious belief than truth. Gray
makes the challenging claim that what is truly apocalyptic are not the historical circumstances such as the ecological destruction we now witness, but ‘the belief that history will come to a stop’ as a result of some utopian plan (like sustainability) (2003, 42). Aidan Davison depicts the ‘reinvention of the ecological crisis’ as it occurs in sustainability as ‘an urgent imperative for the completion of the emancipatory promise of technology - the promise of freeing its ‘masters’ from material scarcity and moral ignorance’ (2001, 38). This continues in the tradition that Simon Gray notes, involving the utilization of science as the ‘chief vehicle for myth’, supporting the search for a perfect human future within the secular cultures of modernity (2003, 42).

Fallibility
Some people offer of the notion of fallibility as an antidote to the negative aspects of rationally derived control. Soros suggests that ‘where reason has failed, fallibility may yet succeed’ (cited in Dresner, 2002, 170). Here, Soros echoes the sentiments of sociologists such as Giddens and Beck who theorize that reason should not be seen as ‘a means of knowing the world with certainty, but…(as) a perennial source of doubt towards what we think we know’ (cited in Dodd, 1999, 213).

I am criticizing rationalism, and yet I am using rational analysis to do so - how can I justify my actions? Sociologist Nigel Dodd suggests that the way out of the dilemma exposed when using rational thought to critique rationalism is to accept that ‘our use of reason is bounded by culture, by society, by politics and by locale’ (1999, 214). Likewise, Habermas and Bauman argue that reason is ‘grounded in, not the grounding for, social and cultural practices’ and is ‘contextualised and specific, impossible to generalise in a single definition’ (cited in Dodd, 1999, 215). Cultural context determines what constitutes ‘reasonableness’.

How do we deal pragmatically with this complicated state of affairs? Dodd advocates rejecting theoretical models ‘in favour of heuristic concepts and modes of explanation that can facilitate rather than obstruct empirical research’ since ‘theories in and of themselves cannot represent the world’ (1999, 214). Sustainability practitioners need to be context-responsive: able to interact, learn and respond flexibly in a range of situations where familiar meta-narratives simply do not explain what is really going on. Those who are evaluating sustainability as a ‘reasonable’ response to global crises must
consider the smaller-scale differences in culture, society, politics and locale that will render certain grand-scheme sustainability strategies unreasonable and therefore ineffectual.

**Conclusion**

The discourse of sustainability that began to emerge in the late twentieth century was borne of the meeting of key political themes of that time such as the commitment to the project of global development based on a confidence that the institutions of modernity are the most appropriate vehicles to carry humanity progressively along a scale of development; the need to assist people in lower income nations and disadvantaged people living in higher income nations; and the increasingly unavoidable political power of environmentalism. The three pillars that were proposed as key areas of concern in the search for more sustainable ways for people to live - economy, society and environment - are culturally specific categories coloured by the worldview of architects of sustainability - notably those who created the Brundtland Report. Since then, the concept of sustainability has been contested by people with views ranging from conservative to radical.

The terms ‘sustainability’ and ‘sustainable development’ have slightly different emphases. The notion of sustainable development appears more difficult to shift from its original cultural ground than sustainability, since it carries the heavy mark of Truman-style ‘development’. The notion of sustainable development is therefore somewhat less flexible than the notion of sustainability (although the latter does not completely escape cultural bias either). For these reasons I consider ‘sustainable development’ to be more limited in application than ‘sustainability’.

Although sustainability is an evolving concept, several key themes tend to be reiterated including:

- the hope that people should be able to live well and happily;
- the need for synergistic and holistic approaches;
- a sense of crisis and the need for people around the world to work together to overcome it;
the requirement for social justice and equity;
the value of democracy, empowerment and participation;
the need for social and institutional change;
reference to global and local issues and the relationship between them;
inter- and intra-generational concern;
the search for more sustainable production and consumption patterns; and
the importance of accountability and precaution.

Sustainability is a political project spawned in response to particular problems and circumstances. As a discourse, sustainability is influenced by the types of language used to refer to it, and the mythologies that surround it. It has been formulated as a remedy for potentially apocalyptic ailments. It is possible that when we are on track, we will be able to officially abandon the need to keep referring to it. As with campaigns such as ‘affirmative action’ - designed to rectify the inequalities of opportunity afforded to different groups of people - success is achieved when intrinsic flaws are dealt with. Sustainability may play out as a response to crises of largely late-modern origin until its energy dissipates.

Until such time, however, the discourse of sustainability will remain of vital political and sociological significance. In many respects the discourse of sustainability represents an officially formatted version of many of the concerns already felt by a large number of people. It potentially offers a legitimized opportunity for all to explore the implications of such concerns and the inadequacies of the dominant political economy. Sustainability is a contested concept, an attribute that is often criticized, but such normative political concepts draw their resilience from the contestability that bubbles beneath the surface of broadly understood ideals. The democratic and empowering ambitions of sustainability are best served by meeting its messy contestability head on - people should be able to participate in the ongoing genesis of meaning of the new political agenda of sustainability.
Chapter Three
The Concept of the Corporation: an Historical Overview

Introduction
Corporations have a ubiquitous and unique presence in the contemporary world. They concentrate not only productive and economic power, but immense political power as well. Multinational corporations (MNCs)\(^{21}\) in particular are wealthy enough to exert enormous influence in the global political economy.

In this chapter I provide a brief overview of the historical circumstances that gave rise to the corporation as a representative institution of modern society. I then consider the changing concept of the corporation and the nature of corporate power in light of its historical context and contemporary influences, focusing on transnational corporations in particular. Conventional descriptions tend to focus on rational and political processes. In the tradition of a liberal political framework, it is suggested for example that economic pressures such as transaction costs encourage the formation of firms. But there are many muted undercurrents in the apparently factual history of the development of corporations, with corresponding biases in the way corporate identity tends to be presented. Critiques from anti-racist, feminist, gay/lesbian, ecological and anti-colonial perspectives provide a host of arguments to reject the notion that corporations are neutral constructs. This examination of the philosophical underpinnings of corporate identity provides a basis for comparison with the underlying ethos of sustainability.

\(^{21}\) I use the terms ‘transnational corporation’ (TNC), and ‘multinational corporation’ (MNC) interchangeably to refer to businesses that have their ‘investments outside (their) home nation…capital transfer is embodied within the extended firm, not transferred to an independent entity abroad…We define the multinational activity as that of a firm extending over the national frontier’ (Wilkins, 1991, 28). Multinationals may have a global or multidomestic orientation. Multidomestic corporations have subsidiaries with autonomous operations in different foreign markets, although headquarters coordinates financial controls, marketing strategies, policies and some R&D or component production. Global corporations, on the other hand, have a centralized strategy which controls all their resources in a single world wide system of production, with the result that a comparatively small number of multinationals compete against each other in the world market (Hout et al., 1998, 290, 291).
A brief historical overview

Beginnings

As Bowman says, ‘In order to predict the future of corporate capitalism, we must first decipher its past’ (1996, 5). Today’s corporations are descendents of corporations chartered in European countries in the sixteenth century which were a ‘social invention of the state’, intended to further the interests of the nation that gave them legitimacy (Robbins, 1999, 98). The advent of chartered corporations corresponded with the move away from the decentralized manorial system that had been taking place for two centuries in countries such as England. At that time, power was increasingly being concentrated in centralized national governments and corporations with trading monopolies were enlisted to help expand empires (Bowman, 1996, 39).

In the seventeenth century corporate charters enabled the private funds of merchants and financiers to be directed for public purposes, including expanding the state according to its imperialist and colonizing ambitions or supporting military conflicts between rivals (Arrighi, 1994; Smith, 1994). From the beginning, corporations’ power was enhanced by their role in supporting and providing the hardware for wars between nation states (Arrighi, 1994). They were also often internationally orientated in their business dealings. The East India Company was the archetypal version of the colonizing corporation. Expanding from its establishment in 1600 to effectively rule more than a fifth of the world’s population by virtue of support of its private army of 250 000 men, it ‘conquered India with a total monopoly on trade and all the territorial powers of a government’ (‘A Short History of Corporations’, 2002, 24).

Bowman identifies the Progressive Era as the formative period of corporate power, particularly in America (1996, 16). Two important factors combined during that time which shaped the essence of the corporation - ‘the restructuring of relationships of control through the law, and the reorganisation of the market through combination and attendant methods of cooperation’ (Bowman, 1996, 16). Far from slavishly perpetuating notions of individual competitiveness, many thought that merging and

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22 Multinational corporations now are embodiments of the particular technologies that became available at the end of the nineteenth century. While embryonic forms of the MNC existed by the time of the middle of the nineteenth century, the novel communication and transport technologies that became available just prior to the twentieth century made new forms of managerial control over long distances possible (Wilkins, 1991, 28-29).
growing corporations signalled ‘the eclipse of capitalism conceived of as warfare by capitalism conceived of as cooperation’ (Bowman, 1996, 16).

The legal frameworks that were built to support the trend to incorporation that began in America in the early 1800s and in Britain in the mid-1800s protected investors from bankruptcy and effectively separated managers from employees (DiMaggio, 2001, 8, 9; Sampson, 1995, 25). In Britain, an 1844 Act permitted companies to select their own projects and purpose. Incorporation thus became a ‘general privilege (as opposed to an exclusive right conferred by special charters)’ (Bowman, 1996, 9). This was followed by the British Act of 1855 which meant that limited liability became the rule rather than exception (Sampson, 1995, 25). In 1886, the American Supreme Court turned to the Fourteenth Amendment to create the legal fiction of the corporation as an individual. A law created in 1868 and originally designed to uphold the claim of slaves to freedom was used to free groups of people designated as a corporate body from many of the criticisms they might otherwise face from champions of individualism (Robbins, 1999, 100). Just as slaves were freed by no longer being dismissed as sub-human or non-human, corporations were ‘freed’ to pursue profits by being given an anthropomorphic guise. This legal interpretation of the corporation has since been adopted in most places.

The introduction of the concept of limited liability was an important catalyst for the expansion of corporate enterprise. As distinct legal entities, corporations themselves, rather than their human investors, were deemed to own the business’s property. If legal action needed to be taken, it was the corporation rather than the investor who became involved, thus protecting investors’ private property (Rafferty, 1996, 1). In this way, capital became ‘both the subject and object of property’ (Kay [1991] cited in Rafferty, 1996, 1). This limitation of risk was a great source of power: the extent to which individuals could be held accountable for their business failures was diminished, and as a result their daring increased (Robbins, 1999, 98).

These developments meant that
the value of disinterest - that is, the disinterested act or the public good - was denied and ignored. The very idea of the public good was therefore vaporized (Saul, 1997, 28, 29).

In one ideological stroke, enlightened self-interest was promoted - in the tradition of the notion of the invisible hand Adam Smith (1991) famously proposed in the 1770s - while the corporation was simultaneously presented as an individual, in order to provide the best overall outcomes for society.

While businesses of the early nineteenth-century were predominantly owner-operated, the new rules of ‘ownership’ associated with incorporation meant that managers - ‘a new class of trained and committed staff’ - had to be employed to control internal operations that had formerly been looked after by motivated entrepreneur/owners (Rafferty, 1996, 3). Analysts such as Berle and Means (1932) interpreted the new structure as critically dependent on this separation between the functions of ownership and control, and raised many questions about the likely implications of this distinction, such as the need to decide to whom company managers should be accountable23.

It was predominantly industries such as railways, mining and international shipping that first assumed the corporate form towards the end of the nineteenth century. Rapidly changing technological bases and market demand in these areas meant that new production techniques, new legal parameters and organisational strategies were required that were most easily provided by corporations (Rafferty, 1996, 2, 3). As time passed, the number and size of incorporated firms began to increase, driven by mergers and by the rising minimum scale of production required to remain competitive (Rafferty, 1996, 3). In this way, businesses could draw on the financial resources of greater numbers of people in order to run their operations at a scale that would be beyond the means of individuals or families. Hannah observed that

The movement towards industrial concentration in the late nineteenth century was historically unprecedented and created individual production enterprises, on a scale that could not have been conceived a century before (cited in Rafferty, 1996, 3).

23 Berle and Means’ analysis has been questioned to some degree. The positing of ownership as distinct from control has been challenged by the suggestion that control rights are themselves a form of ownership, for example (Parkinson et al, 2000, 4). Many of the issues they raised remain pertinent, however.
Large firms often worked in government-arranged collaborations, a technique designed to erode the possibility of perfect competition in the market. This period leading up to the First World War signalled the end of the ‘competitive’ or ‘laissez-faire’ capitalist period (Rafferty, 1996, 3).

**After the industrial revolution**

The understanding of the corporation that developed as the industrial revolution unfolded remained popular with historians and social scientists until well into the twentieth century (DiMaggio, 2001, 7). It is built on the reductionist, atomistic belief systems of the enlightenment. It is based on assumptions of linearity and equilibrium, and is heavily quantified, mirroring the mechanistic attitudes of western economics, which, in turn, attempted to parallel Newtonian physics. This multileveled parallelism - the belief that management ‘science’ fitted perfectly with economic ‘science’ and that both were compatible with what was known about physics - made the industrial management paradigm enormously persuasive (Toffler and Toffler, 1997, viii).

The technocentric management paradigm which supports this iteration of the corporation is similarly influenced by anthropocentric enlightenment thinking (Gladwin et al., 1995, 882; Purser et al., 1995). Gladwin et al. observed in the 1990s that the technocentric worldview was dominant, and was ‘typically taken for granted in most conventional economic and management journals and textbooks’ (1995, 882).

This modernist model of the corporation has had the greatest longevity so far (DiMaggio, 2001; Rafferty, 1996). It is characterized by a Weberian bureaucratic structure intended to permit ‘members to leave their ordinary social ties at the firm or bureau’s door and to do their jobs without reference to the complex personal and family networks of reciprocal obligation in which they were otherwise embedded’ (DiMaggio, 2001, 14, 15). Weber understood that bureaucracies provide an effective means of providing for a world committed to military and economic competition. Bureaucracies

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24 Two theorists exerted particular influence - Weber, with his ideas about bureaucracy, and Marx, whose work influenced people’s thinking about the relationship between capitalist enterprise and the political economy for decades (DiMaggio, 2001, 7).
have the capacity to draw their members together in the name of a common goal to make the most of sheer size and technological advantage ([1924] cited in DiMaggio, 2001, 7).

Bowman contends that hierarchy extends beyond individual firms in today’s oligopolistic form of corporate capitalism, so that ‘there exists a hierarchy of control within the corporate sector itself’ (1996, 17). This is a result of the way that the current collective mode of production requires ‘regulation, prudent or “fair” competition between firms, and a considerable degree of competition’ (1996, 16).

Such exogenously controlled organisations exist in a state of tension where people deprived of their usual choices must deal with the personal costs of conforming to the agenda of the hierarchy. This severance from the pull of normal social relationships - arranging a degree of institutionalized insulation from broader socio-cultural considerations - unleashes power that would not otherwise be accessible when restrained by social conscience.

Peter McMahon maintains that ‘in terms of capitalism as a social control system, the construction and maintenance of firms, especially the enormous TNCs of the modern era, are increasingly the primary process by which specific groups gain and maintain social structural power’ (2002, 14, 15). Corporations have been far more successful in securing power than other groups in the capitalist system, such as consumers and workers. According to McMahon this is because of the ability they share with military organisations to acquire and process ‘social and material resources more time-efficiently and because they more effectively (discipline) their own personnel’ (2002, 15). The power they provide is conventionally deemed to be legitimate when managers are suitably responsive to the property rights of shareholders, who are the individual owners (cited in Tarrant, 1976, 28)\(^\text{25}\). Various forms of power and methods of creating and accessing power are involved - forces of physical production, financial power and related sociopolitical influence, power gained by accessing social and natural capital, and so on. Power is created by relational effects, and not just between people, as described in Chapter Five.

\(^{25}\) If, however, shareholders become disengaged from the workings of the corporation, its power is effectively illegitimate since managers can act free of control, with little responsibility.
During America’s colonial period very few corporations were created, and the majority of these provided some sort of public service (Bowman, 1996, 38). Companies granted a charter were expected to be terminated once the task for which they had been set up had been completed. Charters were usually for the order of between 10 to 40 years, which limited the potential for commercial gain and their ability to wield political influence in the long term (‘A Short History of Corporations’, 2002). From these modest beginnings, America quickly became an important home for multinational enterprise, due to factors such as its high per capita income, large population, and vast geographical area serviced by comparatively advanced communication and transport capabilities (Wilkins, 1991, 31).

Enterprises based in colonial America that could be thought of as multinational corporations (MNCs) were largely created when merchants sent family members to represent them in far away places (Wilkins, 1991, 5). The modern version of the American multinational began to take shape in the 1850s as technologically advanced American companies established arms of their businesses in European countries (Wilkins, 1991, 5). The fact that America had become the world’s largest market by 1900, gave American multinationals a distinct advantage (Wilkins, 1991, 31).

**Cultural contexts**

Corporations are influenced by the cultural contexts in which they are immersed. The corporations that took shape in Britain and Japan during the nineteenth century, for instance, embodied certain characteristics that were noticeably distinct from those of American firms. In Britain, the corporate driven industrial economy did not thrive to the same extent as it did in America. It was hampered by a lack of social acceptance of the technologists whose innovations underpinned industrial expansion. Scientists were held in higher esteem than technologists such as engineers, who were seen as ‘tradesmen’ rather than ‘gentlemen’. England was also slow to adopt venture capitalism. While venture capitalists were operating in America, Japan and Germany by the 1840s, they did not become established in England until just prior to the Second World War (Drucker, 1999, 4, 5).
Corporations arrived in revolutionary fashion in Japan around 1868, filling the space left by the collapse of the feudal system that occurred after Emperor Meiji took power. Western technology and influence melded with the existing traditions of family responsibility that typified the feudal system to provide a distinctive template for corporate identity. The country’s rulers deliberately avoided government intervention, so that the process became essentially ‘the first successful privatization, resulting in the creation of the zaibatsu trading groups which were to dominate Japanese industry for most of the next century’ (Sampson, 1995, 31).

Historical criticism of the corporate form

The expansion of corporate enterprise has been accompanied by heated criticism and deep suspicion in many quarters. In America, for example, grave concerns about corporations’ ‘anti-democratic tendencies’ and skepticism about big business’ supposed benefits to society have been voiced since 1781 (Bowman, 1996, 5). Abraham Lincoln himself was full of foreboding about malevolent corporate greed:

I see in the near future a crisis emerging that unnerves me and causes me to tremble for the safety of my country…corporations have been enthroned and an era of corruption in high places will follow, and the money power of the country will endeavor to prolong its reign by working upon the prejudices of the people until all wealth is aggregated in a few hands and the Republic is destroyed ([1864]26, cited in Shaw, 1950, 40).

Towards the end of the nineteenth century, people such as Max Weber and Emile Durkheim developed eloquent intellectual arguments to support corporatism in general. They recommended a group and interest centered society of some form, whether it be based on state, economic or societal organisations (Saul, 1997, 28). Scholar John Raulston Saul links the ascendancy of business corporations to the rise of the ideology of corporatism as the general condition of society, which in effect originally proposed ‘the legitimacy of groups over that of the individual citizen’ (1997, 17). ‘We live in an organizational world’ and the significance of this is indicated by the way organisations are often ‘singled out as the cause of many of the ills besetting contemporary society’ (Scott [1992], cited in Pfeffer, 1998, 733). As with many other organisations, business

26 In a letter to Colonel William F. Elkins, November 21st, 1864.
corporations have had to proceed while navigating the difficult ground between concurrent support and criticism.

As corporations’ power increased during the 19th century, misgivings about corporate dominance in business and its negative sociopolitical and economic side effects also swelled. By the end of the 19th century, unfettered capitalism had left ‘railroad tycoons and robber barons…in charge of monopolies and cartels’ (‘A Short History of Corporations’, 2002, 25). As a result widespread dissatisfaction grew amongst the labour force. The US Government responded by raising tariffs and taxes and establishing antitrust laws designed to demolish monopolies. In this climate of discontent, state regulation again became a favoured option (‘A Short History of Corporations’, 2002, 25).

At the start of the twentieth century, social injustices and the effects of alternatively expanding and depressed business cycles stimulated strident opposition from a broad spectrum of protesters (Bowman, 1996, 76). Most of the main socio-political and economic concerns of the time were inextricably bound to or caused by the expanding fortunes of corporate enterprise. In America, farmers’ struggles to survive on the land, social inequality, political corruption and the struggle faced by people within the workforce for recognition were issues that drove people to protest (Bowman, 1996, 77). In an effort to breach corporate defenses,

populists invoked romantic images of Jefferson, Jackson and Lincoln. Revolutionary socialist and anarchists prepared for the inevitable cataclysm. And utopian visionaries evoked the longing for simpler times (Bowman, 1996, 77).

Bowman claims that this unrest was dealt with by employing revisionist strategies that allowed public regulation of corporations while at the same time maintaining a constitutional gap between the private sector and the state (1996, 9). In the US, says Bowman, this amounted to ‘the corporate reconstruction of…society though the law, politics and the market’, an orientation that became characteristic of liberal thought for the rest of the century (1996, 9).
The twentieth century

The tumultuous first half of the twentieth century saw government intervention gain popularity again. The devastating depression of the 1930s, and a growing labour movement lent weight to calls for public intervention in the processes of business. Welfare states were created in Europe after World War Two. This movement was not universally effective, however. Some poorer nations were essentially controlled by corporations based in the United States and Europe. The company ‘United Fruit’ actually backed a coup in Guatemala in 1953, an event which lead to the coining of the term ‘banana republic’ (A Short History of Corporations’, 2002, 25).

After World War Two, American corporations in particular began to spread their operations internationally, becoming ‘multinational’. More and more corporations gradually followed suit, originating from both ‘developed’ and ‘developing’ countries (Rafferty, 1996, 4; Lall, 1983), although it was not until the mid-1960s that such corporations were referred to by the term ‘multinational’ (Martyn, 1975, 30). The ‘globalization’ of industrial production has proven to be an uneven process, with variations between corporations from different countries and between industries. Corporations from wealthier nations have often enjoyed structural advantages in the global political economy, while certain sectors of industry are more suited than others to take advantage of the technologies that facilitate globalization (Farrell, 2004, 82).

The benefits of globalization - streamlining production and supply chains globally in order to reduce costs and drop prices to increase demand for their products, for instance - are not equally attractive to all. Service industries involving data entry, call-centres and transaction processing, for example, are now becoming increasingly globalized, due to ‘plummeting telecommunications costs and the digitization of some paper-based business processes’ (Farrell, 2004, 84). The consumer electronics industry has also extended its global reach by situating the production of components and their final assembly in countries where financial costs are lowest. The apparel industry has a reasonably global aspect - although less so than electronics - since it can reduce costs by finding people who are willing to accept lower wages to make garments, and since it is relatively inexpensive to transport the finished items elsewhere. On the other hand, trendier fashion houses catering for elite clients might be prepared to pay higher wages in order to be based closer to their markets, improving the efficiency and speed of their operations. Meanwhile, the auto and steel industries, for example, are not as well placed to benefit from globalization. They face problems such as the high cost of transporting their products, union pressure, tariffs and government restrictions and so on (Farrell, 2004, 85).

One way an industry’s degree of globalization can be measured is by comparing the annual value of global trade to the annual value of industry sales. Global trade includes both the shipment of components to various companies as part of the chain of production and the transport of finished products. A ratio of over 100% means that an industry can be considered to be highly global. Consumer electronics has a ratio of 118%, apparel 77%, auto 42%, steel 33% and IT/business-process outsourcing 1% (Farrell, 2004, 85).

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*27* The benefits of globalization - streamlining production and supply chains globally in order to reduce costs and drop prices to increase demand for their products, for instance - are not equally attractive to all. Service industries involving data entry, call-centres and transaction processing, for example, are now becoming increasingly globalized, due to ‘plummeting telecommunications costs and the digitization of some paper-based business processes’ (Farrell, 2004, 84). The consumer electronics industry has also extended its global reach by situating the production of components and their final assembly in countries where financial costs are lowest. The apparel industry has a reasonably global aspect - although less so than electronics - since it can reduce costs by finding people who are willing to accept lower wages to make garments, and since it is relatively inexpensive to transport the finished items elsewhere. On the other hand, trendier fashion houses catering for elite clients might be prepared to pay higher wages in order to be based closer to their markets, improving the efficiency and speed of their operations. Meanwhile, the auto and steel industries, for example, are not as well placed to benefit from globalization. They face problems such as the high cost of transporting their products, union pressure, tariffs and government restrictions and so on (Farrell, 2004, 85). One way an industry’s degree of globalization can be measured is by comparing the annual value of global trade to the annual value of industry sales. Global trade includes both the shipment of components to various companies as part of the chain of production and the transport of finished products. A ratio of over 100% means that an industry can be considered to be highly global. Consumer electronics has a ratio of 118%, apparel 77%, auto 42%, steel 33% and IT/business-process outsourcing 1% (Farrell, 2004, 85).
Globalization was boosted in the 1970s when Milton Friedman’s ideas about privatization and deregulation were adopted by powerful political leaders. In many respects this signaled a return to the laissez-faire capitalism of the previous century. In the 1980s, the concerted political promotion of the ‘neoliberal’ agenda represented such a shift in perspective at the time, that the processes took their names from the leaders whose faith carried the movement - ‘Thatcherism’ and ‘Reaganism’ were born. Capitalists rode on the wave of a ‘major rehabilitation’:

The capitalist was reinterpreted as a heroic life force, a bringer of growth, innovation and riches to others as well as himself, associated with giving and generosity rather than meanness and avarice (Sampson, 1995, 169).

In the 1970s and 1980s, corporate funding was increasingly provided in the form of debt: ‘Many large firms were taken over by corporate raiders or by the firm’s management using largely debt capital. The resulting businesses were usually corporate in form, but often had no public shareholders and were not listed or traded on organized stock markets’ (Rafferty, 1996, 4). It has been argued that this was a positive development leading to useful innovations in organisational structure, and helping to bridge the existing gap between the ownership and managerial roles within companies (Rafferty, 1996, 4).

During the 1980s, TNC’s economic influence grew significantly. Mergers became a more common means of bolstering company performance by attempting to secure market shares or to gain access to foreign markets, for example. On many occasions the aim of merging was purely speculative, and on other occasions mergers facilitated joint ventures or co-operative research and development programs. The number of mergers increased significantly during the latter half of the decade (The Group of Green Economists, 1992, 83). Companies merged to create individual firms with unprecedented economic power, without parallel changes in international regulatory controls to oversee them. TNCs were thus able to operate with reduced accountability to the public (The Group of Green Economists, 1992, 82).

The neo-liberal ideology of 1980s macro-economics left the poorest countries with little budgetary room to maneuver as they complied with IMF prescriptions, and restricted wage rises and growth in higher income, industrialized countries (The Group of Green
Economists, 1992, 83). Private companies had to cope with deregulation and reduced
government protection (Sampson, 1995, 233). In this environment, TNCs opted for
investment strategies that ‘focused on rationalization, internal restructuring, ‘global
sourcing’ and co-operation with other TNCs, rather than on expansion aimed at
developing new markets’ (The Group of Green Economists 1992, 83). In this hostile
and competitive setting companies no longer felt responsibility for providing secure,
long-term employment, a dramatic change from post-war attitudes (Sampson, 1995,
233).

In an attempt to cope with these circumstances, a sort of corporate ‘federalism’ or
‘subsidiariety’ began to emerge. Companies such as Shell, Unilever and Ciba-Geigy,
wishing to balance the advantages of large and small scale foci, adopted forms that
Handy likened to political federations ([1992], cited in Sampson, 1995, 241). The aim
was to balance the big and the small to simultaneously enhance the stability and power
typical of large corporations with the adaptability and local knowledge of smaller
operations:

The concept of federalism is particularly appropriate since it offers a well-
recognised way to deal with paradoxes of power and control: the need to
make things big by keeping them small; to encourage autonomy but within
bounds; to combine variety with shared purpose, individuality and
partnership, local and global, tribal region and nation state, or nation state
and regional bloc. Change a few of these terms and these political issues
can be found on the agendas of senior managers in most of the world’s large

By 1999, globalization of industry had proceeded to the point where ‘the top 200 global
corporations’ combined sales exceeded the combined economies of all the world’s
countries minus the top 10’ (Steger, 2004, xv). This economic strength is inevitably
accompanied by political leverage, and many corporations today have the capacity to
exert pressure on national governments in order to organise policies that suit them.
Even supporters of the free market sometimes bemoan the sort of corporate expansion
that ‘has created a situation where most markets are dominated by a small number of
leading firms that compete with each other only as a formality’ (The Group of Green
Economists, 1992, 82).
Ontology

Although corporations are now the primary social organisation supplying the built apparatus of industrial society, ontological questions of what corporations and corporate power actually are and why they exist are extremely difficult to answer. In the 1980s, Casson concluded that there was ‘no really satisfactory general theory of the (multinational enterprise)’ (1981, 53). Bowman observed that:

Corporate power exists as one of the great enigmas of political science. A complex phenomenon possessing economic, legal, political, and social significance, corporate power does not lend itself to facile description or to conventional methods of political analysis. Nor are there convenient historical analogies that might offer guidance in disclosing the inner principles of this mysterious force (1996, 1).

Historical analogies are indeed thin on the ground, perhaps because the corporation is in many ways a genuinely innovative concept. Drucker nominated it as the first independent organisation in centuries to form as a comparatively autonomous centre of power within society and yet outside government (cited in Sampson, 1995, 26). Anticipating and observing the rise of multinationals during the twentieth century, Drucker went so far as to suggest that multinational corporations ‘may…well become the prototype and forerunner of a truly multinational public-service agency of tomorrow’, in the same way the national businesses set precedents that public service institutions adopted (cited in Tarrant, 1976, 229).

To complicate matters, corporate structure and identity are not static over time and vary even between contemporary sectors or firms in or spanning different societies. A range of corporations exist, including private, public and not-for-profit firms. There is disagreement about how different types of firms should be analyzed. Observers such as Williamson (1981) treat the multinational enterprise (MNE) as a straightforward variant of a national firm, whereas Casson (1981, 360) stresses the need to examine the multinational element of such organisations more specifically rather than focusing primarily on the enterprise element28.

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28 Casson talks about the way many theories begin by taking the nation-state for granted and then proceed to investigate the enterprise itself. The question that follows is often ‘what are the costs of transacting across the boundaries of nation-states?’, as opposed to asking ‘Given the economic advantages of operating on a global scale, what is the rationale for continuing to split up the world into different nation-states?’ (1981, 360.)
Defining the corporation

Various definitions of the corporation with a range of emphases have been proposed over the years. Bowman’s ‘abbreviated description’ of the corporation is useful in that it highlights several important determinant aspects of corporate identity. The large business corporation, he says,

is at once a legal entity (a fictitious and immortal person possessing rights and obligations), an enterprise chartered by government and subject to the rule of law, a joint-stock company that earns dividends for its stockholders, and an economic, political, and social institution through which power is exercised internally (within the enterprise) and externally (in society at large) (1996, 2).

Bowman offers this definition as a mere scratch on the surface, and stresses that ‘every aspect of corporate power - in the economy, the law, politics, and society -contains its own set of issues and analytical problems’ (1996, 2).

Bowman’s insights into the nature of corporate power emphasize their pervasive influence, and undemocratic tendencies:

Corporate power is the power wielded by individuals, often working in concert, who, by virtue of their dominant positions within the marketplace, make the critical decisions that largely determine the production, distribution, and consumption of goods, the development of technology, and the conditions and location of employment. Corporate power affects virtually every aspect of social existence - work, education, the arts, leisure, communication, transportation, entertainment. It can shape, if not determine, the economic condition and fate of communities, cities, regions and even nations (1996, 16).

Legal frameworks

The legal frameworks that support corporations are essential to their existence. There is a crucial relationship between the law, ideology and power that supports corporate existence - the law sanctions the relationships of power involved as well as providing justification for the ideology that undergirds them. In this way ‘the coercive and ideological functions of law combine to enable and stabilize relationships of control’ (Bowman, 1996, 13). Kraakman (2001) identifies five universal legal aspects of the corporate form:
as legal personalities, they are allowed to trade, own property, pay taxes and be sued or sue others (149);

• shareholders have legal and control rights over the firm’s activities in ‘an investor-owned corporate form that dominates business everywhere’ (149);

• power is delegated to a single authority within the management structure of the firm (150);

• limited liability has now been universally adopted, although unlimited shareholder liability for debts has existed in some places until fairly recently (150); and

• shares are transferable, insulating the firm’s identity from change of ownership (151).

Economic reasons for corporate existence
Analyses of the existence and organisation of the firm that rely heavily on economic justification are common. One of the most influential contributions to the debate was Coase’s idea that the basic economic driver behind the creation of the firm as a way of doing business is to minimize ‘transaction costs’. According to Coase, it is safe to assume ‘that the distinguishing mark of the firm is the suppression of the price mechanism’ in this way (1988, 36). Transaction costs can be defined as ‘searching and information costs, bargaining and decision costs, policing and enforcement costs’ (Dahlman, cited in Coase, 1988, 7). By creating a ‘body’, a legal entity - the firm - that can internalize such costs and organise the dynamics of these interactions to suit itself, such costs are minimized, argued Coase. People within the firm can deal with each other and avoid the need to expend time and energy finding other people to deal with, build trust, communicate the terms of trade, negotiate, and form and police contracts in order to undertake market transactions. The existence of the corporation as an atomistic identity with a clearly defined ‘inside’ and ‘outside’ is implicit in such descriptions of the firm.

According to this perspective, the firm has evolved so that it can organise much of this within its own boundaries and thus maximize efficiency (Coase, 1988, 7). Within the firm, clear job descriptions circumvent the need for workers to continually negotiate who will do which task. The requirement for employees to assume formal work roles
and disassociate themselves from normal interpersonal relationships is also touted as a method of streamlining production and avoiding conflict (DiMaggio, 2001, 9).

Williamson (1975) was an earlier theorist who sought to explain the firm’s existence in terms of variations in style of interpersonal interaction within the firm and outside it. He suggested that whereas outside the firm formal contracts must be drawn up to guarantee transactions, activities within the firm could be conducted on a more informal basis. Williamson referred to these informal interactions as ‘relational contracts’, and thought they served to avoid some of the problems associated with the formal workings of the market, such as the necessarily incomplete nature of formal contracts. In this way, the firm is seen as being held together internally by informal, relational ties that coexist with the strict hierarchical attributes of corporate structure that McMahon describes:

Firms of any size are typically hierarchical bureaucracies: within them resources (including time) are taken away from the communication process necessary for the endogenous control process of negotiation (market transaction) and allocated elsewhere to increase overall efficiency (2002, 7).29

Why have a market at all then, if you can eliminate transaction costs by forming an organisation, or avoid the need for costly formal contracts by relying on informal ones within a group? Coase thought the answer in terms of cost minimization might lie in optimum size: ‘as a firm gets larger, there may be decreasing returns to the entrepreneur function, that is, the costs of organizing additional transactions within the firm may rise’ (1988, 43). Firms expand until costs ‘within the firm become equal to the costs of carrying out the same transaction by means of exchange on the open market or the costs of organizing in another firm’ (1988, 44).

Casson suggested that multinational organisations are formed in order to gain from ‘net benefit(s) (of) internalizing an intermediate product market linking activities located in

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29 Another way to conceive of hierarchical structure is in terms of various people’s responsibilities within the business in terms of time: some employees are concerned with short term responsibilities such as dealing with particular customers for a specific transaction, while managers tend to focus on longer term issues such as establishing the processes that guide dealing with customers and so on (Jaques, cited in Senge, 1997, 142). It is an intriguing perspective, although perhaps I am biased since by this logic the sustainability officers within a business should hold the highest office!
different countries’ (1981, 347). He added that ‘the case for multinational operations rests upon the relative and not the absolute costs of transacting’ (1981, 354). Casson emphasized the point that it is markets rather than advantages that are internalized - ‘internalisation is nothing if it is not a general theory of how market failure leads to the creation of firms’ (1981, 348). It involves replacing the ‘arm’s-length contractual relationships’ of the market with ‘unified ownership’ (Casson, 1981, 348).

Other primarily economics-based explanations of why firms exist have been proposed. Knight, for example, thought that the mode of payment to employees was the ‘distinguishing mark of the firm - fixed incomes being guaranteed to some of those engaged in production by a person who takes the residual, and fluctuating income’ (cited in Coase, 1988, 40, 41). Archibald, described the firm formally as ‘intermediate agents, between resource owners and consumers, that perform certain organizational tasks. Resources are sold or hired to firms; commodities are bought from firms…and firms are black boxes in between’ (1971, 10). An ‘old, crude fiction’, as Drucker described it, that is still fairly commonly believed, is that the corporation is ‘nothing more than the sum of the property rights of the individual shareholders’ (1983, 30). In 1997, Charles Handy noted that the corporation was still commonly spoken of as if it were a ‘licensed, self-appointed oligopoly, dominated, in the Anglo-Saxon world, by the pressures of the stock market’ (1997b, 28).

Legal and taxation issues are important to company size and structure. Transactions occurring within firms are treated differently from market transactions under the law. Sales tax impacts differently on individuals operating in the free market compared to corporations. This situation provides stimulus for the creation of firms, and for their expansion where they already exist (Coase, 1988, 41). In this respect, the firm’s existence may be, to some extent at least, due to a Heisenberg-like influence of the

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30 Product markets include components, raw materials, semi-processed materials, wholesale productions, technology, knowledge, and commitments to pricing and production (Casson, 1981, 347).

31 Heisenberg, a physicist who worked extensively in the area of quantum mechanics, showed that the scientific researcher influences the subject of his/her enquiry. The act of observation of sub-atomic particles for instance, affects the particles themselves: ‘This inherent aspect of observation of quantum systems not only challenged the view of the relationship between physical theory and physical reality. It also challenged the classical assumptions that the observer was separate and distinct from the observed system and that acts of observation did not alter the system. In quantum physics, a definite value of a physical quantity can only be known through acts of observation, which include us and our measuring
theorist on their subject. Law and policy makers might conceive of the firm as an identity and might develop rules that consequently propagate precisely what they imagine.

To economists, the firm has frequently been seen as a meeting place for cost and demand curves, run by the need for an optimal relationship between inputs and pricing (Coase, 1988, 3; Casson, 1981, 356). However, such narrow economic definitions of the corporation overlook vital aspects of corporate identity. The corporation ‘is not now, nor has it ever been, an economic device pure and simple,’ says Bowman (1996, 2). Distilling the firm down to economic formulae makes it seem as though exchange takes place without being influenced by institutional setting: ‘We have consumers without humanity, firms without organization, and even exchange without markets’ (Coase, 1988, 3).

As Mark Casson noted, most theories of the multinational enterprise are ‘themselves a product of liberal thought applied to economics, (and therefore) presume a liberal framework’ (1981, 345). Such theories tend to be built on the presumption that there is ‘a static configuration of independent nations, each with a liberal constitution, and with its production organized largely by private companies and corporations’ (Casson, 1981, 345). This is problematic for several reasons: it leads to a failure to appreciate the position of nations with ‘colonial or dominion status’; it does not consider the business implications of international territorial disputes and other disruptions; nor does it account for the existence of ‘unappropriated frontier territory, such as that represented today by the Antarctic, the oceans and the atmosphere’ (Casson, 1981, 345). Casson maintains that the analytical framework derived from liberal thought is too narrow to provide an adequate theory of the multinational firm (Casson, 1981, 345).

The corporation as a social or ecological entity
While there is reticence amongst economists to expand the theoretical understanding of corporations, others attempt to see beyond convention. Many management theorists, sociologists and philosophers for example, argue that the corporation’s true character depends on relationships between people. They maintain that corporate structure should ultimately be determined by social interactions and socially derived notions of instruments, and we cannot assume that the quantity would be the same in the absence of observation’ (Nadeau and Kafatos, 1999, 37).
what legal structures and forms of value should be endorsed. Bowman maintains that corporate power simply cannot be understood if it is abstracted from its social context during the process of analysis (1996, 5). As long ago as 1946, Peter Drucker suggested that ‘the essence and purpose of the corporation (is) not in its economic performance or in its formal rules but in the human relationships both between the members of the corporation and between the corporation and the citizens outside it’ (1983, 24). The essence of the corporation, said Drucker, ‘is social, that is, human, organization’ ([1946] 1983, 31). Casson postulates that the transaction-cost theory of the firm inherently implies the need for ‘an elementary appreciation of “human nature as we know it”’ (1981, 340). Charles Handy suggests using a ‘new language of polity’ which emphasizes the idea of the corporation as a community bound by a common purpose rather than as a piece of property (1997b, 28). Handy suggests that businesses should take the literal meaning of the word ‘company’ - the sharing of bread - to heart (1997b, 28).

By iterating the importance of internal and external social relationships, Drucker touches on the co-existent public and private aspects of corporations, suggesting that the relationship between them is of critical importance. Many years later, Parkinson et al. also highlighted the importance of this characteristic: ‘In reality the company is both private association and public body, but the way in which the balance between the two is determined can be crucial’ (2000, 5). The public/private relationships involved include: ‘companies and investors; companies and employees; and companies and the community’ (Parkinson et al., 2000, 6). The extent to which each of these characteristics is expressed depends to a large extent upon the politics that shape them. Throughout the twentieth century, British polity, for example, adhered to laissez-faire philosophies that preserved the notion of the company as primarily a private association, and buried attempts to focus on the public aspects of its character (Parkinson et al., 2000).

Kelly suggests a more biologically inspired model to cope with increasing complexity and to make industrial technology more people-friendly:

rather than understanding businesses using a sort of industrial model - as little production lines, as self-contained entities that are mechanical in their
operation - we will have to start understanding them more like an ecology of organisms (1997, 252).

Such suggestions that the corporation should be thought of primarily as a human community, rather than a mechanism to be utilized by its owners, or as an organism, are still seen as fairly radical. Ackoff (2002) observes that attempts to conceptualize corporations as social systems are still in their infancy.

If, as theorists such as Drucker ([1946] 1983), Handy (1997b), Ackoff (2002) and Senge (1997, 2002) suggest, the corporation should be thought of as a human community, then perhaps the key to understanding corporations lies in observing the effects of human psychology. Descriptions of behaviour within a group - the corporation - in contrast to behaviour between people inside and outside the firm resonate with findings from psychological studies of human cognition and conflict, and in-group and out-group interactions. It is beyond normal human ability to deal continuously with and fully explain the unlimited complexities we face on a daily basis.

Our rationality is therefore ‘bounded’ - it can be rigorous and deliberate, but is inherently limited in scope at any given moment. We tend to create categories such as human ‘in-groups’ and ‘out-groups’ to manage the infinite amounts of information we are bombarded with. These categories can be pliable and overlaid with others, but they direct our imagination powerfully (Perdue et al., 1990).

The hierarchical structure of corporations has the effect of inoculating people against the moral import of their actions, by allowing them to remove themselves from their usual social ties (Weber, cited in DiMaggio, 2001, 14). The corporation becomes the ‘in-group’ and everyone else is relegated to ‘out-group’ status, at least while people are at work. The ontology of the out-group is constitutionally entrenched. The human tendency to imagine members of an out-group as an homogenous ‘other’ (Perdue et al., 1990) and frequently as a less morally acceptable group of people than the in-group, is

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32 In addition to our tendency toward bounded rationality there is the tendency to opportunism, whereby people or groups such as corporations distort information to their own advantage - an obvious impediment to supposedly free market interactions (McMahon, 2002, 7). This combination of ‘finite decision-making capacity and varying intention…(presents) serious problems for social groups organized on an endogenous control basis’, such as experienced in pure market relations (McMahon, 2002, 7). This is a highly contentious issue in relation to corporate activity in the global political economy.
employed as a device for the creation of power, as it is when armies are encouraged to
fight each other by dehumanizing the opposition.

A corporation may be thought of as an in-group by those who work in it, where
members interact with each other in ways that are psychologically distinct from the
ways in which they interact with people operating “outside” in the free market, when
such categories are determining the parameters of action. The division between groups
of people making up a corporation and “other” groups of people is not only entrenched
in law, but is also, and perhaps more fundamentally, underpinned by the cognitive
tendency to identify people not in one’s in-group as ‘other’ (Perdue et al., 1990), and
therefore less worthy of loyalty and trust. The free market outside the corporation may
be seen as a more risky environment in which to form trust-based working relationships
than within the corporate in-group.

The hypotheses that Coase (1988) and Williamson (1975) proposed to explain why
firms exist, and Casson’s (1981) views about ‘psychic distance’ resonate with such
analyses of interpersonal and intergroup behaviour. Casson explains that transaction
costs are increased by what he refers to as the ‘psychic distance’ created by differences
in language and culture that impede interaction (1981, 354). He interprets this to mean
that ‘a major factor in reducing the psychic distance between transactors is common
membership of a social group’ (1981, 353). Casson identifies trust as a key element
underpinning economic activity in the market, as well as in and between firms. He
notes that ‘arm’s-length trade’, for instance, ‘will be most common in countries with
strong cultural homogeneity’ such as Japan (1981, 353).

The price mechanism can also be understood as a practical response to the nature of
social interaction. It is perhaps most comfortably employed where personal
relationships are not supported by hard won understanding and trust. In other words,
money is used as an impersonal symbol of value exchanged between members of
different groups, reducing the need to develop more intimate and trusting relationships.
In a sense, money replaces trust, although participants in market exchange must feel
confident that the rules of the market will be upheld, of course 33. In contrast, the

33 I discuss this further in Chapter Eight.
entrepreneur within the corporation can lay a guiding framework for employees willing
to accept the discipline of an exogenous control system for the benefit of the group, in
the same way that citizens become soldiers and accept the hierarchical discipline of the
military.

According to economists such as Coase who support the model of transaction cost
minimization, the best solution to the problems of efficiency associated with these
tendencies is to ‘integrate individual negotiation, or market transactions, into an
overarching system which concentrates available information and oversees reward
allocation. That is to say a dedicated control structure is imposed on the
negotiation/market exchange practice, resulting in an exogenous control system’ - in
other words, the firm as an ‘alternative to the (negotiated) market’ (McMahon, 2002,
7):

Markets and firms are alternative instruments for completing a related set of
transactions; whether a set of transactions ought to be executed across
markets or within the firm depends on the relative efficiency of each mode

Markets and firms represent two different methods of social organisation - firms, which
are hierarchies, and the market, which consists of transactions within peer-group
relations (McMahon, 2002, 7). McMahon explains that exogenous organisations such
as corporations are favoured where the key ambition is to maximize speed of operation
in competitive circumstances. This occurs most often in regards to warfare and trade,
where precedence is set on the capacity to gather, process and communicate
information to enable rapid execution of operations (McMahon, 2002, 4). In times of
war, for example, it makes sense for members of a community to at least temporarily
relinquish a certain amount of endogenous political power in order to deal with an
external threat (McMahon, 2002, 9). Hierarchies may also be formed when an
individual or core group of people obtain control of the main form of information
transmission for the organisation, as is the case with corporations. Some, like
Williamson have argued that this is dependent on the inherent capabilities of the
individuals concerned:
the emergence of structural power through hierarchical position is basically a product of the ability of certain individuals to perceive more accurately than others the character of the relevant environment (McMahon, 2002, 9).

McMahon argues however that the privilege of control experienced by the leaders of such exogenously controlled hierarchies often has more to do with existing prejudices and inequalities than the inherent capabilities of people vying for control (2002, 9). This is not a particularly democratic system. This is an important realization in regards to the equity concerns of sustainability. McMahon also points out that once established, hierarchies such as firms ‘tend to perpetuate themselves, and that allocation of position and other rewards has little to do with innate ability or competence’ (2002, 9).

Endogenous organisations, on the other hand, are more democratic, and are ‘the most materially efficient form of social organisation and would be promoted in situations where material environmental concerns are the primary determining factor’ (McMahon, 2002, 5)34. Here is a vital point - if corporations’ exogenous control structure is less appropriate than endogenously controlled ones for encouraging democracy and material efficiency, then it is unlikely that corporations will be able to lead the way to sustainability.

The ephemeral corporation

My own starting point in analyzing the corporation is to view it primarily as a locus of power and control upheld by the law, drawing human and non-human networks together for the purposes of the guiding power. It is not a purely economic entity. The corporation is an idea that directs the actions of the people who work within it. Coase called them ‘islands of conscious power’ (1988, 35). They are not people or things, but concepts that are ‘given a name, and a legal existence on paper. Though there is no such actual creature, our laws recognize the corporation as having concrete form, but

34 McMahon explains that communications technology determines organizational structure: ‘the specific character of particular information processing or communications technology will have important ramifications for related control structures…hierarchical structures generally need vertical, selectively high-capacity communication lines and concentrated, large-scale information processing systems which match the economies of scale available to hierarchies. Horizontal (networked) communications and dispersed information processing systems, on the other hand, tend to undermine hierarchical advantage because they distribute information’ (2002, 8). In other words, they can support endogenous control systems.
their true existence is only on paper and in our minds’ (Mander, 2001, 85). Corporations are, in other words, products of the human psyche and certain cultural belief systems. We imagine and believe them into existence, so that they have no physical corporality, as Jerry Mander terms it (2001). This means that it is theoretically possible to change almost every physical attribute of a corporation - the people who work for it, its infrastructure, its shareholders, its products and the people who buy them - and still leave an entity that is publicly recognised.

The material embodiments of the corporation may be changeable, but there are aspects of any given corporation that help to perpetuate its identity over time, as with any ‘culture’. One crucial factor is institutional memory - a combination of tacit and formal knowledge that is shared selectively with members of the corporation. Institutional memory is preserved and passed on via formal and informal processes. Tacit knowledge is ‘that which is not readily articulated. It consists of ‘sentiments, thoughts, feelings, emotions, hunches and so on’ (Rooney and Schneider, 2005, 19). Polanyi defined it as ‘personal, context-specific, and therefore difficult to formalize and to communicate. It is often ambiguous and experiential and therefore highly complex (cited in Birchall and Tovstiga, 2005, 30). Tacit knowledge provides essential sustenance for corporate identity and is passed on informally through a myriad of interpersonal interactions. In addition to tacit knowledge, formal knowledge, which is more easily codified, is gained over years of experience and is meted out according to the dictates of power and management structures (McMahon, 2002).

**Corporations and rationality**

As an essential part of the global political economy, corporations embody particular cultural philosophies that justify and perpetuate the modernist worldview with its celebrated focus on expert rationality. Expert knowledge is tied to capitalist progress dominated by MNCs, a combination which many observers think is failing for the majority of us (Korten, 1999; Mander, 2001). The ordinary citizen is too often overrun by the political ambitions of far more powerful groups. Mander asserts that the corporate form is beyond redemption:

> Corporations are inherently bold, aggressive and competitive. Though they exist in a society that claims to operate by moral principles, they are
structurally amoral. It is inevitable that they will dehumanize the larger society as well (2001, 90).

Corporations are not neutral providers of goods and services conceived and desired in a cultural vacuum. They are one of the forces that shape cultural norms, promoting certain attitudes and beliefs and relegating others to unfashionable obscurity. David Korten terms it the ‘colonization of popular culture’ (1999, 31). As John Howard notes, ‘we have, in Nietzsche's sense, arrived at "super corporations" that are so large, powerful and effective they influence greatly the culture of which they are a part’ (2002, 42). If this were not the case, corporations could forego the need for expensive advertising budgets that go beyond mere explanation of the merits of a particular product. They would not bother creating enticing associations between the latest model car and notions such as freedom, sex, power or excitement. They would not bother selling life styles and images, they would simply sell products.

Corporations’ cultural agenda does not stop at the level of marketing their products. They depend on the production and maintenance of a critical level of normative social understandings for their very existence. They rely upon the acceptance of the tenets of liberal democracy as superior and inevitable. They exist within the realm of economics, which rather than being a neutral construct, is actually built on the normative idea that it is possible to ‘own’ things and reasonable to exchange them via a social contract symbolically represented by ‘money’. Imagine the last remaining human in a room with an insect. Any claim the human makes to the insect about ownership of the chair he or she is sitting on would not only be meaningless, but pathetic. It is difficult to imagine the insect being impressed - flattened perhaps, by our lone human if he/she chooses not to share the chair-space, but not actually participating in the formation of in any contractual agreement about long term rights to the chair. Clearly, ‘ownership’ in economics is not a reflection of reality, but a social agreement.

**Biases in conventional views of the corporation**

_They are dead_  
_They are dead_  
_And will not return from the dead_  
_Until they stop neglecting_  
_The art of their dialogue_  
_For broken english lessons_
To impress the mister bosses  
Who keep them employed  
As dishwashers porters messenger boys  

Factory workers maids stock clerks  
Shipping clerks assistant mailroom  
Assistant, assistant, assistant, assistant  
To the assistant, assistant dishwasher  
And automatic smiling doorman  
For the lowest wages of the ages  
And rages when you demand a raise  
Because it’s against company policy  
To promote SPICS SPICS SPICS  

(Pedro Pietri, 1971, 40, 41)

Business organizations are affected by sub-cultural influences (Hofstede, 1998). Peter Drucker maintained that corporations could only be understood via a detailed appreciation of their social structure - ‘the things that really count are not the individual members…an institution is like a tune; it is not constituted by individual sounds but by the relations between them’ (1983, 34). The above verses from Pietri’s poignant lament, *Puerto Rican Obituary*, highlight confronting accusations about endemic racism in the production systems of many MNCs, for example. Failure to appreciate the significance of such structural deficits would create a stumbling block to any corporate ambition to contribute to sustainability. In the next section I will focus on the issue of gender in relation to corporate structure and function. My aim is not to provide an exhaustive analysis, but to briefly examine the possibility that corporations are not neutral constructs.

**The corporate gender bias**

A number of analysts argue that gender is a foundational structural and functional element of bureaucratic organizations35 (Britton, 2000, 419; Bologh, 1990; Martin and Knopoff, [1997], cited in Martin, 2003, 345). Social scientists note a strong bias towards a masculinist model of gender in corporations (Acker 1998; Britton, 2000; Mills 2002; Swanberg 2004; Dossi, 1993; Martin, 2003; Haas and Hwang, 2007). In organizations strongly connected to the neoliberal economy, such as businesses and

35 Golombok and Fivush define gender stereotypes as ‘a set of shared beliefs and majority agreements which prescribe differences between men and women in their attitudes, values, interests, psychological traits, social relations and occupations’ ([1994], cited in Gunkel et al., 2007, 59).
universities, the male norm becomes a standard against which ‘women are measured and women are understood to be different and lacking’ (Currie et al., 2002, 61). The masculinist model may be ‘normalised’ to the point that it becomes invisible in every day discourse (Currie et al., 2002, 61). Theorists question whether ‘positive contributions to sustainability (are) more likely to arise from organizations that are more female versus male in their various spheres’ (Gladwin et al., 1995, 898).

Speaking from personal experience, Anita Roddick describes negative impacts of corporations’ often gendered character. It is an issue that she suggests should be brought ‘out of the shade and into the sunshine’ in order to ‘rethink the whole management education’ (2000, 122). Peter Drucker’s use of language to describe mass production as resting on the ‘order of relations between man and man’ (1983, 34) betrays the gender bias that has permeated corporations from the beginning. The corporate form began to take shape in societies where women were not permitted to vote or to enroll at universities, nor even to dispose of their own money, and when ‘even a progressive thinker like Freud was convinced that women were ultimately incapable of making ethical judgements. The ethic that ultimately shaped our society was a male ethic’ (Dossi, 1993, 176).

As first summarized by Drucker in 1946, the purpose of the corporation from a patriarchal perspective is

> to be economically efficient; it must therefore be measured by a yardstick of efficiency, which means objectively, impersonally and independently of emotions and desires (1983, 44).

The sustainability-orientated business strategy of eco-efficiency is an extension of such orthodox economic logic. However, this version of events is not ‘natural’, it is normative, and clearly patriarchal. The drive for eco-efficiency above all other concerns of sustainability emphasizes the rational, objective (male) functions of human effort and devalues such things as emotion and desire (female). If, as Dossi (1993) suggests, money is the ultimate symbol of a world based on male values, then the standard Venn diagram of sustainability, with its equally weighted spheres of economics, environment and society, begins to look not only like a culturally specific symbol, as I have already discussed, but a
Individual dignity and fulfillment in an industrial society can only be given in and through work…The first demand is that our citizens are citizens because they are engaged in industry (Drucker, [1946], 1983, 122).

The notion that a ‘job’ in an organization could be gender neutral is immediately flawed, since it already contains the gender-based division of labour and the separation between the public and the private sphere. The concept of ‘a job’ assumes a particular gendered organization of domestic life and social production’ (Acker [1990], cited in Currie et al., 2002, 63). Martin notes that the gendered nature of business and other organizations is ‘unhealthy for many men and most women’ (Martin, 2003, 345). Haas and Hwang suggest that

The gendered substructure of work organizations significantly influences work activities and practices, decisions affecting efficiency and productivity, wage-setting and promotion criteria, and the extent to which employees’ family lives are taken into consideration at the workplace (2007, 54).

Women are not equally represented in business as yet. While many women have become involved in business, they have found more opportunities in small business than in big corporations. The large firm remains the province of men, organised along the lines of typically male perspectives - from ‘cold-hearted calculation, to being “mothered” by a secretary, or “mothering” young managers by developing them in career terms’ (Roper, cited in Sampson, 1995, 277).

The gender bias of corporations extends beyond ideology to actual numbers of male and female employees and the positions they hold. Women’s perspectives in Big Business management, and in the broader agenda of capitalism generally, have been conspicuous by their absence. In fact, as Wajcman points out, during industrialization’s beginnings ‘women were denied access to ownership of capital and access to education…’ (Wajcman, 1991, 21).

gender specific one as well. Money (economics) is given a central role, but money, as we have seen, is the currency of male independence and competitiveness rather than female interrelatedness and care. It assumes that we can be separate from things in order to own them, and can trade them for our own advantage. According to this version of sustainability, female ethics must still be subordinated to male ethics so that efficient productivity can save the world.
The situation remains unbalanced. Even now, corporate board rooms remain an essentially male-dominated domain. In Australia in 2004 women held a mere 5.7% of board positions in the country’s leading 500 publicly listed companies, while there were only two female CEOs (The West Australian, 2004, 8). Suggested reasons for the situation in Australia include the increasingly tough corporate governance regime; chairmen’s reluctance to appoint people they don’t know (which impacts on women since most chairmen are of an age where they have rarely worked with women as peers); dismissive attitudes towards women’s participation on ‘hard ’ issues; sexist behaviour; and the flimsy argument that women lack CEO experience, despite the fact that any man also lacks experience until he is appointed (Bridge, cited in The West Australian, 2004, 8).

This gender imbalance can affect management cultures and methods of decision making – as evidenced by an Australia-wide empirical study of the impact women in senior positions have in business (Chestermann et al, 2006). This study revealed that both men and women perceive cultural and managerial changes resulting from an increase in numbers of women employed in senior positions, although the researchers detected potential for entrenched stereotypes of feminine roles to further entrench gender inequality within organisations (Chestermann et al., 2006, 69).

Men can also be affected by masculinist bias in corporations. Companies can underestimate ‘men’s feelings of work/family conflict and their desire to enjoy better integration between work and the rest of their lives’ even when ‘family friendly’ policies are enacted (Wise and Bond cited in Haas and Hwang, 2007, 53). A recent study examined men’s participation in child care in Sweden, where the Government actively promotes gender equality (Haas and Hwang, 2007). This research showed that companies’ general lack of responsiveness to men’s family responsibilities is connected to the gendered substructure of organizational culture. The cultures of most work organizations remain grounded in beliefs and values that reinforce the separation of work and family life (“the doctrine of separate spheres”) and reproduce men’s advantage and dominance in the labor market (“masculine hegemony”) (2007, 53).

Research into differences between men and women’s ethical decision making in business, has not yet provided conclusive evidence of substantive differences between the sexes. It is therefore inappropriate to provide prescriptive advice or generalizations
Roxas and Stoneback’s (2004) analysis of studies of ethical judgements between the sexes found that while differences can be identified, they are not universally observed. Valentine and Rittenburg also point out that the ethics-based sex-differences in different cultural and geographical contexts around the world have not been sufficiently researched (2006, 126). Nonetheless, given the importance of equity in sustainability theory, gender issues in corporations are an important subject for research and debate and serve to highlight the need to apply deep critical analyses of organizational structure and function in order to create a sustaining company.

**Challenging masculinist tendencies**

Gender bias in organisations can be addressed in a number of ways. For instance, a study of senior women executives in Australian public, private and higher education organisations lead to a number of recommendations designed to eliminate discriminatory policy and practice. The recommendations for organisations include:

- implement ongoing monitoring of different forms of gender inequity, so that discrimination remains visible where it exists
- develop strategies for ‘succession planning’ so that new leaders emerge from a tradition of equity
- monitor whether the degree and nature of work loads at senior executive levels is deterring people from applying for jobs
- display CEO’s commitment to equity publicly
- ensure that family friendly, flexible working arrangements are available to all staff (Chesterman et al., 2004, 32).

Roddick argues that ‘by setting up their own businesses, women can challenge these male-dominated business models’, which is exactly what she has tried to do (2000, 125). Researchers have identified agreement amongst business employees that ‘the presence of women in senior roles had changed management cultures and influenced methods of decision-making (Chesterman et al., 2006).
However, as Tara Brabazon (cultural studies researcher and sometimes customer of The Body Shop) admits, the ‘banal acts of beautifying’ women undertake with Body Shop products for their ‘self-improvement and…vanity’ are enabled by ‘a process of economic, social and intellectual appropriation - taking the goods, services and ideas of the other’ (2001, 187). In this way, ‘the masculine act of colonization survives through the feminine practices of cleansing, toning, exfoliating and moisturizing (demonstrating) how past truths are rubbed into the skin of contemporary culture’ (Brabazon, 2001, 187). While corporations such as The Body Shop would undoubtedly be more than happy to reap higher profits if such preening was undertaken by as many men as women - The Body Shop has a range of men’s products as well - the point is well made.

Perhaps the best way of thinking about the difference between overly patriarchal systems and the types of business Roddick hopes for, is by imagining a healthier relationship between cooperation and competition. Rather than offering the two in the form of a dichotomous choice, rigorous competition might be used more wisely to promote the public good if it is consciously embedded in a cooperative context. Cooperation could be acknowledged as a prerequisite of positive competition.

Yet redressing the gender imbalance in organizations such as corporations is not an easy task. Currie et al. note that even ‘when certain gendered practices have been challenged and changed, there is a residue of thinking about gender which retains its potency within institutions that are still inhabited disproportionately by males in more powerful positions’ (2002, 48). Furthermore, if management traits stereotypically associated with ‘the feminine’ are endorsed as a remedy to masculinism, this may serve to further entrench gender inequality at senior levels within organizations (Chestermann et al., 2006).

**Limited liability**

The concept of limited liability itself, so crucial to the very existence of the corporation, also has very male gendered overtones. It posits the corporate body as an atomistic identity whose existence relies upon legal insulation against too much responsibility towards others. It thus has more in common with the masculinist tendency to prize
people’s self-reliance, freedom and independence over a more feminist orientation where responsibility, care and interconnection are priorities.

Anita Roddick effectively issues a fundamental challenge to the concept of limited liability and the associated notion that corporations should legally be able to place pursuit of profit above other moral and ethical responsibilities. She insists that business should enhance rather than undermine public welfare:

> it is now more important than ever for business to assume a moral leadership. The business of business should not be about money, it should be about responsibility. It should be about public good (2000, cover).

Others have argued that the privileges gained from limited liability need to be balanced by a ‘legal duty of care to do no harm to people or the environment in the pursuit of profits for shareholders’ (Bendell, 2005, 32)

**Markets and corporations: mythologies**

**Market mythology**

In Chapter Two I outlined some of the mythologies that permeate modernism and therefore the dominant discourse of sustainability, and noted that these are perpetuated by belief. The global free market which corporations operate in - an artifact of modernity - is likewise protected by faith. While acknowledging that ‘markets are human constructs based on human values, laws and norms’, and rightly asserting that they ‘must be built, and…can always be improved’, the World Business Council for Sustainable Development (WBCSD) defends market mythology by claiming that ‘there is no true global market. There exist only the badly flawed, shaky beginnings of one’ (WBCSD, 2001a, 3). In this way, the WBCSD simultaneously, and confusingly, depicts markets both as a value-laden product of the human imagination and a mythological ideal that exists independently of people. After conception, the ideal of the free market assumes a life of its own, leaving humanity behind to wallow in ineptitude. The market is excised from the cultural context that produced it. The WBCSD suggests that human fallibility is preventing us from achieving the ideals of the market, even after many years of practice. It implies that if we work hard enough we may overcome our human fallibilities and approach the perfection we have imagined.
Corporate mythology

The ‘corporation’ - the designated engine of eco-modernism - is a mythological creature. When the American Supreme Court constitutionally instated the corporation as a ‘natural person’ in 1886, it was a crucial manoeuvre that muted longstanding criticisms about the potential for abuse associated with the potential for big business monopoly, which is an anathema to liberal faith in individualism. If the corporation is understood to be an individual unit, attention is directed away from the collaborations within that unit. As Bowman puts it, it was an ‘ideological trick of mirrors’ (1996, 8), and one that was necessary so that the power bestowed upon corporations could be accepted without overt coercion, since ‘power acquires legitimacy through ideological justification’ (1996, 10).

This legal entrenchment of mythology was a critical influence in the proliferation of corporate enterprise. At a time when ‘the industrial revolution stood as a monument to the era of individual enterprise’, it allowed ‘a corporate vanguard’ to take up responsibility for furthering industrialization (Bowman 1996, 9). Bowman explains that

With the rise of corporate power in the final decades of the nineteenth century, the doctrine of corporate individualism could be easily accommodated to the moral directives of laissez-faire…In America, the age of individualism promoted the ascendancy of corporate power first by disguising it and then by denying its existence (1996, 9).

The semantic and legal acrobatics that reconcile seemingly conflicting political/ideological notions - the importance of the individual (the market) as opposed to the importance of the collective (the firm) - are fascinating. Coase (1988) suggested that corporations exist as a way of minimizing the transaction costs associated with trading in the free market. This view presents an interesting dilemma, as Coase pointed out:

In view of the fact that, while economists treat the price mechanism as a co-ordinating instrument, they also admit the co-ordinating function of the “entrepreneur,” it is surely important to enquire why co-ordination is the work of the price mechanism in one case and of the entrepreneur in the other (1988, 37).
The market appears to be a less appropriate option under certain circumstances than a more controlled set of interactions between people within an economy. The most obvious construct of industrial capitalism - the corporation - effectively contradicts the liberal tenets of the market economy. It is an island of collectivism existing in defiance of the ideology of individualism surrounding it. Market forces connecting individuals acting with enlightened self-interest are thought to be the optimal guide to economic success beyond the boundaries of the corporation, while within the corporation, managerial decisions delivered within an often heavily controlled, hierarchical structure, are expected to provide optimal outcomes. Referring to corporations, Rockefeller himself exclaimed that ‘The day of combination is here to stay. Individualism has gone, never to return’ (cited in Sampson, 1995, 42). The giant corporation bears an uncanny resemblance to a socialist bureaucracy. Alan Harrington, speaking from a vantage point within corporations, comments: ‘Every so often I hear my seniors at the corporation inveigh against socialism, and it seems strange. I think that our company resembles nothing so much as a private socialist system’ (cited in Sampson, 1995, 105).

Charles Handy is another who underscores the contradictions smoothed over by mythology:

One of the great paradoxes of our time is that it is totalitarian, centrally planned organizations, owned by outsiders, that are providing the material wherewithal of the great democracies (1997b, 27).

Some trick of mirrors allows our faith in market forces to be unaffected by the observation that the representative institution of capitalism exists by sidestepping them. Far from being slaves to the rigors of competition in the free market, large corporations ‘reach forward to control the markets (they) are presumed to serve and, beyond, to bend the customer to its needs’ (Galbraith, cited in Sampson, 1995, 102). By throwing a cognitive boundary net around what is in fact a system linked to many other systems, calling it a corporation and granting it the legal rights of an individual, a complex collective is offered as an ideal vehicle for promoting the liberalist agenda of strong individualism. The mythology of individualism survives unscathed.
Conclusion
The corporation is a nexus of power, created and sustained in part by legal, socio-cultural, political and economic influences. Corporations play a key role in the contemporary global political economy. They have enormous local, regional and global political influence. In most parts of the world, corporate power infiltrates almost every aspect of social existence - including work, play, communication, mobility, arts and politics.

Corporations are not neutral constructs. The corporation is an idea rather than a concrete entity, given form by belief and effort. It arose as a result of particular historical circumstances which continue to inform notions of corporate identity. The corporation is commonly defined in an atomistic sense, and enshrined in law as a legal entity in its own right. This version of corporate identity upholds the mythology of individualism. In the past, analysts have tended to focus on economic reasons for corporations’ existence as ‘individual’ building blocks of the economy. Coase, for example, postulated that corporations enable their members to avoid the transaction costs associated with free market activities. However, some analysts are now pushing these boundaries by suggesting that corporations are primarily social entities or communities, and/or that ecological models and principles provide more appropriate windows into the reality of corporate existence.

Corporations commonly rely on exogenous forms of internal control - corporate structure has often been hierarchical. Since exogenous control systems are generally less conducive to sustainability than endogenous ones, corporations’ strongly exogenous traits constitute a barrier to sustainability. Other limitations have been identified: anti-racist, feminist, ecological and anti-colonial critiques, amongst others, highlight deficiencies in corporate structure and function that threaten to impede sustainability. The analysis of these critiques undertaken in this chapter demonstrates a clear need for the reformation of corporate identity.
Chapter Four
Changing Corporate Attitudes to Environmentalism and Sustainability

Introduction
Corporations hold a position of central importance in today’s global political economy. Many observers therefore maintain that these iconic institutions must bear the main burden of responsibility for ensuring that development takes a more sustainable trajectory (Benn and Dunphy 2004; Dunphy et al., 2003, Schmidheiny, 1992; Holliday et al., 2002; Hart, 1997). This assertion is hotly disputed by those who harbour reservations about Big Businesses’ intent and capacity in regard to such matters. The variance in corporate attitudes to matters beyond their conventional bottom line contributes to such doubts. Strategic corporate responses to calls to promote positive environmental and social outcomes as they pursue profits have ranged over time and between companies from outright denial to the development of management perspectives that go beyond ‘doing things differently’ towards ‘doing different things’. Even more radical proponents of sustainability argue for ‘being different things’.

In this chapter, I outline a history of changing corporate attitudes first to the environmentalism that began in the 1960s and later to sustainability. I will examine variations over time and amongst different business sectors in regard to the depth and character of corporate understandings of environmentalism and sustainability. I will also examine resultant changes in management strategies, and consider how satisfactory progress in these areas has been to date.

Corporations and environmentalism
Evolving trends in the transformation of business attitudes to environmentalism have been noted (Hoffman, 2001; Benn and Dunphy, 2004; Robbins, 2001). The existence of such transitional stages raises interesting questions. How and why did this transformation of industry occur? How radical have the changes been - are they profound alterations to institutional outlook or do they simply amount to ‘greenwashing’ in an attempt to deflect attention (Hoffman, 2001, 4)? What is the scope for future change?
Hoffman (2001) notes that to answer the ‘how’ questions, a historical review is needed (4). Analyzing corporate responses to environmental and social concerns is an intriguing task since, as Hoffman points out:

How corporate activities were perceived in the 1960s, 1970s, 1980s and 1990s is a subjective reflection of the historical context in which they were observed. In point of fact, no corporate activity is objectively defined. Whether it is a smokestack, an environmental accident, or a corporate environmental strategy, each action or issue is conceptualized based on the context at its inception (2001, 6).

This means that changes in corporate responses to environmentalism should not be portrayed as following a Darwinian progression from naïve to superior attitudes. The prevailing attitudes of any given moment must be regarded in their proper context - that is in relation to the beliefs and circumstances of the time. Transformations in business attitudes to environmental and social concerns are:

not the result of firms getting smarter, nor does it suggest that firms were dumb to begin with. It suggests that how a firm behaves is a reflection of how accepted conceptions of corporate behaviour are defined. And this definition has been steadily evolving (Hoffman, 2001, 7).

Hoffman’s use of the term ‘evolving’ should not be interpreted as an endorsement of Darwinian evolutionary ‘progress’ to a higher state. To depict corporate change in this way would be merely to apply another form of eschatological hope, paralleling the culturally specific desire for progress that meets criticism when it arises in the discourse of sustainability. Such an attitude would be no more helpful in analyzing corporate activity than it is in framing sustainability. If we are to criticize corporations for peddling the eschatological myths of progress in order to promote their own agenda, then we cannot afford to make the same theoretical mistake in relation to corporations themselves. Additionally, if corporations do assume an adversarial or socially unacceptable stance that activists rightly endeavour to redirect, it would be a strategic error to underestimate their capabilities and understandings.

Hoffman also cautions that there are important situational differences which affect business’s ability to meet agendas such as environmentalism. Some contexts offer actors within business more latitude than others - where internal objectives are the
primary motivation the potential for greater flexibility exists, while decisions driven by largely uncontrollable external forces are beyond the scope of people in business to resist (2001, 6). Hoffman maintains that for ‘the last three decades, corporate environmental management has fallen into this latter category’ (2001, 6).

Corporations’ interpretation of environmentalism has varied since the 1960s. As Hoffman says, in relation to business ‘the environmental history of the past thirty-five years reflects an evolution in what environmentalism “means” to corporations’ (2001, 6). Importantly, it is not entirely within corporations’ discretion to determine what environmentalism or sustainability means or should mean to them, as the growing debate about the importance of stakeholders demonstrates. A variety of other actors with an interest in business activities contribute to the ongoing evolution of business understandings of environmentalism and sustainability (Hoffman, 2001, 6).

The first task is to review how corporations have met with environmentalism and sustainability. Since the environmental movement of the 1960s began, corporations have faced the scrutiny of critics concerned about the environmental and social effects of business operations. The corporate response to this attention has ranged from initial widespread denial to increasing preparedness to engage with environmentalism and sustainability to a degree that ultimately re-orientates business ethos.

The prognosis for corporate attention to environmental issues has not always been encouraging. Anthony Downs (1972), for instance, predicted that a form of public mental exhaustion would eventually erode the importance of environmental issues within society. Downs thought that public interest in environmentalism would decline after its initial infamy, in keeping with the “issue-attention” cycle. He postulated that general enthusiasm for the cause would wane as the difficulties and costs of attempting to alleviate ecological issues became clear, and another issue would take centre stage. This does not appear to have been the case, however.

Environmental issues are a potential source of cost and liabilities for businesses, particularly when mishandled, but they also provide financial opportunities for business. Various programs and policies have been implemented by management in
order to ‘green’ corporations (Robbins, 2001, 43), underpinned by changing interpretations of environmentalism.

Robbins (2001, 1) lists 7 key areas of environmental challenge facing business:

1. the atmosphere;
2. toxic chemicals and waste;
3. freshwater;
4. land;
5. oceans;
6. biotechnology; and
7. biodiversity.

Robbins suggests that the first three clearly pertain to most corporations, and have therefore been the subject to the highest level of scrutiny and regulation (Robbins, 2001, 1). While it can be argued that all corporations impact on the land, the oceans, and biodiversity either directly or indirectly, these areas have not been dealt with as extensively by business as the first three. Biotechnology issues are obviously a primary concern of companies in that sector.

The dynamic interaction between corporations and environmentalism continues to play out in various manifestations. Theorists have noted sequential shifts in corporate attitudes towards environmentalism that do not seem to have reached a final resolution as yet. Jamison, for instance, notes that corporations’ fundamentally oppositional stance of the late 1960s to early 1970s gradually yielded to a 1990s concern with attuning modernization more carefully to ecology (2001, 123-124). Schot and Fischer’s (1993) analysis lead them to similar conclusions. These authors identified two main eras of corporate greening: first a period of what they refer to as resistant adaptation, from approximately 1970 to 1985, followed immediately by the start of a period they call embracing environmental issues without innovating. During this time, Schot and Fischer saw an institutionalization of environmental concerns within companies, and a perception that environmental problems were directly the firms’ problems. They also noted that comparatively few companies abandoned their compliance orientated strategies during this period (1993, 12).
For the purposes of his analysis of the US petroleum and chemical industries, Hoffman brackets these businesses’ concern with environmentalism into four distinct stages. These categories echo experiences in other industries:

1. Industrial environmentalism (1960-1970)
3. Environmentalism as social responsibility (1982-1988); and

The industrial environmentalism Hoffman (2001) refers to arose in the 1960s as chemical and oil companies dealt with the issues of pesticides and automobile emissions respectively. At this time industry was largely able to determine its own course of action, as government and civil groups did not exert a particularly strong influence. Government regulation was not considered to be a significant issue, and environmentalists’ claims tended to be treated dismissively.

Regulatory environmentalism ensued with the formation of the Environmental Protection Authority (EPA) in the 1970s. This government agency mediated between business and environmentalists in oppositional roles. Industry tended to react defensively towards what it saw as intrusions by the EPA into the reasonable workings of business. Environmentalism remained peripheral: ‘Although elevated to a separate corporate department, it remained an ancillary role with low organizational power, focused strictly on legal requirements’ (Hoffman, 2001, 12). Regulatory environmentalism is sometimes referred to as a ‘command and control’ strategy. Hoffman suggests that business attention to environmentalism increased as the EPA lost its bite in the 1980s, a time when environmental activists, backed by increasingly well funded and growing organisations, were aiming serious criticisms squarely at big business. Industry began to push environmental standards more proactively to demonstrate commitment to social responsibility, and aimed to promote itself as ‘part of the solution, not part of the problem’ (Hoffman, 2001, 13).

Hoffman refers to the period from 1988 -1993 as ‘strategic environmentalism’. He suggests that a more equal balance of power developed between corporations,
government and activists, which prompted industry to move proactively. The focus remained on industry’s ability to deal with issues itself. The firm’s organisational boundaries were increasingly interpreted as being flexible, and it was not treated within management strategies as a completely autonomous entity. External pressures therefore had a more direct impact than in previous times. In this atmosphere, environmental departments had more clout and environmental issues were integrated more deeply into business operations (Hoffman, 2001, 13).

Hoffman makes the point that the existence of these trends indicates the importance of ‘institutional change on the field level’ in addition to ‘organizational change on the individual level’ (2001, 13). This demonstrates that companies are social products rather than rational inevitabilities. The firm’s license to operate depends to a large extent on the subjective social evaluation of its activities, rather than simply the pursuit of profit. It also highlights the fact that firms are dynamic, complex networks with multiple social influences. They are not monolithic. ‘In the end’, says Hoffman, ‘the firm is a reflection of the society of which it is a part - not directly, but as mediated and filtered through its institutional environment’ (2001, 13, 14).

Corporate responses to environmental issues are understandably linked to the desire to enhance competitiveness in order to increase profitability (Robbins, 2001, 16). This can be achieved in various ways, including:

- improved product quality;
- increased staff commitment;
- improved safety record;
- reduced risk exposure;
- lower insurance premiums and finance costs;
- improved public relations record;
- assured present and future compliance;
- reduced waste management costs;
- better utilization of by-products;
- reduced downtime;
- improved materials and energy efficiency;
• enhanced yields;
• the discovery and development of new management techniques; and
• establishment of new patterns of company behaviour shaped by new
  influences and forms of organisation (Müller and Koechlin, 1993, 33;

Forest Reinhardt (2000), from the Harvard Business School, argues that there are many
instances where attention to environmental issues leads to profitable results for
business, and that managers should therefore be interested in investing in
environmental strategies which either deliver positive returns or minimize risk.

Corporations with a history of creating environmental or social damage face the
prospect of having to deal with lawsuits or conforming to legal requirements to clean
up contaminations. This has been the case in the US in particular but it is becoming
more prevalent elsewhere in the world. As Robbins notes, the mechanism of
environmental liabilities means that ‘past environmental actions can return with a
vengeance to cause current environmental costs’ (Robbins, 2001, 32). Robbins uses the
example of BHP’s OK Tedi mine in Papua New Guinea to illustrate this. In this case,
the company paid $500 million to the Australian Government in compensation for
damage caused by copper and cadmium contaminated sediments which degraded local
rivers. Part of the money went to people whose villages had to be relocated as a result
of the damage. BHP’s CEO Jerry Ellis stated that the disaster served as a reminder
about ‘the absolutely paramount importance of getting our relationships right with the
communities in which we work’ (cited in Robbins, 2001, 32).

Firms respond to these threats and opportunities in different ways and rates. The
variation between businesses and sectors can be partly understood by considering the
way managers deal with uncertainty when making decisions. Managers may not be
confident that they have sufficient or accurate information about the likely costs and
benefits of environmental management; they may be unsure about how well new
technologies are likely to perform; the transaction costs involved may be beyond the
scope of the firm to cover; and/or managers may not fully appreciate the advantages to
be gained by getting to grips with environmental issues (Ashford [1993], cited in Robbins, 2001, 16).

**Beyond environmentalism: the new challenges of sustainability**

Hoffman (2001) suggests that corporate attention to sustainability differs from the earlier meeting with pure environmentalism in that industry is now an active contributor to the framing of the sustainability debate. He contrasts this with the resistance to environmental regulation typical of American oil and chemical companies of the 1970s (2001, 222). Drawing on its knowledge of environmental management, industry therefore tends to focus primarily on the ecological aspects of sustainability rather than the social ones (Hoffman, 2001, 222).

There is strong, although not unanimous, support amongst the business community for the proposal that industry must engage with sustainability. The WBCSD summarizes the business responsibilities for sustainability as:

- taking account of the entire life cycle of goods and services - design and engineering, purchasing and materials management, production, marketing, distribution, use, and waste management;
- applying the principles of eco-efficiency to create increased value for customers through the sustainable use of resources;
- in its role as consumer, procuring and requesting products and services that have less environmental impact;
- making accurate, scientifically sound environmental information available to customers and the public so that they can make informed decisions about purchasing, use, and disposal (DeSimone and Popoff, 1998, 15-16).

At the moment there is a tendency towards a somewhat bipolar arrangement of perspectives, delineated by the perceived boundary of the corporation. In many instances corporations’ inward gaze tends to rest on social and financial aspects of organisational performance, in line with organisational theory advocated by Drucker (1983), Senge (1997, 2002), Ackoff (2002) or Kelly (1997) amongst others, where firms are seen primarily as social entities. On the other hand, business perspectives on
sustainability often centre on ecological issues as an extension of their own environmental management strategies (EMS) (Hoffman, 2001, 222). The latter attitude is evidenced by the promotion of ‘eco-efficiency’ as the key business contribution to sustainability. Edgar Woolard, in his capacity as CEO of DuPont, clearly illustrates the point: ‘Industry has a next century vision,’ he says, ‘of integrated environmental performance’ (cited in DeSimone and Popoff, 1998, 1). The ambition may be ‘21st century’ but the habit of conflating sustainability with environmental performance is very much ‘last century’. Corporate social responsibility is a hot topic, but it is not always linked to sustainability, and rarely integrated with EMS. True acceptance of sustainability into the workings of business would require a merger of these disparate perspectives as well as erosion of the silo mentality37 that so often prevails at the moment. The frequent failure to appreciate socio-cultural issues as essential external foci of sustainability extends not only to stakeholders surrounding business, but to the structure of business itself as an artefact of culture.

**Eco-efficiency**

Business’s central platform to date has revolved around eco-efficiency (Holliday et al., 2002). This concept was proposed by Stephan Schmidheiny in his 1992 book *Changing Course: a Global Business Perspective on Development and the Environment*. Björn Stigson, executive director of the World Business Council for Sustainable Development (WBCSD) describes eco-efficiency as ‘both a concept and a tool used by business - but not exclusively - to make measurable progress toward sustainability’ (cited in DeSimone and Popoff, 1998, xii-xiii). Eco-efficiency is a management philosophy that fits comfortably with the dictum ‘what gets measured gets managed’ and the implication that sustainability, like the environment, is something to be ‘managed’. Stigson continues:

Eco-efficiency catches at a glance the balance business strives toward: sound ecology and profitable operations. Quite simply, it is about doing more with less, and being environmentally responsible (cited in DeSimone and Popoff, 1998, xiii).

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37 The term ‘silo mentality’ refers to the tendency to compartmentalize problems into particular fields of expertise with little or no interdisciplinary or interdepartmental crossover.
Within this framework, goals are set and progress towards them can be accurately measured. Some targets are proposed in the full knowledge that they are theoretically impossible but represent a sensible general direction in which to head. The desire to achieve ‘zero emissions’, for example, ultimately flies in the face of the laws of thermodynamics, but it is still a useful target. Eco-efficiency itself is more a process than a destination, making it unlikely that final targets will be agreed upon and reached once and for all (Huber, 2000; DeSimon and Popoff, 1998). A range of approaches such as Life Cycle Analysis (LCA), Total Quality Management (TQM), Design for the Environment (DFE) and Industrial Ecology (IE) are used by individual companies or by groups. In all of these the aim is to fine tune the material aspects of productivity.

According to the WBCSD, there are seven guidelines of eco-efficiency that should inform economic development. Businesses should aim to:

- reduce the material intensity of goods and services;
- reduce the energy intensity of goods and services;
- reduce toxic dispersion;
- enhance material recyclability;
- maximize sustainable use of renewable resources;
- extend product durability;
- increase the service intensity of products (DeSimone and Popoff, 1998, 21).

The ‘eco’ in eco-efficiency is designed to refer to both ecological and economic concerns, in terms of the need to ‘make optimal use of both’ (DeSimone and Popoff, 1998, 2). As a strategy, it is hoped that eco-efficiency will provide sustainable growth, based on a qualitative change in the nature of business growth (DeSimone and Popoff, 1998, 10). Quantitative concerns retain primacy, supported by qualitative changes.

There are other approaches concerned with resource productivity, such as ‘Cleaner Production’ (a UNEP initiative), Total Quality Management (TQM) and Design for the Environment (DFE). Cleaner Production is

the continuous application of an integrated preventative environmental strategy to processes, products, and services to increase overall efficiency,
and reduce risks to humans and the environment. Cleaner Production can be applied to the processes used in any industry, to products themselves and to various services provided in society… (UNEP DTIE, 2005, n.p.).

The International Declaration on Cleaner Production is a voluntary but public statement of commitment to the strategy and practice of cleaner production by achieving economic, environmental and health/safety benefits. Cleaner Production provides a significant contribution to achieving sustainable production and consumption (UNEP DTIE, 2005, n.p.).

Total Quality Management (TQM) focuses on control of processes in order to ensure the highest product quality, and to provide quality assurance and ongoing quality improvement. Design for the Environment (DFE) aims to consider the complete lifecycle of the product concerned from very early in the product’s conceptualization so that cost and performance objectives are met while pollution and waste created during the product’s life cycle are reduced. The International Institute for Sustainable Development (IISD) describes DFE as:

an umbrella term describing techniques used to incorporate an environmental component into products and services before they enter the production phase (IISD, 2005, n.p.).

Techniques such as Life Cycle Analysis (LCA) are used to try to identify environmental impacts, after which designers use a variety of techniques to minimize these impacts. DFE practices include:

- design for recycling;
- design for disassembly;
- design for energy efficiency;
- design for remanufacture;
- design for disposability;
- hazardous material minimization (IISD, 2005, n.p.).

DeSimone and Popoff (1998) contend that while eco-efficiency has much in common with these systems, it has distinctive features including:
• an emphasis on value creation;
• an emphasis on stretching, long-term, targets for improvement;
• it explicitly links environmental excellence with business excellence; and
• consideration of the need for both sustainable consumption patterns and production patterns (DeSimone and Popoff, 1998, 11).

The goal of promoting sustainability by improving eco-efficiency is a potentially lucrative one for corporations, and one that is not at odds with their conventional directives. This is illustrated in the way the Dow Jones Sustainability Index (DJSI) regularly outperforms the Dow Jones. Between 1995 and 2001, the DJSI posted an annualized return of 15.8% in comparison to the Dow Jones’ 12.5% (Anon, 2002, 1)38. The Dow Jones is not intended to be an absolute measure of companies’ contribution to sustainability, it aims to highlight best-of-sector performances. In fact, the people behind the DJSI admit that there are no sustaining companies as yet (Grey cited in Anon, 2002, 2). At this stage therefore, it primarily demonstrates that attention to sustainability issues can enhance business performance. It does not prove that it is actually possible to have ‘sustaining’ corporations.

Eco-efficiency strategies do not constitute a fundamental challenge to corporate identity. Even so, Stigson’s inference that business as a whole strives towards sound ecological practices is yet to be established. What has occurred is that the concept of eco-efficiency has sparked a shift from merely increasing ‘resource productivity’ towards genuine innovation, from producing goods to offering services and from a focus on the individual corporation as actor to sectoral accountability (Stigson, cited in DeSimone and Popoff, 1998, xiii), or the merits of industrial ecology (IE) systems (Korhonen, 2003, 2004; Seuring, 2004). Pollution and resource use have been thought about in novel ways, for example: ‘source reduction approaches such as pollution

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38 Created in 1999, the DJSI is based on the methodology of Sustainable Asset Management (SAM). It is made up of the top 10% of the biggest 2500 companies in the Global Index. It included ‘307 companies from 62 industries in 26 countries, with a combined capitalization of 6.4 trillion EUR as of January 31, 2002’ (WBCSD, 2002b, n.p.). It analyses environmental, social and economic dimensions of each corporation. It relies on best-of-sector screening, which aims to identify examples of best practice rather than the least sustainable companies. This approach draws criticism. Although the DJSI does exclude the arms industry, it includes sectors such as alcohol and cigarettes, whose compatibility with sustainability is contentious. The DJSI’s architects defend this by pointing out that there are currently no industries that are irrefutably sustaining, and that it therefore makes sense to concentrate on companies leading the field.
prevention and design for environment are increasingly preferred to “end-of-pipe” methods that are expensive and simply transfer pollution from one medium to another’ (DeSimone and Popoff, 1998, 1).

Life Cycle Analysis (LCA) is an important component of eco-efficiency strategies. LCAs involve looking at a product’s entire life cycle, from resource to waste - ‘cradle-to-grave’ - in order to identify and minimize overall inefficiencies. In this way companies ensure that their best efforts to promote eco-efficiencies are not simply undermined by failures elsewhere in the chain of production and consumption (DeSimone and Popoff, 1998; Elkington, 2001b). Systems approaches such as this are essential to sustainability.

In some regions, governments and businesses work together to encourage LCA. In the EU, the Integrated Product Policy (IPP) was developed in an attempt to move beyond policies that focus on point sources of pollution and degradation and to encourage LCAs instead. It is the result of collaboration between a range of stakeholders who wished to promote sustainability and simultaneously enhance business competitiveness. The European Commission states that

IPP attempts to stimulate each part of the individual phases to improve their environmental performance: extraction of natural resources…their design, manufacture, assembly, marketing, distribution, sale, use…(and) disposal as waste…(it) seeks to minimize (environmental degradation) by looking at all phases of a product’s life cycle and taking action where it is most effective (European Commission, 2005, n.p.).

Companies now are frequently seeking to develop shared values ‘and a common sense of purpose among their staff’, and eco-efficiency can be used as a unifying approach to achieve this (DeSimone and Popoff, 1998, 11). Eco-efficiency emphasizes stakeholder engagement: customers, suppliers, and stakeholder organisations are brought into the sort of strategic collaboration ‘that many management theorists are now advocating’ (DeSimone and Popoff, 1998, 11). These aspects of eco-efficiency demonstrate the sense in which it is an innovative management philosophy.
At the Panasonic Matsushita TV Factory, has enabled a workplace culture conducive to improving eco-efficiency. Lead by middle management, employees have developed innovative ways of dealing with waste and to improve energy efficiency, for example:

- local firms buy or remove by-products;
- a fencing company buys unwanted pallets;
- cabinets are sold to a local company that converts them into worm farms;
- plastic and scrap metal is recycled;
- cardboard cartons are sold, and the money raised is used to cover other waste; disposal costs;
- all left over foam is used by another company in concrete slabs (Benn et al., 2006, 160).

The success of these employee driven initiatives subsequently inspired upper management staff to promote eco-efficiency strategies, such as adopting energy saving initiatives in new warehouse and building sites (Benn et al., 2006, 160). The company has moved from a paternalistic attitude to the local community to the point where it now allows employees to participate in the meals-on-wheels scheme during work hours. In addition to reaping the benefits of eco-efficient practices, the company enjoys a low level of staff turnover (Benn et al., 2006, 160).

The theme of needing to produce more using fewer resources is a common one amongst business and sustainability theorists. There are several renowned examples, including Factor Four, Natural Capitalism, and The Natural Step. *Factor Four: Doubling Wealth, Halving Resource Use* (von Weisäcker, Lovins and Lovins, 1999) argued for a fourfold growth of productivity in industrial processes. Hawken, Lovins and Lovins (2000) call for *Natural Capitalism* as the key aspect of the ‘next industrial revolution’, building on earlier works such as Hawken’s *The Ecology of Commerce: A Declaration of Sustainability* (1993). They argue for radical resource productivity, biomimicry, a service and flow economy, and investing in what they call ‘natural capital’. These four areas are thought to be interrelated and interdependent, with the potential to ‘reduce environmental harm, create economic growth, and increase meaningful employment’ (Hawken, Lovins and Lovins, 2000, 11).
Karl-Henrik Robèrt founded The Natural Step, a not-for-profit organisation, in 1989. This framework ‘facilitates the journey to sustainability, first, by describing the features by which we can recognize our destination, second, by pointing out the direction to travel, and third, by providing a compass to keep us on track’ (Nattrass and Altomare, 1999, 29). It is informed by a deep conviction that the ‘laws of nature’ must be respected and appreciated. The Natural Step identifies ‘four system conditions for sustainability’. These counsel avoiding subjecting natural systems to increasing concentrations of substances extracted from the earth or produced by society, avoiding overharvesting or excessive ecosystem manipulation, and using resources fairly (Nattrass and Altomare, 1999, 23).

One of the most celebrated examples of a company using The Natural Step is Interface, Inc. with Ray Anderson, its courageous and visionary CEO, at the helm. Interface is the ‘world’s largest manufacturer of carpet tiles and upholstery fabrics for interiors’ with a core vision of ‘becoming an example of a sustainable and restorative enterprise by 2020’ (WBCSD, 2002b, n.p.). The company designed a remanufacturable carpet in order to reduce primary resource consumption and close the production loop and shifted their commercial orientation from selling carpet as a product to offering the service of covering people’s floors (WBCSD, 2002b, n.p.).

Interface’s efforts have been inspiring and widely recognized. The firm set out to become the ‘prototypical company of the 21st century’, and its sustainability program lead to cumulative savings of $222 million by 2004 (Anderson, 2004, 32). Anderson reminds us that Interface’s sustainability ambitions are a work in progress, and the aim of achieving ‘zero footprint’, or no environmental impacts, has yet to be reached. Nonetheless, he is convinced that integrating sustainability into business results in a superior business model (2004, 37). The new type of company that Anderson believes in will:

- be strongly service orientated;
- use resources efficiently and avoid the linear production models of the early industrial revolution;
• be driven by renewable energy;
• be strongly connected to its employees and stakeholders;
• be ahead of regulations;
• be ‘committed to taking nothing from the Earth that is not rapidly and naturally renewable’;
• be sustainable and just;
• ‘be growing, even in a no-growth world, by taking market share from inefficient competitors’ (2004, 36-37).

Müller and Koechlin (1993) point out that efficiency, and as a corollary eco-efficiency should be obvious foci of management science:

Even without ecological pressure a good management will seek to improve its efficiency on purely financial grounds. However, the parameters of efficiency are subject to change, i.e. environmental resources that were previously free will be taxed and thus have a price tagged to them. This means that the managerial concept of efficiency becomes increasingly an ecological one. True efficiency will in the long run never be incompatible with ecology and therefore never involves managers in difficult conflicting aims (36).

**Criticisms of eco-efficiency**

While business endorses eco-efficiency, others prefer notions such as sufficiency, consistency or eco-effectiveness. Voices from certain non-government organisations (NGOs) dedicated to ecological issues promote the idea of sufficiency, that is, ‘self-limitation of material needs, withdrawal from the world-market economy and an egalitarian distribution of the remaining scarce resources’ (Huber, 2000, 269). Huber suggests that even if the concepts of sufficiency and eco-efficiency are combined they are inadequate. He argues that consistency is needed, which in practical terms might be achieved via industrial ecology, which ‘aims at an industrial metabolism that is consistent with nature’s metabolism’ and represents more than an incremental shift in strategy (2000, 269).

McDonough and Braungart (2002) prefer the notion of eco-effectiveness to eco-efficiency, arguing that in nature excess is often produced but that it is not wasted as a rule. For example, many trees produce thousands of flowers in to create a few young
trees. The remainder is not ‘wasted’ as such, but is absorbed into the cycles of the ecosystem. Furthermore, people often consider this apparently excessive ‘abundance’ to be both safe and beautiful, unless of course they are not enamoured with the prospect of raking up the mess. McDonough and Braungart move beyond ‘cradle-to-grave’ design to advocate the use of ‘cradle-to-cradle’ design. They reject catch phrases related to eco-efficiency such as ‘Reduce, Reuse, Recycle’ as being too linear in orientation. The cradle-to-cradle style of design they recommend involves conceptualizing products in a closed loop where materials are reused again and again. Shaw-Fiber’s “eco-solution Q” carpets provide a good example of this. These carpets can be continuously recycled with ‘old, worn-out carpet becoming the feedstock for new carpet’ (Helten, 2004, n.p.). Waste is used to provide either biological or technical nutrients for something new (McDonough and Braungart, 2002).

**Steps to sustainability**

Benn and Dunphy (2004) suggest that individual companies typically proceed through a common sequence of steps as they explore sustainability. They identify six stages:

1. Rejection
2. Non-responsiveness
3. Compliance
4. Efficiency
5. Strategic proactivity
6. The sustaining corporation (143, 144).

The sustaining corporation Benn and Dunphy (2004) refer to is more hypothetical than actual at this stage. It is a projection - a wish list of characteristics and values they suggest a sustaining corporation should have.

Zadek is another who has attempted to conceptualize organisational changes in relation to corporate responsibility. He talks about five stages of organisational learning:

- defensive (denying responsibility)
- compliance (adopting policy-based compliance approach);
- managerial (embedding societal issues into core business practices);
- strategic (integrating societal issues into core business practices); and
- civil (promoting broad industry participation in corporate responsibility) (2004, 127).

Zadek also lists four stages of ‘issue maturity’: latent (the business community largely ignores the issue in question); emerging (business experiments with approaches to deal with the issue); consolidation (voluntary standards are adopted and collective action is undertaken); and institutionalized (norms are established that become a regular part of business models) (2004, 128).

Freeman et al. use ‘shades of green’ to delineate four types of strategies corporations may have towards ethics and the environment, noting that they are not necessarily sequential steps in a given company: light green, market green, stakeholder green, and dark green. In the first three of these categories, the aim is to ‘create and sustain competitive advantage’ by ‘ensuring your company is in compliance with the law’ (light green); ‘paying attention to the environmental preferences of customers’ (market green); ‘responding to the environmental preferences of stakeholders’ (stakeholder green). ‘Dark green’ companies aim to ‘create and sustain value in a way that sustains and cares for the earth’ (2000, 12-16).

The WBCSD’s observations conform to analyses such as these in that they maintain that

The overall message…is that eco-efficiency works and builds value for customers and stakeholders. The secret is moving away from a compliance-focused, crisis-avoidance mentality and seeing good environmental and social performance as the essential foundation for the market and public reputation and the motivated and confident staff that creates success in today’s business environment (DeSimone and Popoff, 1998, xx).
Here, eco-efficiency is positioned as a stage beyond defensiveness and mere compliance. The same general trend from reticence to outlooks that involve cultural change within the organisation is evident in each of the above examples.

As business attitudes towards sustainability change, the scope of vision used to inform strategies often expands correspondingly. The WBCSD concludes that attention must shift ‘beyond sites to industrial systems and society as a whole’ (DeSimone and Popoff, 1998, 14). A transfer of attention over time has been observed from pollution control in individual companies, to process integration, then whole facility planning, the development of industrial ecology systems and finally to sustainable communities, cities and/or regions (National Science and Technology Council [1995], cited in DeSimone and Popoff, 1998, 15).

Industrial ecology is, like LCA, an industrial metabolism practice. Practitioners use arrangements such as eco-industrial parks, industrial recycling networks or industrial ecosystems in order to manage material flows, focusing on ‘the physical material and energy flows that a company uses from its natural environment as well as from its co-operation partners’ (Korhonen, cited in Seuring, 2004, 309). It also focuses on ‘the flows that a company will produce as its waste and on emission outputs dumped back to nature’ (Korhonen, cited in Seuring, 2004, 309). Industrial ecology is a geographically specific approach, applied at a local or regional level (Seuring, 2004, 309). Seuring explains that

Relevant actors are the companies within an industrial symbiosis/park, which organize the by-product or waste exchanges. Their co-location is seen as a prerequisite... The system boundary is formed by the local or regional network of companies, and the material flows are organized within their specific network. Networks might develop over time... or be actively developed around an industrial core... The material flows are dependent on the products produced and the processes used as a result (2004, 309, 310).

The success of industrial ecology strategies is still being evaluated, and is likely to vary between sites. Drawing on their study of Dutch eco-industrial parks, van Leeuwen et al. observe that problems may arise when ‘these methods lack an explicit vision of sustainability, they do not give due consideration to symbiotic or utility-sharing options, they do not sufficiently engage the companies involved in the development and
their policy instruments have a limited environmental impact’ (2003,147). Obstacles are also created if there are unsatisfactory guiding qualitative standards, if communication of symbiotic and utility sharing aspects of the network is poor, or if environmental impacts are not adequately measured (van Leeuwen et al., 2003, 147).

**Framework conditions**

Business groups such as the WBCSD and many businesses themselves acknowledge the need for ‘framework conditions’ such as regulation to complement voluntary initiatives (DeSimone and Popoff, 1998, 17). One argument put forward by companies concerned about the costs of activities such as greening the supply chain, for instance, is that they might suffer competitive disadvantage if they attempt it while others do not. They therefore argue for government regulation to level the playing field (United States-Asia Environmental Partnership, 2002, 26). The WBCSD offers qualified support for regulation:

> There is a continuing need for environmental policies and regulations to establish minimum standards and to set broad performance-based targets. But we believe that tomorrow’s policies and regulations can be more inspiring and less prescriptive than those on the books today (DeSimone and Popoff, 1998, 17).

Kolk observes that

> The existence of legislation, originating primarily from Europe and perhaps Japan, contributes to maintain a certain level of sustainability reporting, both in quality and quantity. Moreover, there are a number of companies where reporting, either compulsory or voluntary, has been accompanied by the routine collection and/or calculation of environmental data, thus becoming part of regular processes (2003, 290).

While it is argued that regulation might be needed to discipline recalcitrant companies which resist improving their environmental or social records, it can also impact positively on the conventional bottom line. Michael Porter (1998) concludes that rather than being an unreasonable burden, regulation used in the right way may stimulate the pursuit of efficiency which enhances competitiveness. This is widely known as the ‘Porter Hypothesis’.

The WBCSD points to the Dutch Packaging Covenant as an example of how government regulation and industry can combine to provide positive outcomes.
This covenant is an agreement between the packaging chain and the government signed by 250,000 companies. Its goal is to ‘limit the volume of landfilled and incinerated packaging waste to 850 kilotonnes by 2005’ (Bergsma et al, 2004, 1).

There is a large contingent amongst insurance companies, particularly in Europe, who endorse the idea of legislation to protect the industry by fighting climate change. Insurance companies are particularly exposed to the financial consequences of climate change - it is they who must pay for much of the damage. Although the idea is not unanimously supported, there are leaders in the industry who recommend pressing governments to enact legislation designed to control climate change. These influential investors, with control of enormous life insurance and pension funds, represent a formidable force in the global economy and their opinions carry weight (Challis, 2002).

The insurance industry is all about risk estimation and management and insurers such as Swiss Re are becoming increasingly concerned about the consequences of climate change and therefore about who they insure. Many have signed the UNEP’s Insurance Industry Initiative for the Environment. In so doing, they have expressed their support for the precautionary principle, which holds that action should be taken to prevent disaster even without irrefutable scientific proof, since many of the issues under consideration are influenced by complex and interrelated factors that are not easily understood (Jansen, n.d.).

**Voluntary initiatives and reporting standards for sustainability**

*Voluntary initiatives*

Other voluntary initiatives are currently used by corporations. Environmental Management Strategies (EMSs), Corporate Environmental Reporting (CER), ISO standards and Supply Chain Management are all used voluntarily and reveal aspects of business performance that relate to sustainability issues. It is now common practice for firms to have Environmental Management Strategies (EMS) in place and to engage in corporate environmental reporting (CER) (Annandale et al, 2004). Many firms also use voluntary standards such as ISO 14001 or ISO 9001 as part of their EMS (USAEP, 2002). Supply chain management, or ‘greening the supply chain’, is another emerging strategy.
CER has been developed over roughly the last decade and a half, and its purpose is to:

communicate an organisation’s environmental performance to its stakeholders. The key reporting elements of CER are management policies and systems; input/output inventory of environmental impacts; financial implications of environmental actions; relationships with stakeholders; and the sustainable development agenda. Sometimes CER is combined with social and economic reporting, to provide information on a company’s performance against the ‘triple bottom line criteria’ (Annandale et al, 2004, 4).

Since the late 1980s EMSs have gained increasing prominence. They are described as ‘problem identification and problem-solving tools, based on the concept of continual improvement. There are many possible approaches to establishing an EMS’ (Annandale et al, 2004, 4). Annandale et al. caution, however, that their empirical study of the effects of the EMSs and CER used by Western Australian companies shows that the ‘influence of these voluntary instruments was not as strong in practice as the existing literature suggests it should be’ and that other internal and external factors play significant roles in determining the success of corporate environmental strategies (2004, 10).

ISO 14001 is the best known voluntary standard for EMSs. It was set up in 1997 by the International Organization for Standardization (ISO)\textsuperscript{39}. It is a process-orientated environmental standard that is designed to nurture voluntary, experimental efforts, rather than simply to list a set of fixed criteria that must be met to gain certification. It is therefore deliberately designed not to become adopted as a market standard, an outcome which might have the effect of stifling other initiatives (USAEP, 2002, 7). Annandale et al. summarize the key steps of the ISO series of EMS standards’ as follows:

\textsuperscript{39}The ISO 9000 and ISO 14000 standards are used by approximately 634 000 businesses in 152 countries. The ISO explains that the 9000 family of standards ‘is primarily concerned with “quality management”. This means that the organization attempts to:

• fulfill the customer’s quality requirements;
• meet applicable regulatory requirements;
• enhance customer satisfaction; and
• achieve continual improvement of its performance in pursuit of these objectives.’ The ISO 14000 family is primarily concerned with “environmental management”. This refers to what the organization does to

• minimize harmful effects on the environment caused by its activities, and to
• achieve continual improvement of its environmental performance’ (ISO, 2004, n.p.)
• undertaking an initial environmental review;
• defining an environmental policy;
• developing an environmental action plan and defining environmental responsibilities;
• developing internal training courses; and
• auditing and review (2004, 4).

Many TNCs consider their own EMS to be superior to ISO 14001, for example. Some businesses are interested in selectively incorporating aspects of ISO 14001 that they feel might enhance their own EMS, but are less convinced of the benefits of investing time and effort in order to gain certification. Some managers feel that it is likely that ISO 14001 might become a base-line market condition, as ISO 9001 did, so that corporations might have to adopt higher standards of their own to hold a competitive advantage (USAEP, 2002, 2). ISO 14001 intersects with other strategies as well. The Natural Step and ISO 14001 can be usefully integrated, for example (Nattrass and Altomare, 1999, 173).

Supply chain management has been defined as:

efforts by global companies to impose environmental conditions on the products and processes of their suppliers. The objective of such initiatives is to mitigate risk in the face of increasing environmental regulations and liability issues (USAEP, 2002, 6).

According to the United States-Asia Environmental Partnership, supply chain management ‘represents perhaps the greatest opportunity for raising industrial environmental performance on a global basis’ (USAEP, 2002, 6). Companies may work with government or non-government organisations to establish suitable guidelines for supply chain management. Starbucks’ CEO, Orin Smith, asserts that ‘Global coffee production can only be sustainable if it is economically viable, socially responsible and environmentally sensitive at all levels of the supply chain’ (cited in Greenbiz, 2001, 1). Starbucks worked with Conservation International to develop guidelines to prompt
suppliers to conform to rigorous sustainability-enhancing standards (Greenbiz, 2001, 1).

Supply chain management is a natural theoretical adjunct of EMS, but in practice it is not always implemented even where EMS’s are in place. This may be because the relevance of supply chains has escaped the attention of the public. Companies operating in Europe are often more proactive in terms of greening the supply chain than others, particularly where there are legal requirements to take back products once they are no longer useful. This is true of the automobile and electronics sectors, for example (USAEP, 2002, 3).

The Clean Development Mechanism (CDM) was developed as part of the Kyoto Protocol to promote the transfer of energy efficient and renewable technologies to economically poorer countries. However, critics complain that this ambition is undermined by attempts to ‘include forestry projects in the name of ‘carbon sinks’, and nuclear, large hydropower and business-as-usual fossil fuel projects’ where companies hope to benefit by obtaining carbon credits by financing the projects (Loong, 2001, 27).

The Equator Principles are a set of guidelines voluntarily established within the finance sector. They were created when ten banks collaborated in order to set out guidelines for bringing environmental and social values into consideration when financing projects in economically poorer nations (Steger, 2004, 48).

Another significant international initiative is the Global Compact. This is a voluntary, multistakeholder initiative launched by the United Nations in 2000, which Kofi Annan challenged business leaders around the world to ‘embrace and enact’ (United Nations Procurement Service, 2004, n.p.). It is an ‘international corporate citizenship network initiated to support the participation of both the private sector and other social actors to advance responsible corporate citizenship and universal social and environmental principles to meet the challenges of globalisation’ (United Nations Procurement Service, 2004, n.p.). It is founded on ten principles (see Table 4.1).

A recent study of 29 Global Compact participants found that companies may have a number of reasons for committing to acting in an environmental responsible manner
and that ‘ethical and economic reasons coexist’ (Cetindamar and Husoy, 2007, 163).

Company performance tended to be improved by increasing networking opportunities and improving companies’ image (Cetindamar and Husoy, 2007, 163). Companies tend to benefit ethically and economically by participating in the Global Compact (Cetindamar and Husoy, 2007, 163).

Voluntary agreements may be struck between government and industry. For example, the Responsible Care Program was developed in the US by members of the chemical industry in an effort to encourage and assist companies to adopt integrated sustainability policies as part of their business strategy. The chemical industry, like the mining industry, is a conspicuous target for criticism. The program is designed to help companies to comply with and go beyond government regulations, evaluate the effectiveness of their internal management and organisation and improve their performance (American Chemistry Council, 2005, n.p.). It is claimed that in the US the Responsible Care Program ‘has resulted in reduced emissions by 75 percent and an employee safety record that is four and a half times better than the average of the U.S. manufacturing sector’ (American Chemistry Council, 2005).

‘Benchmarks’ are standards and strategies identified as best practice which serve as an example and may set the pace for industry in general (Romm, 1999). Springett positions benchmarking as ‘belonging to the array of instruments associated with eco-efficiency, eco-modernism and “political sustainability” ’ (2003a, 1). She has used observations about benchmarking in New Zealand as a form of Foucauldian ‘incitement to discourse’, with a group of companies becoming engaged in a ‘more dialectical discourse of sustainable development based in Critical Theory and perspectives from Foucault’ (2003a, 1).

Interface is attempting to become a ‘cool company’ and is cited as a firm creating benchmarks that others could try to emulate. Interface’s waste and energy-use minimization strategies are innovative and inspiring and serve as an example to others. Romm explains that ‘Waste minimization is cool, which is the main reason Interface has pursued it so diligently’ (1999, 182). This author uses the term ‘cool’ to identify companies which strive to reduce greenhouse gas emissions and so fight global warming. The competitive advantage Interface gains from its efforts puts pressure on competing companies to emulate its success (Romm, 1999, 181).
Table 4.1: The Global Compact’s Ten Principles

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<th>Principles</th>
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<tr>
<td><strong>Human rights</strong></td>
<td>• the support and respect of the protection of international human rights;</td>
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<td></td>
<td>• the refusal to participate or condone human rights abuses.</td>
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<td><strong>Labour</strong></td>
<td>• the support of freedom of association and the recognition of the right to collective bargaining;</td>
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<td>• the abolition of compulsory labour;</td>
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<td>• the abolition of child labour;</td>
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<td>• the elimination of discrimination in employment and occupation.</td>
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<td><strong>Environment</strong></td>
<td>• the implementation of a precautionary and effective program to address environmental issues;</td>
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<td></td>
<td>• initiatives that demonstrate environmental responsibility;</td>
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<td></td>
<td>• the promotion of the diffusion of environmentally friendly technologies.</td>
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<tr>
<td><strong>Anti-corruption</strong></td>
<td>• the promotion and adoption of initiatives to counter all forms of corruption, including extortion and bribery.</td>
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While benchmarking is a widely understood and used concept, critics point out that it has its limitations. Womack and Jones, who had previously expounded the virtues of benchmarking, eventually came to the conclusion that ‘benchmarking is a waste of time’:

Our earnest advice to lean firms today is simple: To hell with your competitors, compete against perfection by identifying all activities that are muda [waste] and eliminating them (cited in Freeman et al., 2000, 180).

**Reporting standards**

Increasing numbers of businesses are making the effort of producing reports and improving their accountability. Kolk notes that corporate sustainability reporting has increased dramatically since 1998: ‘For the largest Fortune 250 companies, it has overall risen from 35 to 45%. The percentage of verified reports has increased from 19
She observes that ‘The largest, most visible multinationals...continue to be much more active in disclosing information on their environmental and social activities’ although verification is reasonably comparable between Fortune 250 companies of different sizes (2003, 281). In noting this global trend towards increased reporting, Benn et al. point to indications that ‘companies see Triple Bottom Line (TBL) reporting as signaling quality management’ (2006, 158). Risk management is also suggested to be a catalyst for businesses to adopt more sustainable practices and to report accordingly. Environmental changes pose considerable risk to businesses in sectors including transportation, mining, food and agriculture, tourism, insurance and the financial services sector (Benn et al., 2004, 158).

The Coalition for Environmentally Responsible Economies (CERES) developed the Global Reporting Initiative (GRI) which ‘provide(s) globally applicable guidelines for economic, environmental, and social reporting’ that many companies utilize (Stigson, 2002, 25). Annandale et al. note that the GRI has had a ‘considerable impact on how companies design CER’ (2004, 4). The WBCSD instigated Sustainable Development Reporting in 2001 to assist companies with their reporting practices (Stigson, 2002, 25). Many companies, such as Rio Tinto, Interface, ABB, IKEA and the Body Shop, now produce sustainability reports. 108 member companies of the WBCSD were listed on its website as having produced sustainability reports between 2001 and 2003, with 54 which produced social/environmental reports over the same period (WBCSD, 2004).

**Triple bottom line accounting**

One method of reporting relies on Elkington’s (1999, 2001b) idea of ‘triple bottom line’ (TBL) accounting. TBL reports cover all three areas of concern within sustainability. The triple bottom line focuses ‘on economic prosperity, environmental quality and - the element which business had preferred to overlook - social justice’ (Elkington, 1999, 70). There is some acceptance within the business community of the value of using TBL analyses. For example, Lea Soupata, CEO of UPS, supports the need for TBL accounting because he considers that

There is a responsibility that comes with being a global firm. Companies need to have a positive impact, both short and long term, on the communities they do business in (2004, 18).
Soupata supports a business model which ‘stresses the importance of taking an integrated approach to development. Companies need to be integrators rather than extractors, when it comes to world wide business practices’ (2004, 18). Extraction, he says, occurs when

companies enter a community, demand extravagant incentives from the local government, grab any resources they want and turn tail if things go bad. Generous incentives are offered by the locals, as communities try to please their new neighbours (2004, 18).

Soupata explains that integration

is more of a two-way street. Companies contribute to the local community to enable it to sustain itself. They take a long-term, big picture view and they act responsibly (2004, 18).

Corporate Social Responsibility

Soupata (2004) infers that triple bottom line accounting is a useful part of corporate strategies emphasizing integration or corporate social responsibility (CSR). Firms exercise corporate social responsibility by undertaking activities that appear to ‘advance a social agenda beyond that which is required by law’ (Siegel and Vitaliano, 2007, 773), in response to the influence of perceived social contracts that ‘bind industries, companies and economic systems into moral communities’ (Donaldson and Duphee, 1999, 3). Baron (2001) describes CSR as the private provision of a public good. For example, car manufacturers may produce hybrid vehicles that exceed the legal requirements for emissions standards in a particular country (Siegel and Vitaliano, 2007, 773).

Interpretations of CSR vary significantly. Some view it as a voluntary, corporate-driven attempt to enable MNCs to avoid regulatory constraints, while others perceive it as an important framework to guide business in society (Engle, 2007, 18). The World Economic Forum and the International Business Leaders Forum list the primary dimensions of CSR, as ‘good corporate governance and ethics, responsibility for people, responsibility for environmental impacts and the broader contribution for development’, particularly in relation to developing countries (Engel, 2007, 18).
The assertion that corporations have social responsibilities beyond that catered for by the pursuit of profit is often rebutted. In the public press, Alan Wood, the economics editor of The Australian newspaper, emphatically dismisses CSR as a ‘trendy nostrum’ that has ‘no place in capitalism’ (2002, 11). Furthermore, argues Wood, sustainability itself is ‘a highly imprecise concept encompassing a bewildering array of expectations about corporate behaviour’ and is therefore irrelevant (2002, 11). In the face of uncertainty about the value and appropriate form of CSR, Simon Zadek notes that making business logic out of a deeper sense of corporate responsibility requires courageous leadership - in particular, civil leadership - insightful learning, and a grounded process for organizational innovation (2004, 132).

It has been proposed that firms may be motivated to pursue CSR in order to achieve strategic goals, such as profit maximizing (Baron, 2001; Bagnoli and Watts, 2003; Siegel and Vitaliano, 2007, 773). In other words, CSR is consistent with ‘rational, profit-seeking management decision-making’ (Siegel and Vitaliano, 2007, 790). Companies that adopt CSR strategies may do so in order to improve their profitability, image and to attract and retain higher quality staff, for example (Siegel and Vitaliano, 2007, 774). They may also attempt to attract socially responsible customers by arranging a public link between product sales and a social contribution (Baron, 2001), such as Ben and Jerry’s promise to donate 7.5% of their pre-tax profits to social causes (Siegel and Vitaliano, 2007, 774). In western companies, CSR strategies are commonly initiated as a result of policy commitment emanating from upper management levels (Gouldson and Sullivan, 2007, 2).

Five specific foci for CSR strategies are education, environmental issues, human rights, poverty, and health care (Engle, 2007, 19). Recent research involving senior executives from medium to large US multinationals revealed that environmental issues are seen as most important in relation to CSR, followed by human rights and education (Engle, 2007, 25). Poverty and healthcare were seen as the least important of the five key areas listed above (Engle, 2007, 25). Further empirical and qualitative research is necessary to expand these results and to examine differences and similarities between US-based and non-US multinationals (Engle, 2007, 27). Welford notes that issues relating to ownership and control in Asia mean that corporate governance ‘may have to be even stronger in the Asian region than elsewhere’ in order to achieve CSR (2007, 42).
instance, in contrast to common practice in the West, many Asian companies are
dominated by family groups or other controlling shareholders (Welford, 2007, 42).

An ‘assymetry’ and significant lack of information has been noted in relation to CSR
(Baron, 2001; Fedderson and Gilligan, 2001, Gouldson and Sullivan, 2007). This
means that it is difficult to fully evaluate corporate CSR performance. Information to
assist evaluation can be provided by individual companies in the form of CSR reporting
documents, or by independent parties or activists (Siegel and Vitaliano, 2007, 775).
Currently, 52% of Global Fortune 250 companies publish CSR reports and 64% include
information about CSR activites in their annual report. However, CSR participation
rates vary according to company size, sector and country of origin (Gouldson and
Sullivan, 2007, 2).

The media can also be a crucial source of information for tracking corporate
performance (Welford, 2007, 51), however it is not always sufficiently comprehensive
nor systematically provided. It is even more difficult to obtain information through the
media in countries such as in Asia where the media may be comparatively passive and
heavily influenced by the state and even corporations (Welford, 2007, 51).

At this stage, despite extensive literature and debate about CSR, very few MNCs appear
to have fully adopted CSR principles (Slavin, 2004), although there are numerous
examples of ethical vision and leadership (Engle, 2007, 17). Gouldson and Sullivan
note that in general ‘corporate CSR commitments fall significantly short of what is
expected by stakeholders’ (2007, 10). These authors note that ‘there is a clear fault line
between the process approaches (to CSR) that have been adopted by companies and the
interests of stakeholders such as local communities’ (2007, 10).

Supporters of more responsible global capitalism maintain that MNC’s strategies and
policies should be more ‘socially acceptable and inclusive’ (Dunning, 2003, 2), so that
local communities can benefit from MNCs’ globalized activities (Engle, 2007, 18).
Attributes such as cooperation, creativity and compassion are recommended in order to
achieve the requisite balance between the global and the local (Dunning, 2003). As I
discuss in Chapter Eight, deliberative democracy/community engagement strategies
provide opportunities to achieve incorporation of the virtues Dunning lists in order to promote CSR and sustainability.

‘Value’
The notion of ‘value’ is increasingly being used in relation to sustainability issues, and it is a familiar notion in business: ‘it is generally agreed that the primary aim of companies is to create and deliver value’ (Charter, 2002, 4). The WBCSD states that the point of having eco-efficiency strategies is to link ‘the business concept of creating value’ with environmental concerns: ‘The goal is to create value for society, and for the company, by doing more with less over the entire life cycle’, an ambition that is ‘clearly to society’s benefit’ (DeSimone and Popoff, 2001, 10). Pundits maintain that ‘The business case for sustainability is becoming increasingly clear and lies in its positive effect on business value’ and that in

a sustainable system, businesses should meet multiple stakeholder needs whilst minimizing negative environment and social impacts by means, for example, of value loops and networks retaining materials in the system and creating new, fair employment opportunities (SustainAbility [2001], cited in Charter, 2002, 3).

Stakeholder engagement features in policy and decision making contexts in the private and public sector where there is a need to encompass diverse perspectives (Grant and Curtis, 2004; Dryzek, 2000; Niemeyer, 2004; Smith, 2003; Crane et al., 2004; Bingham et al., 2005). The importance of stakeholder participation - defined in the company context - to maximize value is becoming increasingly recognized. It is used to some extent within management strategies. It is an area that is being explored, although at the moment ‘there is no accepted understanding of what stakeholder participation actually constitutes and certainly no systematic method for its application within companies and company decision-making’ (Green and Hunton-Clarke, 2003, 292). The term is used to refer to a range of processes and activities undertaken for a variety of reasons. In the UK for instance, it is generally used to inform rather than make decisions (Green and Hunton-Clarke, 2003, 293). Crane et al. examine the ‘implications of citizenship thinking for building ‘ethical’ institutional arrangements for business’ (2004, 107), particularly where corporations are expected to display citizen-like qualities of social responsibility. These authors nominate a range of groups of people that may be
considered as stakeholders: shareholders, employees, consumers, suppliers, civil society organisations, and governments (Crane et al., 2004). They also note likely cultural influences that could affect the type and effectiveness of stakeholder engagement:

More collectivist and feminine cultures...would encourage ethical institutions that embed corporations deeper in societies than those cultural contexts that are more individualistic (2004, 119).

Innovative business-society collaborations such as The Global Compact, described earlier in this chapter, institutionalize ‘relations between firms and stakeholders particularly beyond the institution of laws and regulations’ (Crane et al., 2004, 119). The Compact rests on the interaction of market forces, NGOs and confidence that corporations can and will behave in an ethically responsible manner. It achieves stakeholder engagement through processes such as ‘stakeholder based ‘Learning Forums’ and ‘Policy Dialogues’ (Crane et al., 2004, 120). Crane et al. suggest that

more accountable corporate governance of stakeholder interests and rights will increasingly focus on an institutional level beyond (nation-state-based) governmental legislation. The expectation then would be that corporations can expect to face still quite a plethora of new forms of stakeholder representation interacting with corporations on platforms beyond the institutional setting firms are familiar with at present (2004, 120).

Elkington (2001a) explores ways that ‘citizen CEOs and corporations can fuse values and value creation’ in The Chrysalis Economy. He offers three tools to assist in this effort: The MetaMatrix, used to ‘track corporate metamorphosis and (distinguish) four main types of company or value web’; the Sustainable Business Value Model, which links ‘10 forms of value added to 10 different dimensions of sustainable development’; and the Learning Flywheel which can be used to help map ‘out a path for companies aiming for market-beating triple bottom line performance’ (2001a, xi).

Charter maintains that triple bottom line accounting and existing tools based on the notion of eco-efficiency are flawed because they are characterized by a silo mentality and display ‘a lack of joined-up thinking’. These problems are amplified by the way many businesses are now essentially extended operations embedded in supply chains.
Charter suggests that the situation might be remedied by focusing to a greater degree on value and by further integrating sustainability into discussions about value:

The aim of sustainable solutions development should be to maximize the net positive sustainable value embedded in the product, service or product-service-system (PSS) through minimizing negative and enhancing positive impacts at each stage of the life cycle (2002, 2, emphasis in original).

Charter explains that the people needed to implement such an idea would have to ‘be comfortable with both technical and soft aspects of sustainability...(and be able to) innovate, build trust and form diverse stakeholder partnerships’ (2002, 2, emphasis in original). He does not reject Elkington’s analyses completely and notes that applying the Sustainable Business Value Matrix to business operations shows that ‘Of the ten measures of business value or success, brand value and reputation is most positively linked to sustainability performance, confirming that business case analysis should not focus exclusively on financial measures. Reputation and brand value are linked to ethics, values and socio-economic development’ (Charter, 2002, 3).

Differences between sectors
The WBCSD recognizes the importance of looking at sectoral change rather than focusing primarily on individual companies and acknowledges that each sector of industry faces a different set of challenges and influences. There are six WBCSD sector projects including: Forestry, Sustainable Mobility, the Cement Sustainability Initiative (CSI); Mining Minerals and Sustainable Development (MMSD); Electricity Utilities; and the Financial Sector (WBCSD, 2002d, 1).

Companies from sectors such as mining which are particularly visible targets for public scrutiny and displeasure have in many regards been leaders in the field of sustainability. Francis Grey, co-ordinator of Sustainable Assessment Management (SAM) - the group responsible for the methodology underpinning the DJSI in Australia and New Zealand - explains that ‘The problem…is that the companies which get their heads kicked in the most are normally the most sensitive to these issues, while sectors which aren’t attacked…are pretty slow’ (cited in Anon, 2002, 2). Grey concludes that companies such as property trusts are not often targets of public scrutiny, and have done less than
those in the mining and energy sectors to improve their record, for example (cited in Anon, 2002, 2).

Mining is interpreted as being one of the most environmentally and socially disruptive industries. The biophysical consequences of mining activities are obvious and often unsightly, and mining is often linked to exploitative social practices. In areas where the ore bodies are nearing depletion, such as in various mines in Australia, the US and Canada, the mining industry faces increasing levels of public pressure. Under these sorts of conditions, mining companies are sensitive to the difficulties associated with securing and maintaining their license to operate (Peck and Sinding, 2004, 132). The mining sector has responded by producing the *Mining, Minerals and Sustainable Development Project Report* (IIED, 2001).

One strategy mining companies have tried in an attempt to mitigate such pressure is to produce environmental or sustainability reports. Peck and Sinding (2004) analyzed a group of such reports available on the internet. They found that

four categories of mining groups can be discerned: reporters, starters, resisters and hoarders. The significant overlap between firms in each category and the geographical location of their home base suggests to us that specific cultural and institutional preferences play a strong role in determining the extent of reporting (143).

These researchers also concluded that

When seen in the broader perspective of general environmental reporting by industry, many mining groups have a long way to go if the objective is full and verified and comparable reporting of actual impacts on a site-by-site basis (2004, 143).

One of Peck and Sinding’s recommendations is that mining companies should entertain the currently academic idea of exploring the link from reporting to mineral products to life cycle assessments. They maintain that the ‘idea that firms can differentiate their normally homogenous mineral and metal products along environmental lines is quite feasible if demand exists’ (2004, 144).
Preferred strategies differ between sectors. Sectors such as automobiles, chemicals and computers have utilized supply chain management strategies more than others, for example (USAEP, 2002, 2). Freeman et al. (2000) highlight the variations that may exist between industries:

Zero pollution may not be appropriate for every business, and recycling some materials may not make sense. Every company can’t make first rate consumer products out of recycled plastic à la Patagonia, and energy audits à la the Body Shop may have limited applicability (37).

Trends can be observed in various industries. Few companies in the pharmaceutical industry have attempted to create a sustainability strategy. Technology companies, not surprisingly perhaps, rely mainly on technological innovations and process innovation to promote sustainability. High standards of eco-efficiency exist within the food and beverage industry. Within the finance sector, strategies are often heavily influenced by the size of the company, while the aviation sector tends to isolate issues such as noise reduction or fuel consumption, and create defined strategies to deal with them. Automotive companies also tend to strategize in an issue-based manner. Electricity companies emphasize greenhouse gas reductions, particularly carbon dioxide, by improving efficiency, while oil and gas companies push beyond regulatory compliance, research cleaner energy sources and work to improve health and safety standards (Steger, 2004, 48-49).

Kolk states that sustainability reporting trends between sectors have remained fairly constant since 1998, ‘with chemicals and pharmaceuticals still leading, followed by computers and electronics, automotive, utilities, and oil and gas, all scoring above average’. The sectors that were below average in terms of sustainability reporting were non-industrial, including ‘communications and media, trade and retail, banks and insurance, and also other services, where sustainability reporting continued to be completely absent’ (2003, 282).

National differences in the patterns of sustainability reporting of Fortune 250 companies are also evident: ‘Very high levels of sustainability reporting are found in the UK, Japan and Germany’ percentage-wise (Kolk, 2003, 283). Kolk cautions however, that the discrepancies between countries may be partly explained by the fact that some countries
do not actually have many Fortune 250 companies based within their borders (2003, 283). Kolk suggests that the country variances are related to the ‘level of regulatory and societal attention’ (2003, 285).

Despite the increase in sustainability reports, social issues continue to be under-reported: ‘the use of truly ‘societal’, external indicators is rather infrequent’ (Kolk, 2003, 288). By 2001, Shell was the only company to include data on the number of countries where it has established procedures to attend to social issues relating to its employees, for instance (Kolk, 2003, 18).

**Ecological modernization**

This business orientation towards efficiency in relation to the use of environmental resources and in production methods as the key strategy for sustainability is referred to as ‘ecological modernization’ or ‘eco-modernization’ (Robbins, 2001; Davison, 2001; Jamison, 2001). Eco-modernist perspectives began to emerge in the mid-1980s as a reaction to the perceived inadequacies of state-based approaches to mitigating environmental degradation that were implemented in the early 1980s (Jänicke, 1990). Specifically, the emphasis on eco-modernization as a way to resolve development issues arose from the WCED meetings of 1984, and was encapsulated in the Brundtland Report (Hajer, 1995, cited in Robbins, 2001; Davison, 2001).

Ecological modernization seeks to identify and explain ways in which ecological challenges have pushed institutional transformation in the political-economic structures of industrialized social systems (Davidson and Frickel, 2004, 476). Eco-modernization ‘tries to understand the ways in which institutions, like business, integrate environmental and economic objectives as part of an overall process of social change’ (Robbins, 2001, 23). Eco-modernist scholars focus on trends towards resource efficiency, improved waste management strategies and industries’ expressed commitment to addressing environmental concerns and argue that ‘a given country’s economic advancement will depend on such economical modernization efforts (Davidson and Frickel, 2004, 476).

As described in Chapter Two, eco-modernism offers the institutions of modernity as the organisations capable of alleviating environmental and social problems in the name of
sustainable development. The focus of ecological modernization ‘remains on the core clusters of modernity: science and technology, the industrial organization, the capitalist mode of production, modern systems of values and culture, and the nation-state system (Mol and Spaargaren, 2005, 94).

Robbins suggests that ‘Sustainable development is paradigmatic of ecological modernization’ (2001, 24). It seeks relative environmental improvements via structural reform of institutions and social praxis (Mol and Spaargaren, 2005, 92). It approaches institutional reform through analytical, normative and prescriptive means (Mol and Spaargaren, 2005, 93). Criticisms that these institutions are themselves responsible for the ills of development are deflected with the promise to refine rather than replace them (Söderbaum, 2002, 1).

Eco-modernization focuses simultaneously on production and consumption and the environmental damage associated with these activities (Mol and Spaargaren, 2005, 93). It is the theoretical expression of the wish to perpetuate industrial society by simultaneously encouraging economic growth and environmental responsibility. This aim can be viewed as a product of the efforts in the 1980s and 1990s to decouple, integrate and converge environmental and economic concerns that were viewed as contradictory in the 1960s and 1970s (Robbins, 2001, 25). The ‘environment’ is effectively defined as

The organization of production and consumption, and the material flows (in terms of “additions and withdrawals”) that “mediate” between society and the natural environment following production and consumption (Mol and Spaargaren, 2005, 93).

Percy Barnevik, the CEO of Asea Brown Boveri (ABB), pledges support for the cause of sustainability, stating that

ABB believes that the innovative powers of entrepreneurial business can provide eco-efficient solutions to many of the world’s environmental challenges. We intend to play an important role in meeting those challenges - and in so doing to safeguard and develop our long-term prosperity (cited in DeSimone and Popoff, 1998, x).

The direct sequential link drawn here between innovation, technology and solutions to environmental problems is a characteristic eco-modernist promise. While the WBCSD
acknowledges the need for ‘fundamental political, social, economic, and industrial change’ as described in Agenda 21, it confines the business role for sustainability largely to the pursuit of eco-efficiency (DeSimone and Popoff, 1998, xix).

There have been many impressive technological innovations. Richard Truly, Director of the US Department of Energy’s National Renewable Energy Laboratory (NREL) enthusiastically hails the marvels of technological wizardry, despite the problems of development blighting progress:

Time and time again during the past century, engineering genius turned imagination into reality. We created one marvel after another: from automobiles to powered flight, from the construction of cities on Earth to the exploration of our moon and planets, from the building of our interstate highways to the creation of the Internet. But somehow along the way we neglected and even jeopardized the prosperity that flows from natural ecosystems by creating a gargantuan demand for energy for our rapidly growing population (2003, 7).

Truly does not draw a direct causative link between technological advances and environmental degradation. Despite scientific know how, problems ‘somehow’ arose. He remains confident that we can engineer ourselves, and future generations, out of trouble:

The next generation of engineers…will solve the daunting challenge of climate change with energy efficiency and renewable resources (2003, 8).

Andersen and Zaelke (2003) identify ten examples of ‘industry genius’ ranging from Alcoa’s moves towards sustainable production to Visteon’s integration of electronic circuits in cars, trucks and airplanes to reduce materials, space and weight, save operating energy, simplify assembly and disassembly, and accelerate electronic functions. At Globe 2004, a ‘biannual conference and trade show on the business of the environment’, an array of technological breakthroughs was displayed and the business structures that might promote them were discussed (Helten, 2004, n.p.). George Carpenter, director of corporate sustainability at Proctor & Gamble, cautioned that while technological breakthroughs are necessary, many are likely to remain in obscurity unless business can find a profitable way of delivering them: “The barriers are not technology…Our laboratories are filled with technology that would cause huge quality
of life differences. The challenge, I think, and why we don’t have more people doing this is because we haven’t got a successful business model yet” (cited in Helten, 2004, n.p.)

Robbins suggests that eco-modernization can be analyzed in three ways:

Ecological modernization as institutional learning suggests that corporate management responses are based on a type of incremental shift associated with overall societal processes of ‘greening’. Ecological modernization as technocratic project maintains that corporate management responses are inappropriate responses to socio-environmental crises because they support productive and consumptive relations that create and recreate environmental crises. Ecological modernization as cultural politics argues that corporate responses to environmental crises can transform the relationship between society and the environment, through the debate about the future construction of society (2001, 29).

These three alternative interpretations of eco-modernization ‘correspond to different sets of empirical evidence that can be provided to explain ways in which corporations have responded to environmental crises’ (Robbins, 2001, 28).

**Criticisms of Ecological Modernization**

Eco-modernity tames the radical by enclosing it in acceptable language and institutionalizing it. Radical environmentalism is disciplined by institutional processes so that it loses much of the potency it gains from being unrestrained and dynamic. Critics fear that as a result of this process environmentalism and/or sustainability are being ‘hijacked’ and rendered impotent (Welford, 1997). Jamison remarks that ‘Whether we see it as cooperation or cooption, as seeking greater influence or simply selling out, there can be little denying the fact that much of what was once a movement comprised primarily of voluntary activists has gone to market’ (2001, 124).

The often incremental nature of eco-modernist reform is also criticized (Davidson and Frickel, 2004, 477).

Proponents of eco-modernization as a technocratic project suggest that technology, rather than nature, is out of control (Robbins, 2001, 27). If technology is adjusted, environmental problems can be resolved. Furthermore, the focus tends to be technology designed and controlled by the elite and powerful members of industrial society, rather
than the sort of appropriate technology endorsed by Schumacher (1974) and Sirolli (1999)\textsuperscript{40}.

Jamison argues that despite the increasing attention to environmental issues, ‘business as usual’ is still what it used to be (2001, 124). The deregulation and privatization of the 1980s have infected ‘many ecological transformation processes with what might be called a commercial virus’, he says, so that sustainability is confined within the boundaries of profit making imperatives (2001, 124). Representing economics as an unavoidable pillar of sustainability accentuates this tendency, particularly as ‘economics’ is often taken to mean the hegemonic economic system.

From an ecological modernization perspective, the process of ‘greening’ business is often more informed by the familiar territory of environmental management than the more complex and challenging objectives of sustainability. As Mol and Spaargaren note:

> Ecological Modernization perspectives tend to focus on the contributions to \textit{environmental} reform and not primarily on the effects of these changes in terms of various other criteria. Ecological Modernization is thus first and foremost an environmental social theory (2005, 92).

Furthermore, eco-modernists’ emphasis on technological and market-based strategies for sustainability may limit their capacity to deal with the full spectrum of environmental issues. As Davidson and Frickel note, ‘resource consumption, biological diversity, and environmental justice are not particularly conducive to ecological modernization’ (2004, 477).

It is argued that eco-modernist perspectives are Eurocentric in that they are heavily influenced by the particular social, political and economic circumstances of the Northwest European region (Mol and Spaargaren, 2005, 95; Buttel, 2000). Studies from Western European nations are heavily relied upon to support the case for eco-modernist approaches to business and sustainability (Davidson and Frickel, 2004, 476). This may imply that ecological modernization is likely to be most effective and relevant in countries with a modernist history, a criticism that is acknowledged by eco-modernist

\textsuperscript{40} See Chapter Two.
scholars (Davidson and Frickel, 2004, 477). Research from around the world illustrates that eco-modernization would require contextually sensitive refinement if it is to fulfil its promise. In some cultural and political circumstances, it has been seen to lead to ‘ecological subversion’, such as in former soviet countries struggling to establish their economies (Davidson and Frickel, 2004, 477).

York and Rosa (2003) list four key logical, methodological and evidential challenges to the eco-modernist suggestion that modernized societies can achieve ecological sustainability without radical structural change. They argue that evidence fails to support, or contradicts outright, its expectations (2003, 282). The four challenges they identify are:

1. the need to show that modification of institutions actually leads to environmental improvements;
2. the need to prove that modifications frequently result in more ecologically sustaining production and consumption patterns;
3. the need to demonstrate that the achievements of those firms who provide ecological benefits by modifying their actions are not negated by simultaneous contribution to the growth of other industries or firms with negative effects;
4. the need to establish that economies are becoming more resource efficient and that the rate of improvement outpaces the rate of increase of overall production (2003, 273).

York (2004) posits that a reliance on non-representative, specific case studies as evidence to support the virtues of ecological modernization has lead to false confidence in its potential to improve sustainability. He argues that the inappropriate use of case studies as evidence for the efficacy of eco-modernist strategies ‘that appear to be improving environmental performance...may not be due to a general trend toward sustainability associated with modernization but rather, due to a trend towards increased variability of environmental performance in institutions in late modernity’ (2004, 355).

The UNEP concludes that although business action in regards to sustainability has been commendable it is nonetheless insufficient, since the ‘industry leaders (in this field) are outnumbered by the laggards’ (de Larderel, cited in Kendall, 2002, n.p.). Furthermore, gains in sustainability have been offset by economic growth and rising consumer
demand (Kendall, 2002, n.p.). The result is that ‘Business efforts to reduce environmental impact are not keeping pace with the worsening state of the planet’ (Kendall, 2002, n.p.). Eco-modernism has not yet provided the required basis for sustainability. However, it may continue to play a significant role in effecting social change in a world seeking sustainability.

Although there are exciting examples of corporations who aim to be ‘sustaining’, far more are yet to move in that direction. Relatively few multinational corporations are stalwarts of sustainability even though many are familiar with its rhetoric. As Hoffman observes, ‘the actions of a few forward thinking companies are not indicative of social and institutional change’ (2001, 221). This is not to say that the project of building sustaining production systems en masse is necessarily doomed to failure, but there is clearly a long way to go.

Ecological modernization can be superseded by ‘sociologies of flow’ such as those developed by Manuel Castells, John Urry and actor network theorists for example (Mol and Spaargaren 2005, 96). These analysts venture into the networks and flows that characterize modern society, providing a ‘new…agenda for 21st century environmental social sciences (Mol and Spaargaren 2005, 96). In such analyses, environmental flows include materials and ‘technical infrastructures but also the scapes, nodes, networks, and discourses that go along with the flows in question’ (Mol and Spaargaren 2005, 98).

In Chapter Five I move beyond perspectives such as ecological modernization to apply actor network theory in order to re-consider corporate identity as it meets sustainability.

**What might a ‘sustaining’ corporation look like?**

Benn and Dunphy (2004, 65) imagine the sustaining corporation as one which has the ability to make rapid strategic adjustments in order to make the most of emerging market opportunities and be able to add value by refining its ability to customize service. They maintain that sustaining organisations will absorb sustainability to the point that it becomes a pivotal aspect of their business strategies and one of the important lenses through which self-assessment of performance is undertaken. Such businesses will understand that success is dependent on healthy relationships with stakeholders and the ‘intellectual and skill capital’ of their work force (Benn and
Dunphy, 2004, 65). They will therefore work to augment the skills base of their own workforce and that of the workforces of companies they deal with. Their vision will extend well beyond the economic bottom line to assessment of how their actions impact on the ‘human capability base of society’ and the biosphere (Benn and Dunphy, 2004, 65). Leaders will perceive their corporations as a ‘vital link in the ecology itself and in the inter-generational continuity of society’ (2004, 65).

Despite the existence of cross-cultural differences in management values, a small number of universally palatable moral standards have been identified which can be used to develop international corporate codes of ethics which would be vital for sustainability. Schwartz ([2002] cited in Furnham, 2005, 424) lists six broadly acceptable standards:

1. trustworthiness
2. respect
3. responsibility
4. fairness
5. caring
6. citizenship.

From this moral starting point Schwarz develops a number of principles:

- be honest to stakeholders;
- stick to values despite financial loss;
- fulfil commitments;
- avoid conflicts of interest;
- respect the rights of others;
- take responsibility for actions;
- treat stakeholders fairly;
- avoid unnecessary harm;
- act benevolently;
- obey the law;
- protect the environment
Tom Kallio, a lecturer in economics and business administration, hopes for a transformation in the normative relationship between business and nature. Kallio hopes for a move beyond previous business attitudes from wishing to ‘maximally exploit and utilize the natural environment’ to ‘maximally exploit and utilize natural environment, and at the same time minimize…environmental impact’ (2002, 2). He tentatively suggest an ideal type of firm designed to ‘bridge the gap between business activities and natural environment’ (2002, 2). This firm would ask how it could ‘maximize (its) profit by following the rules of sustainability’ (2002, 2). In such a scenario, argues Kallio, economic rationality would no longer override ecological rationality - economically reasonable behaviour would be identified by its compatibility with sustainability (2002, 2).

Will the emphasis in sustaining corporations be on centralized or decentralized responsibility? Both have benefits. Centralized control leads to:

- greater uniformity of policy and action;
- fewer errors by subordinates who lack information or skill;
- better utilization of expert skills and specialization; and
- closer control of all operations (Furnham, 2005, 669).

Decentralization tends to be associated with:

- speedier decisions without consulting superiors;
- decisions more suited to local conditions;
- greater employee interest and enthusiasm; and
- top management having time to undertake strategic research and decision making (Furnham, 2005, 669).

MNCs tend to have to delegate management and decentralize decision making processes, and therefore have the potential to implement sustainability orientated strategies by utilizing these competencies.
Korten (1999) and Clarke (2001) both argue that sustainability will only be promoted if a series of changes to corporations and to the framework conditions they operate in are implemented. Clarke, a scholar and activist, recommends tempering and directing the power of transnational corporations by developing and implementing a ‘common manifesto for citizens of the world’, including:

1. a declaration of the fundamental rights of people to determine their own economic, social and ecological future;
2. the sovereign rights of people over TNCs and banks;
3. the demand that TNCs meet certain basic economic, social and environmental conditions;
4. the insistence that governments develop and enact new regulatory measures for exercising control over TNCs; and
5. the responsibility of social movements to take whatever forms of action are needed to ensure that people’s basic rights are upheld and that democratic control over TNCs be maintained (Clarke, 2001, 80).

Korten identifies 6 outcomes that he feels citizens should aim for in order to promote sustainability, including:

1. the restoration of political democracy (including delinking corporate money and political campaigns);
2. ending the legal fiction of the corporation as a person;
3. the establishment an international agreement regulating international corporations and finance;
4. the elimination of forms of corporate welfare such as direct subsidies, tax breaks, and legal permission to externalize costs;
5. the restoration of money’s role as a medium of exchange, rather than the predominantly the currency of speculators; and
6. the advancement of economic democracy (proactively support family businesses, cooperatives, community and worker owned businesses and so on) (1999,188).
The last point could be stretched to include the promotion of fair trade, and equitable access to global markets.

**Conclusion**

Corporate attitudes to environmentalism and later to sustainability have differed over time with varying success. Sectoral differences are also evident. In general, a trend is observed for businesses to gradually change from initial resistance to external criticism and pressure in regards to environmental and social issues to more positive engagement. Increasing numbers of corporations are now providing sustainability reports for public scrutiny. Additionally, researchers have noted a widening range of vision from a management focus on issues within a single company, to an appreciation of the importance of understanding and actively engaging in networks and collaborations with a range of stakeholders. Along the way, there is much discussion about what Big Business’s role in society should be - themes such as corporate social responsibility are a source of much debate.

While many initiatives are applauded, critics fear that corporations are essentially ‘hijacking’ sustainability and unhelpfully distorting its core themes. The eco-modernist tendencies of the business response to sustainability, which mainly rest on the promises of eco-efficiency, are controversial. Some doubt whether the culturally specific promises of modernity suitably uphold sustainability’s global ambitions concerning cultural and ecological diversity.

It is important to note that variations in corporate attitudes to environmentalism and sustainability over time should not be interpreted as a Darwinian progression from naivety to sophistication. They are responses to the changing social understandings and contexts in which corporations are embedded. While it is necessary to analyze the sincerity and suitability of corporate responses to environmentalism, critically it is also important to avoid treating them in a patronizing manner emanating from a Darwinian perspective.

The journey continues and may eventually come to involve a profound transformation of corporate identity and function. The meeting between business and sustainability is an inevitable and desirable step. Whether this meeting will provide the sort of outcomes...
society might wish for is yet to be determined - no MNCs currently exist that can irrefutably claim to be sustaining. The existing paradigmatic version of corporate identity has stretched to accommodate eco-modernization, but it is possible that in future, devotion to sustainability will catalyze a shift to a new model of doing business within a new system. Despite beginning to reset the business compass to some extent, issues of sustainability are becoming more pressing and industry seems unable to keep pace with them. Furthermore, if Big Business is to contribute satisfactorily to sustainability, change is required at many levels. While it is true that companies themselves must undertake re-evaluations of their guiding values and consider which form of organisational structure best facilitates sustainability, it is also imperative that the framework conditions within which corporations operate are significantly reconfigured. In the following chapters I consider the importance of networks in achieving this aim, using actor network theory to explore corporate identity and links beyond its commonly perceived boundaries (Chapter Five), and examining network approaches in business (Chapter Six), networks of knowledge (Chapter Seven) and deliberative democracy as a way to access many of the networks discussed (Chapter Eight).
Chapter Five

Corporations Meet Sustainability: A Reflexive Process

...we have to stop trying to figure out what to do by looking at what we have done. And we have to start looking into our hearts and seeing what we truly believe to be possible...And it might be something that has never, ever been produced on a large scale, so all your historical evidence says no, no, no - but your heart says 'yes' (Senge, 1997, 145.)

Introduction

Multinational corporations’ attention to the discourse of sustainability is necessary, significant and to be encouraged. Corporations meet the discourse of sustainability in a reflexive or ‘co-evolutionary’ process. Both are transformed by the exercise to some degree, and the results of this ongoing interaction are of crucial interest to those of us trying to find sustainable ways of living.

In Chapter Two I briefly outlined the way the discourse of sustainability often favours the interests and agenda of the powerful, particularly multinational corporations (MNCs). In this chapter I take this analysis further by examining the reflexivity of the interaction between corporations and sustainability. I begin by considering how the conceptualization of the corporation influences thought and action, as does the language associated with competing paradigms. I use actor network theory (ANT) as a way to see past conventional versions of corporate identity and to tease out the web of interrelationships that give rise to corporate power as a relational effect. I show that while corporations are important actors in the discourse of sustainability, they are also subject to subversive pressure as sustainability infiltrates the corporate stronghold. I highlight this by examining changes and contradictions in language and praxis within corporations in relation to the principles of sustainability.

\[^{41}\text{In this context the term ‘co-evolutionary’ refers to the simultaneous process of evolution or development of corporations and the notion of sustainability, in which the direction of change is determined in part by the fact that both are involved in the discourse. Each is affected by the presence of the other.}\]
Imagining the corporation

In the middle of the last century Peter Drucker famously suggested that corporations’ raison d’être is to support the general agenda of society ([1946] 1983, 25). Years later the World Business Council for Sustainable Development (WBCSD) echoes Drucker’s sentiment by assigning business the key role in ensuring sustainability. The WBCSD endorses globalization of the marketplace, driven by multinational corporate leviathans, as ‘the best path towards sustainable human progress’ (2002c, 8). Many commentators - often from the upper echelons of business or organisational studies - go so far as to identify corporations as the ‘only’ vehicle capable of delivering sustainability to the global community (Hart, 1997; Dunphy, Griffiths and Benn, 2003, 4). In the first sentence of the first chapter in the WBCSD book Eco-efficiency: the Business Link to Sustainability, Edgar Woolard, in his capacity as CEO of DuPont unequivocally allocates responsibility for the practical performance of sustainability to corporations: ‘The green economies and lifestyles of the twenty-first century may be conceptualized by environmental thinkers, but they can only be actualized by industrial corporations’ (DeSimone and Popoff, 1998, 1; my emphasis).

The support is not without qualification, however. Drucker, for instance, noted difficulties in establishing which forms of institutional organisation most appropriately ensure this outcome and acknowledged the likelihood of conflicts between the inwardly orientated ambitions of ‘the corporation as an autonomous body’ and the needs of the society it ostensibly exists to serve (Drucker, [1946] 1983, 24). For its part, the WBCSD adds the proviso that businesses, governments and citizens’ groups must ‘cooperate in creating a market that maximises opportunity for all’ (2002c, 8). As even their champions recognise, there are risks associated with reliance on corporate power.

In addition, the degree to which sustainability calls for new models of business identity, structure and function is debated. Delyse Springett, from the New Zealand Centre for Business and Sustainable Development, believes that the degree and nature of change required for sustainability is usually underestimated within the discourse of the ‘greening of business’ (2003a, 2). Springett asserts that the discourse ‘generally fails to address the profound change in the social role and nature of business and other institutions that is generally called for by the radical political and democratic goals attributed to sustainable development’ (2003a, 2).
The role we envisage for corporations in promoting sustainability depends on how they are perceived and what we consequently expect that they can and should do. The way they are imagined and described profoundly determines their power and effect, how they are run, what is expected of them, and how they engage with themes of sustainability. The concept of the corporation is a determinant of the structure of the society around it (Howard, 2002, 42). Visions of what constitutes appropriate corporate identity are endorsed by law and consequently influence managerial strategies, with effects that may be positive and/or negative. Gladwin et al. argue that

Organizational science has evolved within a constricted or fractured epistemology, such that it embraces only a portion of reality. The organic, biotic, and intersubjective moral bases of organizational existence, we submit, have been neglected or repressed in the greater portion of modern management theory. This exclusion has resulted in theory which is at best limited and at worst pathological. By disassociating human organization from the biosphere and the full human community, it is possible that our theories have tacitly encouraged organizations to behave in ways that ultimately destroy their natural and social life-support systems (1995, 896).

Even where scope to stretch the boundaries of corporate action and responsibility exists within companies’ stipulated legal framework, change may be stymied by persistent concepts and language that carry the weight of former attitudes with them. In economic and management theory, the corporation is frequently assigned an unchallenged identity as a discrete entity distinct from society and environment (Gladwin et al., 1995). To be ‘corporate’ is to be ‘one body made of many individuals’ while a corporation is understood as ‘a group of people authorized to act as an individual and recognized in law as a single entity’ (Thompson, 1995, 299)\(^{42}\). Such definitions clearly emphasize anthropocentric individualism, offering the corporation as a discrete body with people as its cells. It conceals other connections that underpin corporate activity (Purser et al., 1995).

The notion of the corporation as an economic singularity is consistent with what Dunphy et al. (2003) refer to as ‘first wave’ organisations - i.e. those assuming the archetypical discrete, enduring corporate identity with clearly delineated boundaries - the cells of neoliberal economics. Corporations borne of the first wave ‘were primarily

\(^{42}\) I considered the ontology of the corporation more extensively in Chapter Three.
cost driven, emphasized hierarchy and control and maintained traditional ways of doing things, resisting change unless the traditional ways were clearly failing’ (Dunphy et al., 2003, 65). In the 1980s, the Reagan administration in the USA and Thatcherites in the UK, for example, typified the policy response of devotees of neoliberalism by pushing deregulation, privatizing government services, and increasing the power of the private sector at the expense of the public. First wave corporations operating in this policy regime were rewarded by pursuing short term financial gain for shareholders rather than focusing on wider issues, even where these were likely to impact negatively on the firm’s conventional bottom line in the long run43. If such an entity were a person, such self-centred behaviour might be seen as the attitude of a maladjusted teenager. The first wave firm might be thought of ‘institutionalized immaturity’. Wolfe ([1988] cited in Furnham, 2005, 417) holds that this view is detrimental when it surfaces today in organisational politics44 as a managerial ‘bottom-line mentality’ since it undermines integrity.

It is argued that first wave model of organisational structure, while highly compatible with neoliberal economic theory, is fundamentally incompatible with sustainability (Gladwin et al., 1995). Sustainability foregrounds ideas such as the importance of interrelationships, networks, complexity and diversity, all considered with a long term view - countering the mantra of competitive individualism and associated estimations of ‘success’ which hold centre stage in neoliberalism. Sustainability draws a far more sophisticated picture of the relationship between the individual and the whole than conventional economic theory allows. The ‘individual’ and ‘whole’ themselves tend to be defined in a narrow economic sense that externalizes important social and environmental aspects of their identity, and conceals many of the real links that nourish them (Gladwin et al., 1995). People informed by the ‘first wave’ view of the corporation lean towards different strategies to promote sustainability - and indeed meanings of sustainability - than those who understand corporations to be multifaceted constituents of diverse networks. Gladwin et al. describe the conceptual separation of the corporation from everything else as ‘fractured epistemology which separates humanity from nature and truth from morality’ (Gladwin et al. 1995, 874). They argue

43 An emphasis on capitalist individualism still appears in policy and management strategy today, particularly in countries such as Australia, the UK and the USA (Dunphy et al., 2003, 95).
44 Organizational politics are those which are not officially sanctioned - they are seen as being ‘immoral, devious and counter-productive’ and designed to further personal goals (Furnham, 2005, 416).
that ‘reintegration is necessary if organizational science is to support ecologically and socially sustainable development’ (1995, 874). These authors note the parallel between this epistemological disassociation within corporations and that of neo-classical economics, and posit that it ‘leads organizational theorists to employ injudicious assumptions, impossibility theorems, and fallacies of misplaced concreteness’ (1995, 875).

In addition, neoliberal modeling of the relationship between individual and collective is too ethnocentric to serve sustainability adequately. Hinkle and Brown’s research indicates that people from various cultures and sub-cultures differ in their attitudes towards collectivism/individualism, independence/interdependence, cooperation/competition (cited in Vaughan and Hogg, 2002, 459). Orientations towards either comparative or non-comparative ideologies also vary (Hinkle and Brown [1990], cited in Vaughan and Hogg, 2002, 459). For example, in very generalized terms, European/American (Western) social systems tend to emphasize personal independence while those of East Asia (Eastern) tend towards interdependence (Vaughan and Hogg, 2002, 456) (see Table 5.1).

<table>
<thead>
<tr>
<th>The independent person (Western)</th>
<th>The interdependent person (Eastern)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• is bounded, stable, autonomous</td>
<td>• is connected, fluid, flexible</td>
</tr>
<tr>
<td>• has personal attributes that guide action</td>
<td>• participates in social relationships that guide action</td>
</tr>
<tr>
<td>• is achievement orientated formulates personal goals</td>
<td>• is orientated to the collective meets obligations and conforms to norms</td>
</tr>
<tr>
<td>• defines life by successful goal achievement</td>
<td>• defines life by contributing to the collective</td>
</tr>
<tr>
<td>• is responsible for own behaviour</td>
<td>• is responsible with others for joint behaviour</td>
</tr>
<tr>
<td>• is competitive</td>
<td>• is cooperative</td>
</tr>
<tr>
<td>• strives to feel good about the self</td>
<td>• subsumes self in the collective⁴⁵</td>
</tr>
</tbody>
</table>

(Source: Based on Fiske et al. [1998], cited in Vaughan and Hogg, 2002, 457).

⁴⁵ The list of attributes listed as pertaining to an Eastern model of the interdependent person also applies to Indigenous communities in Western countries such as Australia.
Management values and styles in different sociocultural settings may vary accordingly, a fact which has become increasingly apparent as businesses such as those based in the Pacific Rim have gained prominence in the global economy (Hofstede, 2007; Furnham, 2005, 388). Business leaders from different societies may hold fundamentally different business goals (Hofstede, 2007). Komin’s comparative study of Thai and Western management values illustrates this phenomenon ([1995] cited in Furnham, 2005, 389 - see Table 5.2). It has been noted that cross-cultural variance in management values is an important phenomenon for MNCs to come to terms with in their daily operations. When managers from different cultural backgrounds, even within the same firm, lack appreciation of each other’s cultural background this can result in misunderstandings, mistrust and stress (Furnham, 2005, 388).

Further to this though, essential cultural differences in management philosophies are relevant to sustainability. They offer potential leverage for change towards more sustaining companies since they demonstrate the possibility of success in businesses supported by values other than those such as the individualism, short-termism, linearity and rationalism more typically applauded in the West. This is not meant to imply that ‘Eastern’ business values are inherently more sustainable than ‘Western’ ones - far from it - but to serve as a reminder that there are a range of viable options. If we decide to, we can reconstruct business to serve sustainability by choosing carefully from the options available to us.

Support for radical alteration of hegemonic attitudes towards business values comes from within companies based in the West too. Dame Anita Roddick, for example, is one of the most famous and energetic campaigners for change in the corporate world. Having helped to build a highly successful international business, The Body Shop, she maintains that ‘businesses are not dropped from the skies ready-formed; they are created and shaped by human beings and they can be changed by them if they have the will to do it’ (2000, 276).

The existence of firms with distinct cultural characteristics also serves to support the notion of corporate social responsibility. Businesses quite clearly have intrinsically sociocultural elements. They are inseparable from their sociocultural context and are therefore unavoidably socially involved. In fact, arguments against CSR may be
Table 5.2: Comparison between Western and Thai business values

<table>
<thead>
<tr>
<th>Management function</th>
<th>Western values</th>
<th>Underlying Thai values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem-solving</td>
<td>Linear, rational approach</td>
<td>Holistic approach</td>
</tr>
<tr>
<td></td>
<td>Facts and figures</td>
<td>Person and situation orientated</td>
</tr>
<tr>
<td></td>
<td>Short-term task orientated</td>
<td>Long-term orientated</td>
</tr>
<tr>
<td>Conflict handling</td>
<td>Directness/issue orientated</td>
<td>Indirectness/widespread</td>
</tr>
<tr>
<td></td>
<td>Short-term</td>
<td>Personalization/long-term</td>
</tr>
<tr>
<td></td>
<td>Logic, facts</td>
<td>Feeling/people</td>
</tr>
<tr>
<td></td>
<td>Competition</td>
<td>Collaboration</td>
</tr>
<tr>
<td></td>
<td>Task/result, short-term</td>
<td>Relationships, long term</td>
</tr>
<tr>
<td>Motivating</td>
<td>Money/promotion</td>
<td>Money/promotion</td>
</tr>
<tr>
<td></td>
<td>Self-actualization</td>
<td>Relationship orientated</td>
</tr>
<tr>
<td></td>
<td>Task orientation</td>
<td>Individual/family orientated</td>
</tr>
<tr>
<td></td>
<td>Individual achievement</td>
<td>Spiritual fulfillment</td>
</tr>
<tr>
<td></td>
<td>Individualism</td>
<td>Relatively collectivistic</td>
</tr>
<tr>
<td></td>
<td>Materialism</td>
<td>Success, social status, rapport</td>
</tr>
<tr>
<td></td>
<td></td>
<td>with family, friends and associates</td>
</tr>
</tbody>
</table>

(Source: adapted from Komin [1995], cited in Furnham, 2005, 389.)

ethnocentric if they are informed by a Western worldview which permits the ontological separation of business and culture. This conceptual rift is reinforced by the very act of asking whether corporations should have social responsibilities - the question itself implies that corporations are not part of socio-cultural networks and therefore do not necessarily have to consider them.
Other conceptualisations of business organisations have been developed, such as the stakeholder (Jones, 1995; Jawahar and McGlaughlin, 2001; Scott and Lane, 2000) and natural-resource based views of the firm (Hart, 1995). While these perspectives focus on broader social and environmental networks respectively, and do not offer a sufficiently integrated perspective for sustainability, they do attempt to extend managers’ awareness of influences beyond the boundaries of the firm.

The stakeholder view of the firm has useful attributes in terms of sustainability. This perspective places importance on realizing stakeholders’ influence on firms’ performance and survival (Scott and Lane, 2000). A stakeholder can be defined as ‘any group or individual who can affect or is affected by the achievement of an organization’s objectives’ (Freeman, 1984, 46). Stakeholder theory describes the potential for stakeholder engagement to support corporations’ survival and success by ensuring that ‘sufficient wealth, value, or satisfaction’ is generated for ‘all primary stakeholder groups’ without favouring one group over the others (Jawahar and McGlaughlin, 2001, 397). All stakeholders are considered to have intrinsic value (Scott and Lane, 2000; Jawahar and McGlaughlin, 2001) although distinctions are sometimes drawn between primary and secondary stakeholders (Bremmers et al., 2007, 216). Primary stakeholders, such as consumers or governments, are those whose relationship with a company is an important determinant of its success, whereas secondary stakeholders such as community members, may have a less direct, but still important influence (Bremmers et al., 2007, 216).

However, ‘the relative level of attentativeness that managers pay to stakeholders’ demands vary considerably among organizations’ in terms of the ‘degree to which they acquiesce, resist, or proactively manipulate external influences and demands’ (Scott and Lane, 2000, 53). While there are benefits from this approach, it may be difficult to identify and engage with all relevant stakeholders in any given instance, and methods of engagement will influence the effectiveness and equity of the process. Importantly, stakeholder theory implicity leads to a requirement to consider corporations’ involvement in networks (Bremmers et al., 2007, 215), which as I discuss in Chapter Eight, is an important orientation for sustainability.
According to the natural-resource based understanding of business organisations for example, ‘strategy and advantage in the coming years will be rooted in capabilities that facilitate environmentally sustainable economic activity’ as a result of the recognition that ‘businesses...will be constrained by and dependent upon ecosystems’ (Hart, 1995, 991). This has been proposed in order to address the limitations of a resource-based view, which promotes a limited understanding of the constitution of the firm’s ‘environment’ (Hart, 1995, 1007).

Corporate management theorists such as Gladwin et al. go so far as to suggest that ‘management theorists ponder the fundamental question of “how do we wish to live and what is the role of organizations in such living?”’ (1995, 875). They argue that organisational management should entail examination of ‘ “tacit frames”... regarding humans and (or in) nature’ and confrontation of the ‘question of the impact of management theory and practice on the full human community, the natural environment and a sustainable future’ (1995, 875).

An actor network view of corporate power and identity

Enormous multinational corporations, perhaps more than any other business organisations, are prime candidates for actor network analysis. Their power is largely derived from their ability to access networks around the world, to the point that very few places are now free of their influence, either directly or indirectly. In this context, ‘dysfunctional, and at times pathological, dangers of being locked into “psychic prisons”... “iron cages”... and other forms of constricted sense making... or faulty mental modelling’ constitute a barrier to the development of sustaining organizations (Gladwin et al., 1995, 875, 876). Actor network theory offers an opportunity to move beyond these restrictions and expand ontological understandings of business organisations.

Actor network theory can assist us to achieve the ‘fuller acceptance of systemic interconnection’ (Gladwin et al., 1995, 897) or ‘multilevel and multisystemic bases’ (Starik and Rands, 1995, 908) that theorists argue is demanded by sustainability. Gladwin et al. maintain that
Such a view would see organizations both partially causing and being affected by biodiversity loss, climate change, freshwater scarcity, food insecurity, population growth, persistent poverty, gender bias, and explosion of megacities...New insights about system dynamics and predictability emerging from this study of complex systems may become critical in making these connections (1995, 897).

**Enrolment, translation, simplification**

We can envisage corporations as examples of simplifications in an actor-world that are lent power by ‘summon(ing) or enlist(ing) a cascade of other entities’ (Callon, 1986a, 31). As stable actor-networks, corporations have successfully enrolled, convinced and enlisted many other actors, both human and non-human, to create a locus of power. They enlist resources, employees, sinks, legal systems, political actors and consumers. Social contracts are created - certain people decide that corporations should be powerful and engineer their existence, others support their activities, either directly by working in corporations (voluntarily or because of the coercive pressures of deprivation) or buying shares, or tacitly by buying their wares. Material resources exist which permit corporate existence and shape it by their nature - mining companies exist because ores and minerals permit it. Technology, including information technology - created in alignment with available resources and what societies think should be done with them - enables corporate activities and simultaneously shapes them.

According to ANT, ‘translation’ occurs as roles are created and defined, the emergent actor network becomes indispensable to others outside it, and changes those who have become enrolled within it. Within corporations, for instance, individuals assume the identity of employee, often suspending their personal views or ethical standards in order to conform to those implicitly or explicitly promoted by the organisation, congratulating themselves for their loyalty as they do so. Their interests have been ‘translated’ to coincide with the interests of the company.

The compaction of identity of a heterogenous actor network into a single identity (simplification) is in many ways an essential procedure. We can recognise a simplified idea of the ‘corporation’ at a relatively uncomplicated level, in the same way that we recognise concepts such as ‘democracy’ or ‘sustainability’ without dealing with their underlying complexity. This allows us to engage in dialogue about ‘corporations and sustainability’ for example, without being bogged down in detail. However, the
tendency for ‘successful translation (to) quickly make us forget its history’ (Callon, 1986a, 28) - ‘post-translation amnesia’ - has become particularly troublesome in the case of corporations. The detail of networks which enable corporations to exist, as well as those which are affected by the existence of the corporate actor network, must remain firmly in sight if we are to act appropriately, particularly now when we hope for change.

Post-translation amnesia also diverts attention from the tenuous nature of ‘enrolment’ - not all actors are completely or permanently enrolled by the actor-network that surrounds them. Post-translation amnesia can obscure the fact that corporations’ power is not absolute and that their capacity to achieve is reliant on the health of networks around and within them. When corporations are understood in a simplified sense as discrete entities, this may lead to narrowly defined managerial and policy frameworks that do little to promote sustainability in real terms.

Corporate actor-networks are deliberately ‘punctualised’ actor networks that unleash a particular form of power through relational effects. Corporations are intentional manipulations of actor-networks and the perseverance of this coercive intention gives them stability and resilience, at least for as long as there is a collective will to perpetuate them. They are an actively maintained locus of power.

If corporate identity is legally inoculated against internal and external complication in an arbitrarily created atomistic shell, it becomes possible to view power as an intrinsic quality of the corporation, and/or to misdiagnose where the true source or locus of power is (Casson, 1981, 345). This shorthand version of corporate identity obscures network effects, and therefore simultaneously obscures the way these network effects produce power. It may then seem that there is a source of power possessed by corporations that radiates outward. Power is invested in the simplified idea of the corporation rather than being understood as a gift from the networks that permeate and surround it. Having done this, it is easy to imagine the corporation as separate from ‘nature’ or ‘society’, and to regard the requirement to include consideration towards

\[\text{\textsuperscript{46}}\text{ For example, the ‘preoccupation with the firm and its arm’s-length contractual alternatives’ that accompanies theoretical allegiance to the idea of a corporate shell is not particularly useful when considering ‘earlier times in which the extended family, the partnership, the merchant guild and the cartel were also important forms of economic organisation (as some still are today) (Casson, 1981, 345, 346).} \]
them in business activities as an imposition or threat rather than a survival tactic. Actor network theory helps us to see past this facile suggestion, highlighting the ways that the corporation is defined by networked effects that combine to provide its vitality. It shows that an atomistic understanding of the corporation, although it has often proven to be workable in the short term, becomes precarious when the health of the supporting networks that have been ignored deteriorates too far.

‘Order’ versus ‘ordering’

The ANT premise that order cannot be taken for granted is a radical departure from the way technocratic managers of modernity search for order and control, often falling back on the apparent security of well-defined metrics and narrow definitions to sign post the way to sustainability. According to this view, sustainable order is out there somewhere if only we could successfully fine tune modernity to locate and preserve it. Latour’s description of this attitude is irresistible:

There was a waste problem. We put an end to it. There was a pollution problem. We put an end to it. It is now only a question of controlling, monitoring and managing. That’s all there is to it. Exit the bearded and hairy ecologists: they have become obsolete (1999, 225).

From this perspective, we do not have to abandon modernity, we just have to ecologize it. One important aspect of this ‘ecological modernization’ is the idea that institutional learning will facilitate the move to a more ecological and socially sensitive mode of development. It assumes that institutions as they exist, such as corporations, are able to ‘internalize ecological concerns or at least influence new types of transnational management that can deal with relevant issues’ (Robbins, 2001, 26). Corporations will trim their sails and become more eco-efficient, sleeker moving versions of themselves. Here the identity of the corporation is seen as being unrelated but responsive to the workings of networks external to it. In other words, the corporation is a particular form of order. By contrast, ANT emphasises the processes of ‘ordering’ rather than identifying the existence of ‘order’. According to ANT, what we recognise to be a corporation is not a pre-existing immutable order. It is a punctualisation resulting from the translating processes of ordering. It therefore cannot ingest sustainability without being re-ordered to some extent. Its identity is challenged by engaging directly with a concept that explicitly attempts to go beyond simplified versions of individualism.
Actor network theorists such as John Law (1992) determinedly reject the idea that the great deserve a privileged form of analysis. The powerful, says Law, ‘are no different in kind sociologically to the wretched of the earth’ (1992, 380 emphasis in original). According to this view, corporations are denied the luxury of assuming that their size and associated power grant them special analytical favour. Size is merely the result of network extension. As Latour points out, creating a distinction between the ‘large’ and the ‘small’ may lead to a false impression that the size gives some form of immunity against atrophy (cited in Murdoch, 1995, 751).

According to ANT, power is not something a single corporation possesses absolutely. It is generated through the links that exist in networks, and these can be disrupted. Law (1992) underscores the uncertain nature of the power associated with iconic organisations we take for granted. The mighty have fallen before, he reminds us - witness the demise of the USSR. Such momentous events show that ‘when the hidden trapdoors of the social spring open we suddenly learn that the masters of the universe may also have feet of clay’ (Law, 1992, 379). If corporations cannot organise themselves to answer the challenges of the time, the legal concept of a fictional identity that exists independently of its human and other constituents may be destined for extinction, or may at least undergo a significant metamorphosis.

Actor network theorists’ insistence on the principle of symmetry might seem difficult to apply in relation to corporations. The corporation may have assumed the legal identity of a natural person, but its sociopolitical power far exceeds that usually enjoyed by other, more physically ‘natural’ individuals. While in theory at least, governments have to account for the multitude of views of their constituents, according to the law, giant corporate individuals are simply one more voice. Backed by enormous resources, their individual voices boom above others, sometimes drowning out opposition in an unequal contest. Robbins points to debates in the US in the 1990s about corporate funding of election campaigns, sometimes to the tune of millions of dollars, where:

corporations, as “persons,” were free to lobby legislatures, use the mass media, establish educational institutions such as many business schools founded by corporate leaders in the early twentieth century, found charitable institutions to convince the public of their lofty intent, and in general
construct an image that they believed would be in their best interests. All of this in the interest of “free speech” (1999, 100).

Corporations have been accused of exercising undue influence over policy in the United States. For instance, documents released under the U.S. freedom of information legislation reveal that the president’s refusal to sign the Kyoto Protocol was influenced by input from ExxonMobil and other members of the Global Climate Change Coalition 47 (Vidal, 2005, 1). Exxon was identified in a government briefing paper as ‘among the companies most actively and prominently opposed to binding approaches (like Kyoto) to cut greenhouse gas emissions’ (Vidal, 2005, 1). U.S. government officials thanked executives from ExxonMobil for ‘the company’s “active involvement” in helping to determine climate change policy, and also seeking its advice on what climate change policies the company might find acceptable’ (Vidal, 2005, 1). This has implications for democracy.

Similar pressures exist in Australia. Carmen Lawrence, the former Premier of Western Australia and Australian Labor Party president, anecdotally laments the way that big groups in Australia, such as corporations and unions, participate in the ‘“potentially very corrupting” practice of (buying) political influence with big donations’ (Pennells, 2006, 5). Lawrence asserts that in her experience ‘Donations from big players open doors’ and that this effectively means that not all voters in Australia are treated equally (Pennells, 2005, 5). She warns that Australia runs the risk of becoming

a ‘corporate democracy’ in which the number of shares you have purchased in the party of your choice determines your effective voting power (Pennells, 2005, 5)

Clearly, corporate actors are capable of undue influence in the contest over what sustainability - a political concept - should mean. Castree and MacMillan’s suggestion that a weak version of ANT is sometimes more appropriate than a strong version might be helpful here (2001, 222). They advocate a version of ANT that gains from the strengths of social constructionism, in order to avoid the pitfall of merely describing

some actors - particularly non-human ‘actants’ - ‘in their subjugation to others’ (2001, 222). The weight of corporate influence could be investigated by conceding that agents, while social, natural, and relational, vary greatly in their powers to influence others; that power, while dispersed, can be directed by some (namely, specific ‘social’ actors) more than others; and that a politics of nature attuned to the needs and rights of both human and natural entities must ultimately be orchestrated through putatively ‘social’ actors (Castree and MacMillan, 2001, 222-223).

As products of ‘intentional coercion’ designed to focus power within networks, corporations do tend to direct the discourse of sustainability more powerfully than other agents. Corporate actor-networks, faced with sociopolitical pressure to accept the imperatives of sustainability, problematize and redefine their identity in order to ‘make themselves large strategically’ within the discourse. The WBCSD as a group also makes itself large strategically, which equips it with an inbuilt ability to resist pressure to accept new parameters imposed by governments in the name of sustainability.

Critics such as Korten (1999) and Mander (2001) believe that the corporate form is pathologically deformed and is inherently incapable of responding to the moral dilemmas that face us now. Mander dismisses calls for CEOs to behave in a morally responsible way as absurd since ‘Corporations and the people within them are not subject to appeals towards moral behaviour. They are following a system of logic and rules that leads them inexorably toward dominant behaviour. Form is content’ (2001, 91). He likens the codified rules governing the corporation to a form of genetic programming (2001, 91). Here, Mander does not condemn the actants within

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48 The idea of strategically created size is drawn from Singleton and Michael’s (1993) ANT analysis of the UK Cervical Screening Program. These authors note that GPs ‘make themselves small strategically’ as they explain the practices of cervical screening and defend their own position and actions within the program (Singleton and Michael, 1993, 244). They highlight the difficulties and complexities in sample collection and laboratory analysis, while at the same time emphasizing their own professional limitations. In this way the GPs problematize and redefine their identity, building internal networks as they do so. Their ‘(construct) boundaries between knowledges and hence between actors. The upshot is a process of translation and a simplification of entities’ (244). Certain actants or actor networks carve a place for themselves in changing or controversial circumstances. Like the GPs in Singleton and Michael’s study, the corporation ‘complexifies’ and problematizes itself in order to redefine and transform itself into an important skilled actor and an obligatory point of passage in other coexisting networks’ (Singleton and Michael 1993, 258).

49 Genetic metaphors are becoming more widely used in business in a positive sense. Nielson and Pasternack (2005, 32) for instance, talk about ‘organizational DNA’, consisting of four building blocks: decision rights (how decisions are made), information (performance metrics and knowledge transfer
corporations, rather he implies the need for ‘reordering’ of the actor-networks in which corporations find definition, with new relational effects providing new organisational forms.

**Identifying networks**

Corporations can be thought of as simplified entities in an actor-world that ‘only exists in context, that is in juxtaposition with other entities to which it is linked’ (Callon, 1986a, 30). To illustrate the relational effects that produce the power associated with corporations, it is worth taking the tendencies of atomistic corporate identity to extremes and attempting to visualise the impossible idea of a corporation existing in a vacuum. Could we pluck a corporation out of its embedded space, imagine all else into oblivion, and examine our specimen in its entirety without changing its power and identity? Clearly not. To begin with, on close inspection it is not at all obvious where the inside of a corporation stops and the outside begins. Even assuming this dislocation was possible, there would be no point even referring to such an entity as a ‘corporation’ once it was removed from its original ground. There would be no one left to be interested or differentiated from. The promise of limited liability loses its appeal when there is no one to be liable to anyway. Furthermore, it would be fruitless to search for power, since power is a relational effect - power over whom, granted by whom and compared to what? The only place left to look for actor-networks and relationships of power would be within this floating corporate universe.

The heterogeneity and inherent potential for recombination of the constituent networks of the bounded corporation can be explored by imagining what might remain if the opaque conceptual walls of the corporation are transgressed and dissolved. If we cease to identify the corporation as the defining expression of the juncture between particular networks how might the remnants reconstitute and redefine themselves? What other actors and groups might also be engaged and transformed as the possibilities of recombination are explored? Once we become more aware of the often ambiguous internal and transboundary dynamics of what we recognize as ‘firms’, how might this prompt us to reinterpret corporate identity itself in order to explore the potential for adaptive change?
If the atomistic identity of the corporation is dismantled, it is not difficult to imagine both individuals and cohesive systems that would remain in its wake, albeit possibly somewhat altered and susceptible to further transformation. Social and cultural groups, artefacts of industry, the ecosystems it relied upon for ‘resources’ and ‘sinks’, the economic framework within which it operated and so on, would not simply vanish into thin air. These networks that were drawn together as a ‘corporation’ can be seen to have integrity in their own right and their connections can clearly be seen to exceed the limits of the territory previously staked out by the firm. It may be useful to imagine the corporation as a sort of conceptual centre of gravity that distorts and influences parts of the fabric of various networks, in a manner that could be represented by the two dimensional diagrammatic representations of the effect of the distortion of space/time by a gravitating mass (see Figure 5.1).

**Non-human participation in corporate actor networks**

As mentioned in Chapter One, a crucial analytical step actor network writers take is to position the social as ‘*nothing other than patterned networks of heterogenous materials*’ (Law, 1992, 381, emphasis in original). In terms of sustainability, it is important to note that actor networks such as corporations are thought to include more than merely human participants. The non-human is given the same analytical status as the human (although not necessarily the same ethical status). In this light, Drucker’s early claim that the ‘essence of the corporation is social, that is, human organization’
(1983, 31) needs scrutiny. If, as actor-network theorists maintain, the radical
suggestion that the social is fluidly constituted ‘not only of people, but also of
machines, animals, texts, money, architectures - any material that you care to mention’
is credible (Law, 1992, 381), then Drucker’s inference that the corporation can be
thought of as a human organisation is too narrow a view. A corporation that sees itself
as a primarily human network is likely to afford different weight to the importance of
treating the non-human - and the ‘less-human’ - with deference, than an organisation
that perceives a broader heterogeneity at its core. An institutionalised appreciation of
this heterogeneity would be a great boon for sustainability, as theorists such as Gladwin
et al. (1995) observe.

The crucial relationship biophysical networks have with corporations is amply
demonstrated by the threat climate change and other environmental disturbances pose
to the very existence of insurance companies. Far from being securely insulated from
the workings of something ‘out there’ called ‘nature’, this industry actor network is
threatened by damage inflicted upon human actants by non-human forces. The non-
human actants in this case - the atmosphere, greenhouse gas emissions, energy levels
and so on - might not be granted the same ethical status or voice as human actants
within society, but it is painfully clear that the stability of corporate actor networks
relies on them. If the biosphere ceases to support the business aims of insurance
companies their corporate actor network is likely to unravel. Individual companies, and
possibly the entire sector, may be threatened.

According to reinsurers Swiss Re and Munich Re, 2005 was the most expensive year
ever faced by members of the industry who offer insurance against natural or human
made disasters (Environmental Finance, 2005a, 2005b, n.p.). This was due in large part
to the hurricanes which hit the USA. It is estimated that worldwide losses of property
caused by windstorms, droughts, heatwaves and flooding could cost insurers $70
billion, with broader economic losses in the order of $200 billion (Environmental
Finance, 2005a, 2005b, n.p.). This represents a substantial increase from 2004, which
was the second most costly year on record. In that year insurers paid out $45 billion,
while economic losses totalled around $145 billion (Environmental Finance, 2005a,
n.p.).
Thomas Loster, the CEO of the Munich Re Foundation, remarked that ‘there is a powerful indication from these figures that we are moving from predictions of the likely impacts of climate change to proof that it is already fully underway’ (Environmental Finance, 2005a, n.p.). Big reinsurance companies are acutely aware of their precarious position in the face of this devastation (Jansen, n.d.). It is probably telling that it has taken such economic analysis to drive home the need to take scientific research into enhanced global warming seriously, but nonetheless reinsurers are taking a far more proactive approach to climate change than many other members of the business community. Their survival as stabilised actor networks depends on it. The insurance industry’s concern influences financial markets as well, since it invests large amounts of money in them.

Insurers are beginning to direct their funds into industry sectors that are liable to alleviate global warming rather than exacerbate it (Schmidheiny and Zorraquín, 1998, 118). They are increasingly reluctant to write policies protecting companies that face the possibility of climate change related lawsuits (Elliot, 2006, 28). ExxonMobil - responsible for about 1% of global carbon emissions - is one company that is likely to come under more pressure to clean up its behaviour. This would represent a significant challenge for a company which has a history of attempting to derail efforts to reduce global greenhouse gas emissions. The head of the greenhouse gas solutions unit at Swiss Re, Christopher Walker, thinks it likely that strong arm tactics will be necessary to discipline ExxonMobil. Swiss Re may hand the energy company an ultimatum: “Since you don’t think climate change is a problem, and you’re betting your stockholders’ assets on that, we’re sure you won’t mind if we exclude climate-related lawsuits from your D&O insurance”\(^50\) (cited in Elliot, 2006, 28).

Issues concerning depletion of resources and associated rising economic costs are also significant. Fossil fuels for example, particularly oil, are critical to corporate actor networks, since they allow globalized production systems to exist. As peak oil production approaches\(^51\) and costs rise accordingly, multinationals face possible

\(^50\) In the US, directors and officers’ (D&O) insurance indemnifies company executives against ‘lawsuits arising from their companies actions’ (Elliot, 2006, 28).

\(^51\) Global oil production will peak, and decline thereafter (Deffeyes, 2002; Nelson, 2005). Deffeyes ‘concluded that the gross ultimate reserves for the world supply will be 2.1 trillion barrels and the peak rate of production will occur when about half is produced - late (in 2005). He believes that 95% of the
reordering of their actor networks to accommodate the decreasing availability and increased cost of this energy source. It is very unlikely that alternative sources of energy will completely replace oil, which means that societies, and therefore corporations, will have to adapt in profound ways (Porritt, cited in Bendell, 2005, 43).

**Language and power**

> The way we talk colors the way we think, and the way we think shapes the way we act. We are the unconscious prisoners of our language. While most of the time this constraint matters little, at times of momentous change in culture or society, our use of old words to describe new things can hide the emerging future from our eyes.

(Charles Handy, 1997a, 26.) 52

The habituated use of language can work to preserve certain organised forms of social behaviour. Actors within corporate and civic governance structures to formulate policy enhancing sustainability are directed to a certain extent by the language used - and we must use language to lay out policy. Business, language and discourse analyst Phil Graham asserts that

> policy is almost entirely an achievement of language and exists to propagate new cultural patterns of evaluation - it is simultaneously an expression and legitimation of particular value systems designed to produce specific actions and outcomes by drawing on cultural patterns of evaluation (2005, 121).

Language use also gives important clues about the speaker’s conceptual position. These are discernable through examination of discourse. In the next section I look at some representative examples of public statements made by people in the ‘business of sustainability’ in order to discern possible underlying conceptual structures and philosophies.

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52 Handy was referring to the language of property and ownership in regard to corporations, but the point is equally valid in reference to the language associated with corporate identity and with sustainability.
The power associated with the use of language and concepts within discourse is perhaps nowhere more clearly illustrated than in the way sustainability is interpreted in a way that entrenches business’s position of power within the global political economy, rather than encouraging the emergence of a variety of strategies from other sources. The WBCSD, created with a mandate to consider ‘the business case’ for sustainability (WBCSD, 2001a, 2001b, 2002c), sensibly offers sustainability strategies as essential to business success, while considering industry’s potential contribution towards sustainability. However, the WBCSD’s analysis extends beyond this reasonable stance. While it does acknowledge that ‘there are many cases that can be made for sustainable development: moral, ethical, religious and environmental’ and that many people as individuals support such views, the WBCSD effectively positions business as the key focus for action within the entire discourse. Corporations are placed at the centre of the sustainability universe, while all others are effectively identified merely as ‘stakeholders’ in this mighty relationship. More revolutionary perspectives are thereby pushed into the background.

In the discourse of sustainability, the use of terms and concepts such as the Triple Bottom Line serves to entrench business’s position of cultural domination (Springett 2003a, 2003b). Business remains the central focus of such perspectives, with all other concerns retrofitted to comply with this aim. This conserves ‘the traditional notion of business as usual’ (Springett, 2003a, 3). The discourse of sustainability is restricted, discouraging broader ‘dialectical discursivity’ and reifying the concept according to the terms of the powerful (Springett, 2003a, 2, 3). Foucault would interpret this, says Springett, as discourse ‘creating’ sustainable development (2003a, 2). It is argued that the discourse of sustainable development, for all its contestation, has been quite narrowly controlled, whereas what is needed is a dialectical, discursive, relational approach to the still evolving process (Harvey, cited in Springett, 2003b, 72).

Springett maintains that the concept of sustainability is poorly understood by many business people (2003b, 78). She argues that the jargon of sustainability is one of the main inhibitors to ‘participation, understanding and ownership’ of the concept (2003b, 79).
Confusion in the ranks: from rhetoric to reality

The World Business Council for Sustainable Development\(^{53}\) acknowledges convolutions in the relationship between what people say and what they do. In the preface to the group’s book *Walking the Talk* (Holliday et al., 2002). WBCSD president Björn Stigson draws a careful distinction between what companies say they would like to achieve in terms of sustainability, and what has actually transpired. The title of the book is provocative, says Stigson, and was chosen with hesitancy (Holliday et al., 2002, 8). This caution is not by way of apology for discrepancies or inadequacies - the tension between ‘talk’ and ‘walk’ is seen as inevitable and productive. The organisation’s member companies are presented as being embroiled in the reflexive struggle to come to grips with the radicalising ideas of sustainability and to put them into effect. The initiating step is to ‘talk’.

The adoption of rhetoric as a precursor to or catalyst for wider structural changes is widespread. Professor Patsy Healey (1999) notes that policy change occurs in three sequential levels of increasing depth in which are, in order:

1. changing language;
2. changing thinking;
3. changing culture.

Rhee and Lee (2003) looked at two case studies of Korean companies to determine whether differences existed between rhetoric and reality, and whether they play different roles. They identify ‘gaps between the rhetoric and reality of (corporate) environmental strategy’ and note that ‘rhetoric changes faster than reality’ (2003, 187).

Importantly, they found that rhetoric played an important role in encouraging change in

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\(^{53}\) A group of ‘sustainability experts’ from the government, business, voluntary, academic and service sectors identified The World Business Council for Sustainable Development (WBCSD) in 2003 and 2004 as the ‘number one source of information on sustainable development’ (WBCSD, 2006, n.p.). This Globescan survey predicted that ‘the WBCSD will be one of the most influential international institutions in terms of advancing sustainable development in the next 5 years’ (WBCSD, 2006, n.p.).\(^{53}\)

Communications emanating from the WBCSD are therefore particularly revealing encapsulations of the dominant trends in the discourse of sustainability. Experts from 40 countries in Asia, Europe, North and South America, Africa and the Middle East were surveyed. In the 2004 survey, 40% of the respondents nominated the WBCSD as the best source of information on sustainability. Experts from the corporate (55%) and service (46%) sectors were more inclined to nominate the WBCSD than those from other sectors. The WBCSD was also rated as the ‘second most effective research organization on Sustainable Development after the International Institute for Sustainable Development (IISD)’ (WBCSD, 2006, n.p.).
the environmental learning process. They also found that ‘environmental motivation, organisational culture and leadership affect the gap between rhetoric and reality’ (2003, 187).

The journey from rhetoric to reality is a convoluted one. Careful readings of literature relating to business and sustainability reveal an intriguingly complex process of understanding, ranging even within single documents from dogged allegiance to familiar concepts to radically incisive observations about their underlying meanings. In The Business Case for Sustainability, the WBCSD endorses the idea that ‘the whole is more than the sum of its parts’, stating that ‘we can manage collectively what we cannot manage individually. This is the essence of a very old, very powerful idea called community’ (2001b, 8). This seemingly innocuous statement is quite radical. It essentially contradicts important basic tenets of neoclassical economics - it challenges the exalted status of individualism. This challenge is especially poignant since it emerges from an organisation representing many of the largest companies in the global economy, and it is inspired by a desire to improve business performance.

At the same time, however, the WBCSD exhibits strong support for the dominant economic system which has profoundly atomistic tendencies. The juxtaposition of the ideas of collective synergy and atomism confronts us with philosophical questions that are not explicitly answered in the WBCSD’s texts. Confusion remains. Sometimes these concepts are spoken of as if they form a clear dichotomy and at other times as if they are fluidly interrelated.

Confusion also exists in the artificial delineation of business from society. The WBCSD argues that businesses should concern themselves with matters of social justice and equity because it is good for business: ‘The business case for poverty reduction is straightforward. Business cannot succeed in societies that fail’ (2001b, 12). Similarly, Kermal Davis, Administrator of the United Nations Development Program, speaking at an International Finance Corporation Conference, asserted that ‘Business cannot survive if society fails. Trade negotiations will not succeed if today’s level of anxiety about our global future persists. In many ways, society is the most important business of business’ (Davis, 2005, n.p.). In both cases, the authors come precariously close to positioning business before society, as if the aim was to preserve
business rather than society and as if the real problem with societal failure is that it impacts negatively on business. This language confirms and supports the power of Big Businesses, upholding its position of privilege above society. Davis’ last sentiment - that ‘society is the most important business of business’ - creates an ontological muddle. What is business then? What should it be for? Is it separate from society? Is society ‘business’? In this phrase, Davis throws the cat amongst the philosophical pigeons.

Later in the same speech, Davis does make the point that the processes of globalization should be judged by how well they promote human development. He reminds his audience that ‘From a human perspective, global economic integration and greater openness in trade is not an end in itself: it is a means to reducing poverty and achieving concrete improvements in the lives of people’ (2005, 4). Nonetheless, the elements of Davis’ speech do not hang together seamlessly. In terms of sustainability, it is imperative that these ontological and associated semiotic dilemmas are dealt with.

Stuart Hart (1997), writing about corporate ‘Strategies for a Sustainable World’, offers seemingly conflicting statements within the same paragraph. Hart begins by asserting that ‘the roots of the problem…are political and social issues that exceed the mandate and capabilities of any corporation’ (1997, 67). However, in the next sentence he confidently proclaims that corporations ‘are the only organizations with the resources, the technology, the global reach, and, ultimately, the motivation to achieve sustainability’ (1997, 67). This leaves us in a conundrum - can corporations achieve sustainability or not? Here we see mythology clashing with practicality: Hart’s faith in the mythological powers of the market’s enlightened individualism leads him to conclude that corporations must be the most suitable organizers of sustainability, since they are the most powerful actors in that sphere. At the same time Hart recognizes thorny and insoluble practical problems that stand in the way of sustainability which, according to the mythology of the market, do not lie within the boundaries of required corporate behaviour. If this clash is to be resolved, mythology will have to be rewritten.

Gerard Kleisterlee, President and CEO of Royal Philips Electronics, also uses the term ‘sustainable’ in a conflicting and confusing manner in a speech he delivered on the
theme of ‘Unlocking the Door to Sustainable Profits’ at the 2005 Captains of Industry Conference (WBCSD, 2005b, n.p., my emphasis). Although he pays passing homage to the environmental, social and economic aspects of sustainability - albeit safely in their silos - he focuses on the economic sustainability of the company, adding other concerns where possible. In order ‘to achieve sustainable profits’, he says, ‘we need to go where the growth will be and invest in those parts of the world that represent strong business opportunities. Following the imperative for social responsibility too, this gives us a chance to bridge the divide between the privileged and the underserved’ (WBCSD, 2005b, n.p.). The implication is, of course, that the ‘privileged’ will help only those ‘underserved’ who have something to offer the global economy in return.

Lea Soupata, the CEO of UPS, a company which has had global operations for about 30 years, says that ‘the path to economic prosperity is sustainable development. Companies and communities need to come together, sharing responsibilities to create, sustainable, responsible growth’ (2004, 18). Soupata constructs a hierarchy of goals which is at variance with the integrated view of sustainability. He places economic prosperity above sustainable development - sustainability becomes a strategy for generating wealth, and communities and companies are offered as distinct social entities which must ‘come together’ in their subordination to this aim:

\[
\begin{array}{c}
\text{Community} & \rightarrow & \text{Sustainable Development} & \rightarrow & \text{Economic Prosperity} \\
\rightarrow & \text{Companies} & \\
\end{array}
\]

Delyse Springett (2003a) researches issues relating to business and sustainability with the assistance of company managers and CEOs in New Zealand. This research has revealed systemic confusion about the meaning of sustainability. Several of Springett’s ‘co-researchers’ from business conflated sustainability with other concepts such as ‘eco-efficiency’, ‘sustainable management’, ‘sustainable growth’, or most commonly, John Elkington’s (1999) ‘triple bottom line’ (TBL) system of accounting for business (Springett, 2003b, 75, 76). Springer’s research showed that ‘sensible’ responses tended to be defined as such according to their fit with old business paradigms. One member
of Springett’s research group, for example, saw the US decision not to ratify the Kyoto Protocol as an example of ‘level-headed’ decision-making (2003b, 77).54

Similarly, Paul Tebo, vice-president for safety, health and environment at Du Pont, found that his choice of terminology greatly influenced the success with which his message about sustainability was received by people within the company:

Growth was very important. I tried sustainability and the business leaders saw it as status quo. I tried sustainable development and they viewed it as environmental sustainability. I tried sustainable business [but] growth is what organizations want - either you’re growing or you’re not and not growing is not a very good thing (cited in Holliday et al., 2002, 15).

The paradigmatic use of business language is evident here. Tebo’s selective use of terminology indicates that the recipients of his message were unprepared to accept messages that conflicted markedly with conventional notions of business aims. The terms sustainability, sustainable development, sustainable business and sustainable growth each have a distinctive flavour and meaning. The only way Tebo could get themes of sustainability through the door and into the rarefied air of the corporation was to package them in language which harmonized with concepts the business people endorsed. In other words, the power of the conventional business paradigm selected for acceptable meanings of sustainability by screening the language used to present them. Terms which carried overly challenging implications were rejected. This act reverberates through the corporate discourse of sustainability, tugging the meanings associated with it in a modernist direction. In some instances, the terminology of sustainability is completely hijacked and deformed. Nielson and Pasternack (2005), specialists in business organisation, describe the 70 year old company Caterpillar as ‘sustainably resilient’ after it substantially reorganised its business structure in the 1990s. The achievement of ‘sustainable resilience’ is indicated solely by good financial performance and has very little to do with the sort of sustainability hoped for in the Brundtland Report.

54 The US position in this case clearly demonstrated its allegiance to the neo-classical economic system, where environmental and social costs are externalised and long-term considerations are underplayed. Rather than adopting a precautionary stance in regard to the Earth’s climate, the precautionary principle was effectively applied to the hegemonic economic system - US representatives were not prepared to risk economic disruption in the short term in order to avoid the risk of long-term global climatic disruption.
The value of stakeholder engagement is called into question by these observations. Simply drawing non-corporate stakeholders into the business loop does not ensure that sustainability’s full depth and breadth is catered for if it is restricted and compromised by the language used. What chance of equity and diversity of opinion exists within the discourse of sustainability if its parameters have been set before discussion even begins? How can hierarchies of power be flattened when the assumption is made that corporations are the primary referents to which other stakeholders are drawn?

**Collaboration**

Collaborative research efforts between MNCs and NGOs illuminate the inertial drag of residual language and concepts of both types of organisation and, importantly, the gestation of new perspectives. Giant MNC Unilever recently embarked on a two year project with Oxfam, allowing the NGO to examine the company’s socioeconomic impacts in Indonesia. This was groundbreaking work for Unilever and ‘it was clearly a painful experience’ (WBCSD, 2005a, n.p.). The CEO Patrick Cescau explains that it was ‘hard for our managers to find their values and behaviours subjected to such skeptical scrutiny, and to see their achievements, when operating in a complex business context, so lightly passed over’ (cited in WBCSD, 2005a, n.p.).

Oxfam examined Unilever’s work with poor farmers, which was designed to simultaneously help them out of poverty and improve the consistency of the company’s supplies for their Kecap Bango soy sauce. Unilever joined forces with an Indonesian University and Rabobank, a Dutch co-operative bank with strong credentials in sustainability55 (Dunphy et al., 2003, 67), to try to ‘improve seed quality, provide credit and guarantee purchases from the farmers at a contracted price’ (WBCSD, 2005a, 2). The strategy has met with some success and more and more farmers have felt encouraged to join because of this. Potential areas for concern have been identified by the partners involved, such as the risks associated with farmers becoming over-reliant on a single corporation. ANT theorists might see this as an example of ‘simultaneous enrolment and betrayal’ (Singleton and Michael, 1993, 258).

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55 Rabobank was founded in 1988. Its expresses the ambition to simultaneously support ‘profit, people and the planet’ and ‘regards sustainability as central to its business activities’ (Dunphy et al., 2003, 67).
Language issues were clearly a problem in the collaboration between Unilever and Oxfam, but working through them led to a greater depth in understanding between the two organisations. People from the two groups had to deal with the tendency for referent language associated with in-groups (such as *us, we, ours*) to ‘accumulate primary positive connotations’ while that associated with out-groups (such as *them, they, or theirs*) to ‘accumulate less favourable connotations’ (Perdue et al. 1990, 476).

Such referent pronouns and similar stimuli can influence perception of others subconsciously, to the point that concepts and responses can be activated even if people attempt to ignore or override the stimuli which provoke them (Perdue et al., 1990, 476). Participants from both Oxfam and Unilever had to work hard to move beyond such preconceptions in order to collaborate effectively.

Oxfam personnel referred to ‘difficult negotiations over language (which) caused frustration’ but came to the conclusion that ‘negotiating a common text forced us to understand each other in a way that would have been impossible if we had written separate documents’ (WBCSD, 2005a, n.p.). The people from Oxfam found themselves revising many of the sometimes stereotypical ideas they had previously held about MNCs. Oxfam learnt that ‘“our analysis needs to be more alert to the differences between multinational companies”’ (WBCSD, 2005a, n.p.). Unilever Indonesia, which depends on local suppliers, employees, distributors and customers takes a long-term approach, “is very different from some of the traditional targets of…campaigning, such as extractive or export-processing industries”’ (WBCSD, 2005a, n.p.).

The negotiation of concepts and language throughout the research effort meant that it took much longer than expected. Oxfam noted ‘considerable disagreement’ (WBCSD, 2005a, n.p.), although both groups expressed commitment to reducing poverty. Even after these extensive and painstaking negotiations were completed, the project’s participants within Unilever noted difficulties in explaining their new-found knowledge and ideas to other company employees who had not been directly involved in the research process. It was not easy to communicate “quickly and easily to other, more sceptical, non-team members” (WBCSD, 2005a, n.p.). Presumably such internal
communication would require a similarly laborious examination of existing preconceptions.\textsuperscript{56}

Such experiences are consistent with Pocock’s description of a person’s thinking as a social event, and act of communication and of response within a paradigm-system, and as a historical event, a moment in a process of transformation of that system and of the interacting worlds which both system and act help to constitute and are constituted by (1989, 15).

Tebo’s colleagues (Holliday et al., 2002), Davis (2005) and the collaborators from Oxfam and Unilever, for instance, were living this struggle between preservation and transformation - between sustaining what they were already familiar with and taking sustainability on board as a radical transformational force. Both corporate employees’ and NGO members’ actions were influenced by the norms of the respective cultures they operated in, while at the same time their participation in radicalizing dialogues opened the way for possible transformation.

\textit{Changing language}

Dame Anita Roddick, co-founder of The Body Shop, recognizes the power derived from the use of particular language within the business community, and the potential for transformation if it is changed. She asserts that the language of business needs revision in order to send it on a more humane and sustainable trajectory:

\begin{quote}
I’m not talking about rocket science here; I’m merely talking about changing the language of business, so that humility, love, creativity, compassion and understanding become part of the lexicon of business (2000, 122)
\end{quote}

\textsuperscript{56} Pocock believes that in the act of engaging in dialogue, revolutionaries and non-revolutionaries each accept the discipline of recognizing views beyond their usual horizon. In the case of corporations (usually thought of as non-revolutionary) meeting their critics concerned about the environment or society (usually thought of as revolutionary):

It may seem as if the revolutionary… is being enjoined or compelled to abdicate, to enter into the system he is otherwise committed to transforming. What is happening is rather that, in the first place, limits are being set to his power to define persons as “other,” as alien, as “system,” “elite,” (or) “establishment” (284). This inevitably shifts his mode of politics from the revolutionary towards the consensual (Pocock, 1989, 284).

In other words, the non-revolutionary is denied the luxury of understanding the opponent in a simplistic manner which obscures any basis for cooperation that might exist between them. While this is a positive outcome, it must also be acknowledged that people risk being co-opted or disadvantaged when dealing with corporate power.
Roddick is, of course, absolutely *not* talking about rocket science - she emphatically rejects the cold rationalism of reductionist rocket science that has typically underpinned capitalist enterprise and depicts business as ‘mere trade’. To Roddick, business should be thought of as an art, involving vision, spirit, values and ideals (Dossi, 1993, 182). When the language of curves and figures, of budgets and cash flows starts to dominate a company, she says, the spell is broken. A magic adventure turns into the dead science of money making’ (Dossi, 1993, 182).

In a similar vein, Springett (2003a) asserts that the discourse of the ‘greening’ of business is too restricted to technocratic objectives and ignores pressure for profound organisational change emanating from radical understandings of sustainability. Furthermore, says Springett, it ‘fails to expose the role of power and hegemony in the contestation for ‘ownership’ of the definition of the concept or the reasons why the discourse has remained narrowly controlled’, a shortcoming which may have facilitated ‘business’s purported appropriation of the sustainable development agenda’ (2003a, 2).

Dryzek (2000) believes that ‘the more intelligent’ actors perpetuating the competing discourses of sustainability, such as those from the WBCSD’s member corporations, may well have ‘a good tacit grasp of how their actions (affect) the prevailing content and balance of discourses’ (2000, 128, 129). If this is the case, it provides fertile ground for a steady awakening of new emphases. To this end, one small but important step would be to aim to create ‘sustaining’ rather than ‘sustainable’ corporations. In comparison to the idea of ‘sustainable corporations’, ‘sustaining corporations’, a term used by Benn and Dunphy (2004) for instance, shifts the emphasis away from corporate self-interest and towards the need to consider corporations’ contributions to wider society.

However we do it, Jonathon Porritt, chairman of the Sustainable Development Commission, extols us to somehow keep ‘shovelling the words out there’ in the promotion of sustainable development, until its subversive pressure reaches a critical mass (2001, 40). He points to the exponential growth in numbers of people who have become aware of the concept since 1987 when ‘sustainable development meant sod all to all but a few hundred people’ (2001, 40). He urges: ‘Just keep saying it, slipping it in, cross-referencing it, joining it up; osmosis by oozing, acceptability through
ubiquity’ (2001, 40). Porritt maintains that eventually sustainability can follow the same path as Hoffman (2001) notes of corporate environmentalism, which has travelled from ‘heresy to dogma’. In addition to bandying words about though, it is important to stimulate dialogue (not just discussion) within communities and networks, so that sustainability discourse can be as unencumbered as possible by the stifling power of vested interests.

Corporate leaders who want to shift towards sustaining practices face a difficult task, and one that requires persistence and bravery in the face of uncertainty. Anita Roddick’s Body Shop has become associated with public campaigns and efforts to encourage ethical trade. The Body Shop’s sustainability-related efforts have been documented in publications such as The Values Report 1997. The company’s 1995 report, for example, was hailed as ‘unusual in its efforts to integrate social and environmental reporting with considerable stakeholder engagement’ by SustainAbility and the UNEP in their benchmarking study (cited in Livesey and Kearins, 2002, 239). However, Roddick has struggled with the difficulty of carving a new path for her business:

I look back at the last decade and see how few signposts there were. There was no school of thought to show us how to do business in a different way, no case studies and certainly no instructions. Sometimes it really did feel like management by falling apart at the seams (2000 274).

**Being a consumer - why I buy from The Body Shop**

Consumer preference is often cited as a driving force for sustainability that corporations cannot ignore. Sales success is an added incentive for people in corporations to persevere in the challenging territory of sustainability. While consumer preference is only a weak expression of democratic will at best, it is still essential. For example, I am often a customer of The Body Shop, where I consciously chose to purchase goods produced in accordance with my values, or at least if there are indications that steps are being taken in the right direction.

As Tara Brabazon (cultural studies researcher and sometimes customer of The Body Shop) notes, the company is ‘an economic and social phenomenon’ (2001, 187). Nonetheless ambiguities and contradictions abound within its business philosophy. For
instance, the diversity found in local communities that the company deals with as part of its commitment to ethical trade is not matched by diversity of its business operations - ‘there is a rigid uniformity in business practice...(because) the firm needs to perform a global diversity of practices and productions within a uniform, generic package’ (Brabazon, 2001, 189). Furthermore, given the celebration of local community, it must be asked why it would be necessary to grow a business from ‘a little shop selling naturally-based skin and hair care products on a Brighton back street…to a huge global business with over 1,400 stores in 46 countries’ (Roddick, cited in Brabazon, 2001, 190), catering primarily for the global elite? Perhaps it could be argued that Roddick’s explicit attention to fair trade gives disenfranchised people a foothold in a global economy they desire to be a part of but might otherwise not benefit as greatly from.

The argument is by no means straightforward, however. In the end, the people to ask about such things are those who live in the local communities that trade with Roddick’s enterprise. Are they happy with the idea of ‘Trade not Aid’ that Brabazon (2001, 198) notes bestows them with the right to trade, rather than the right to a voice? What else do they hope for?

Suspicious of the seedier aspects of some companies’ production methods, I steadfastly refuse to pay to advertise certain corporations by wearing a logo emblazoned on my t-shirt for fashions’ sake. On the other hand, I do own and regularly wear a t-shirt from The Body Shop which says ‘thumbs up for reconciliation’ on the front and ‘The Body Shop’ in small letters on the back. When I wear it, I am aiming to endorse both the cause of reconciliation and the idea that business should act in a socially responsible manner. It is my own small attempt to subversively radicalise business without destroying it.

Perhaps I am being duped by clever marketing but my own statement exists in its own right nonetheless - hence its subversive properties. I am still demonstrating that I think business should have a social conscience. Moreover, I would look extremely cynical if I decried The Body Shop’s efforts too loudly, since I like buying their products. I am really saying “I like being able to buy things I don’t have the knowledge, time or expertise to make myself, but can we make them ethically please?” By not purchasing products from those companies whose actions I disapprove of, I am making the same statement, although perhaps less noticeably.
The Body Shop’s endorsement of such causes has other advantages for people wishing to voice their concerns about certain issues but not wishing to insult the mainstream or feel ostracized. By simultaneously supporting mainstream business and what might otherwise appear to be a radical cause, in the act of wearing my t-shirt, I legitimize my viewpoint as one that supports and seeks to improve mainstream society, rather than rejecting it completely. I remain part of ‘the group’, not antagonistic to it. There is of course a serious risk that this action will result in the more radical message being diluted and commandeered for the purposes of the powerful, but that is not inevitable. In the complex processes of society my t-shirt wearing efforts will be interpreted in many ways and only time will tell which ones endure.

It is a perilous journey, no doubt, but The Body Shop’s affirmation of values as a key ingredient of business is an exciting development. Brabazon also applauds the attempt and says that although cultural studies theorists may bark ‘humbug’… there is a desire to do business differently…The problem is that The Body Shop restates many nineteenth-century colonial relationships, with a denial of class and race-based inequalities, and an affirmation of a very narrow mode of feminism (2001, 191).

Despite the pitfalls, Roddick’s is an intriguing and inspiring effort, and ‘we must grasp how this business that affirms natural products also naturalizes profit, enterprise and personal achievement…a new relationship is being formed between the human pelt and profits’ (Brabazon, 2001, 191). After all, it is this very form of synthesis between ‘the natural’, ‘the human’ and ‘the profitable’ that is the goal of corporate sustainability programs.

57 Ultimately, Anita’s Roddick’s radical views and the essence of Big Business were never completely reconciled. Anita Roddick retired from The Body Shop in 2002 after 26 years, although she and her husband Gordon Roddick remained the company’s largest shareholders until recently, holding 18% of the stock. After her departure the business continued to thrive, with Roddick herself indicating that in many ways it was probably better off without her influence: “I’m getting more radical…if I was running The Body Shop I would have been a problem because of our stance against the Iraqi war. It would have caused mayhem in the United States” (The West Australian, 2005, 3). Roddick clearly understands that even for powerful corporations, retail success depends on not rocking the political boat too vigorously. By extension, corporate efforts to provide leadership for sustainability are unlikely to issue too great a challenge to the political orthodoxy.
Conclusion
The central themes of sustainability simultaneously issue a fundamental challenge not only to corporations’ production strategies and organisational structure, but also to the way we understand corporate identity. Ideas such as interrelatedness, diversity, adaptability and so on, prompt us to reconsider both what we do and how we imagine what we do. It is important that corporations’ embeddedness in other networks, such as the sociocultural, ecological and economic networks referred to in sustainability discourse, is explicitly recognized. The complexity lurking behind and permeating the simplified representation of a ‘corporation’ must also be dealt with explicitly. By doing this, it becomes obvious that corporate power depends on the health of other networks and that corporations, if they are to continue to be permitted to operate in the long term, must attend to those networks. Actor network theory shows that corporate power is contestable - order and power are not given, but are achieved via relational effects. Ultimately, corporations rely on sociocultural, economic and ecological ‘licenses’ to operate.

Corporate participation in sustainability strategies should be informed by a deep and sophisticated understanding of the heterogenous biophysical, political and sociocultural systems in which business managers operate. Within corporations, this attention may lead to radical departures from previous production or management strategies, and ultimately to radically altered organisational structures. Sustainability should become a way of thinking and acting that permeates the organisation, industry groups and wider society, rather than simply being one more activity the existing business takes on.

Actor network theory has been used here to provide an alternative perspective. Clearly ANT itself is not infallible. It is described as a modest sociology, rather than a definitive, predictive lens. At times, the jargon associated with it becomes a little

Left with an enormous financial legacy, Roddick now plans to cash in her shares and give her money away: “I don’t want to die rich. Money does not mean anything to me. The worst thing is greed - the accumulation of money. I don’t know why people who are extraordinarily wealthy are not more generous” (The West Australian, 2005, 3). Klein’s doubts about Roddick’s motives appear unfounded in the end, although awkward questions remain about the corporate legacy left behind. Despite her best intentions, has she ultimately created just another corporate monster?
daunting, and there are undoubtedly other methodologies that would be appropriate to use. However, ANT is useful in that it prompts us to expend cognitive energy to reconsider habitualised ways of looking at the world. This is a very important exercise when considering corporations and their engagement with sustainability.

Actor network theory helps us to see the corporation as an identity drawn together for a particular purpose. In many senses the corporation is an abstraction. It is a system whose arbitrarily defined boundaries do not sever the multiple networked connections that infuse it. The corporation is a selectively identified series of interactions whose synergy provides a locus of power. Corporate identity is more helpfully conceived of as viscous and changeable - able to be re-imagined. The point is not to identify accurate categories, but to acknowledge that categories are constructed, as opposed to ‘real’ and discoverable in absolute terms. Corporations that fail to understand this run the risk of simultaneously damaging the cohesiveness and health of networks that interact with them, in the process eroding their own adaptability and competitiveness even as conventionally understood.

Ultimately, both sustainability and corporations are political products. Corporations have mutated since their inception and will continue to do so. The efficacy of corporate engagement in sustainability strategies and the degree to which sustainability influences corporate identity, and vice versa, will depend substantially on political processes. During such processes, the quality of dialogue, in particular its immunity from language which propagates existing power relations, will have substantial bearing on the outcome.

Sustainability strategies that promote eco-efficiency are a step in the right direction, as are innovative efforts to come up with systems based on Industrial Ecology or sustainable chain management. However, in many instances such strategies appear to be employed in advance of a corresponding change in the categories we use to describe what we are doing, or an appreciation of the challenge our actions pose to the philosophical views that underpin those categories. Something subversive is happening. In many respects, sustainability can be thought of as a subversive influence
- paving the way for the recognition that old paradigms no longer adequately describe even what is happening now.
Chapter Six
Network Approaches in Business

Introduction
In Chapter Five I used actor network theory to interpret corporations as heterogeneous networks within heterogeneous networks. Some members of the business community are also interested in network approaches, for a variety of reasons. In fact, theories based on identification and analyses of networks are popular across a variety of disciplines. In this chapter, I briefly explore the causes and extent of corporate transformations in the twenty-first century. I outline the trend towards less hierarchical organisations with more permeable boundaries, created to cope with uncertainty and complexity by nurturing innovation, learning and knowledge. I note the resultant growing emphasis on network theory. I explain how the focus on networks in business parallels and sometimes converges with that of sustainability. This common interest in networks offers a conceptual link that can be strengthened and augmented to promote sustainability.

Transformations of corporate structure
Contemporary organisational and management theorists such as Handy (1997a), DiMaggio (2001), Furnham (2005), Kelly (1997), or Senge (1997, 2002) share with sustainability theorists an appreciation of the way networks can deal with complexity, interdependence, uncertainty or heterogeneity. Interest in concepts such as the network form is driven in part by the need to respond to a variety of transformational effects which are currently impacting on corporations (DiMaggio, 2001; Drucker, 1997; Senge, 1997, 123; Laubaucher, Malone & Working Group, 1997, 3). These include:

- increasing pressure for corporate social responsibility and ethical investment;
- unprecedented capital mobility - promoting service industries and global competition;
- increased workforce mobility;
- more women joining the formal economy;
- technological change and related globalization of business;
- economic shocks;
- concerns about the natural environment;
• global political changes: e.g. collapse of communism and the end of apartheid;
• demographic changes e.g. shift of population ‘centre of gravity’ away from Europe and America.

There is an obvious overlap here - despite the fact that this list is a compilation of ideas of eminent theorists from the field of business studies, each item relates to sustainability:

• CSR and ethical investment can promote the cause of sustainability by ensuring that economic forces enhance rather than degrade social and environmental systems.
• Workforce mobility increases workers’ influence in business policy as companies vie to attract and keep the best employees. This opens the door for inclusion of broader ethical concerns relevant to sustainability which may be important to employees. A mobile workforce may also generate a range of novel social circumstances relevant to sustainability, with economic and environmental repercussions.
• Gender roles in the workforce are important in terms of sustainability’s equity concerns.
• Capital mobility impacts on sustainability, since it results in pressures that directly effect socioeconomic and political processes, often at the expense of local societies and environments.
• Technological change is clearly an unavoidable target of sustainability analyses, both in the sense of evaluating the social, economic and environmental effects of existing technology, and the need to develop more sustaining technology in the future.
• Global political changes are influential since sustainability is a political concept that relies on global (and local) political processes.
• Demographic changes are critical, since they are associated with a raft of sociopolitical and economic repercussions, and have impacts in relation to the use of natural resources.
In other words, sustainability issues have a direct and transformative impact on business, although this link is not often made in business studies at the moment.

Business analysts argue that these factors have lead to an increase in the diversity of styles of business organisation. This turn of events may offer hope to critics such as Korten (1999) and Mander (2001) who feel that conventional models of the corporation are intrinsically unsuitable conduits for sustainability. Peter Drucker argues that the transformational forces currently being exerted on companies are leading to a change in the very meaning of the word *organization*. For more than a century...we have been searching for the one “right” organization for our companies. There can no longer be any such thing. There will only be “organisations” - as different from one another as a petroleum refinery, a cathedral, and a suburban bungalow are from one another, even though all three are “buildings”. Every organization in the developed countries (and not only businesses) will have to be designed for a specific task, time and place (or culture) (Drucker, 1997, 22).

Ultimately, it is impossible to keep sustainability out of such a tangle. If businesses must reorganise themselves to adapt to different times, places and cultures in order to accommodate difference and cope with uncertainty, chances are that some of the voices they encounter will insist on alternative conceptions of the purpose of business and push for companies to be sustaining. In a knowledge economy, corporations cannot afford to be closed to alternative knowledge forms and values if they hope to attract the best employees and be innovative and competitive.

Professor of Sociology Paul DiMaggio maintains that the situation that now exists as a consequence of these transformational effects is so dynamic and complex that it would be virtually impossible to pin the corporation of the twenty-first century down to a single model, and that the best we can hope to do is offer ‘a stock-taking and an exercise in historical imagination’ (2001, 6). Furthermore, it is not just business form and function which are open to transformation, but also their ‘rationale for existence’ (Furnham, 2005, 654). Business may well have no option but to include sustainability as part of their raison d’être. Such a metamorphosis seems within the realms of possibility since, as DiMaggio notes, contemporary corporations are altering so
dramatically that we ‘need a new lexicon’ to describe them’ (DiMaggio, 2001, 3).
DiMaggio observes that

not since the industrial revolution have so many dramatic transformations coincided with such force. No wonder, then, that the categories people have used for the past century to think about the corporation appear inadequate, and no wonder that so many are trying so hard to find new ones (2001, 4).

DiMaggio adds that the plethora of documented innovations in corporate identity and structure is not clarified by empirical evidence (2001, 5). It is not yet clear which trends are likely to be short-lived or unique aberrations and which are precursors of major economic and organisational shifts (DiMaggio, 2001, 5). There is no escaping the need to promote sustainability, however, given the litany of ecological, economic and social woes we currently face. Something has to be done - inaction is not an acceptable option.


These terms display a clear trend away from the understanding of the firm as an isolated entity run by exogenous control systems. Various characteristics typifying the new generation of corporations are discussed, such as:

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58 Shifts away from the first wave form of corporate identity were already evident in the late twentieth century. Mutating forms of corporate organization and management in the 1970’s and 1980’s challenged conventional notions of where the boundaries of the firm lie. Corporations did not always act according to conventional notions of competition that underpinned reductionist notions of the firm (Rafferty, 1996, 5). Changes in relationships underpinning production, marketing and supply challenged the distinction between control and competition to the point that the atomistic conception of the firm no longer adequately described what was going on (Rafferty, 1996, 5). Rafferty concludes that ‘These developments have directed attention not just to the nature of the institution of the corporation, but to the complex networks of interdependence between corporations; that is, to capital as a social process’ (1996, 5). These observations parallel those relating to the subversive effect the discourse of sustainability can have on corporations as described in Chapter Five, although sustainability suggests a broader understanding of capital as reliant on ecological process, not just social ones.
• the permeability of organisational boundaries;
• flattening of hierarchical systems and adoption of management strategies that enhance cooperation;
• the need to embrace uncertainty, complexity and diversity; and
• the importance of learning, creativity and knowledge (DiMaggio, 2001, 3).

For instance, Zuboff and Maxim maintain that the forces of distributed capitalism are currently exerting pressure on management structures within corporations, with the effect of shifting ownership and control from upper management to employees and communities (2002, cited in Benn et al., 2006, 158).

The items on this list resonate with themes of sustainability. Moves away from hierarchies and towards more endogenous systems of control are promising, since endogenous control is more compatible with the terms of sustainability than exogenous control (McMahon, 2002). Corporations may have to accept the influence of external sources of endogenous control or essentially alter their identity by diluting or restraining their own exogenous tendencies if they are to contribute optimally to sustainability.

Some analysts suggest that while professionally-managed corporations will remain the dominant mode of conducting business in the foreseeable future, they ‘may well be small rather than big…The optimum size may well be the one that gives the greatest adaptability rather than the greatest mass’ (Drucker, 1983, 10, 11). Others argue that many large companies will persist and that capitalist networks are enhanced by the role big business plays in providing well-developed knowledge bases, particularly in high tech industries (de Man, 2004, 16, 17). Big firms are also more able to raise large amounts of capital to fund projects than smaller players (de Man, 2004, 17). New orientations of fundamentally capitalist systems in which industry operates are also possible. This has been demonstrated in post-socialist countries. The privatization of industry there has lead to new types of capitalist systems which are ‘far more complex and ambiguous’ than had been anticipated, accommodating the emergence of heterarchical firms (DiMaggio, 2001, 4; Furnham, 2005, 655).
Table 6.1: Descriptions of emergent types of corporate architecture

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
<th>Morphology</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boundaryless</td>
<td>Focus on the permeability of company boundaries.</td>
<td>Vertical, horizontal, external and geographic boundaries made more permeable.</td>
<td>Retail Financial Services (RFS), a subsidiary of GE.</td>
</tr>
<tr>
<td>Centerless</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Clickable</td>
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<tr>
<td>Collaborative</td>
<td>Preference for cooperative management strategies.</td>
<td>Flat rather than hierarchical.</td>
<td>Xerox, Barclay’s Bank</td>
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<tr>
<td>Horizontal</td>
<td></td>
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<tr>
<td>Self-Managing</td>
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<tr>
<td>Network</td>
<td>Simultaneously enjoys the advantages of large size and the flexibility of smallness; ‘flatter’ with minimal direction by formal rules</td>
<td>Interconnected: (1) relatively independent peripheral units clustered around centre with key decision making responsibilities; (2) large central firm outsourcing to network of smaller ones; (3) regional industrial networks.</td>
<td>(1) TCG (2) Joint ventures or partnerships (3) Silicon Valley</td>
</tr>
<tr>
<td>Resilient</td>
<td>Employees aware of firm’s objectives and how to reach them within their groups; they are motivated and have authority to act; Horizontal thinking across silos encouraged</td>
<td>Decentralized decision rights; Accountable business units rather than hierarchy</td>
<td>Caterpillar</td>
</tr>
<tr>
<td>Knowledge-creating</td>
<td>Place importance on creativity, learning and knowledge. Specifically aim to foster a learning business environment, in contrast to conventional firms.</td>
<td>‘Chaordic’: decentralized, networked, virtual. Can be self-organising with many forms.</td>
<td>Visa International; General Electric</td>
</tr>
<tr>
<td>Learning</td>
<td></td>
<td></td>
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<tr>
<td>Minding</td>
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<tr>
<td>Heterarchical</td>
<td>Neither market nor hierarchy. Involve relations of interdependence.</td>
<td>Minimal hierarchy. Heterogeneous organisations. Innovation occurs in units of the organisation. Units are autonomous.</td>
<td>Firms in post-socialist countries.</td>
</tr>
<tr>
<td>Virtual</td>
<td>Created to enable flexibility and speed. Can have minimal environmental impact (although there may be chain management issues).</td>
<td>Can have global scope with relatively few employees; may be temporarily created for a specific purpose or may be more permanent; flexible structures that enable speed.</td>
<td>Amazon.com</td>
</tr>
</tbody>
</table>

(Sources: DiMaggio, 2001; Senge, 1997; Nielson and Pasterneck, 2005; Griffiths, 2004; Ashkenas et al., 1995; Ostroff, 1999).
While much of this organisational change is driven by concern for economic performance, some businesses are actively attempting to adopt new architectures in order to promote sustainability. Senge identifies The Natural Step as ‘one of the most important developments worldwide in the environmental movement’ and a good example of possible alternatives to conventional corporate structure (1997, 132)\(^59\). This Swedish not-for-profit organisation works because it is guided by a vision of becoming part of a sustainable industrial society. Everyone within the organisation understands and endorses this aim. This is supported by a well defined set of operating principles consisting of four system conditions that conform to essential natural laws (Senge, 1997, 132). Its impacts have been remarkable - it has encouraged the public, government and industry to adopt more sustainable behaviour in a way that is unmatched in most other countries. Hierarchy is still present in such businesses, argues Senge, but it exists as a hierarchy of ideas rather than of people. Hierarchical leadership in these cases revolves around the ‘articulation of guiding ideas’ (Senge, 1997, 141). The ideas are infused through the operation, so that the people who created the ideas do not have to make decisions to lead the company on an ongoing basis. The exogenous controls normally experienced in corporations are tempered so that endogenous energies are less suppressed and the particular vigour of the organisation is enhanced.

### The network theme in business

As Kelly notes, networks are ‘the natural organizing metaphor for complexity’ (1997, 154). Since companies must grapple with ways to cope with complexity and uncertainty, the network conception of the firm is gaining popularity (Fliigstein, cited in DiMaggio, 2001, 240; Birchall and Tovstiga, 2005; Kelly, 1997; Castells, 1996; Senge; 1997, 2002; Powell, 2001). At the same time the practice of networking between firms in the larger economy\(^60\) is also becoming more prevalent (Iansiti and Levien, 2004).

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\(^{59}\) I review The Natural Step in Chapter Four.

\(^{60}\) The rise of network conceptions of the firm is related to the advent of new technologies. As McMahon argues, hierarchies depend on appropriate systems technology and the technologies produced by hierarchically formed corporations - particularly in areas such as information technology - can actually contribute to the reformation of the firm into a flatter, less hierarchical configuration and to the creation of more networked systems of production within the larger economy (2002, 10). Just as the church lost control over writing once printing presses became widely available, the current spread of ‘distributed computer networks…is challenging the basic logic of centralized corporate control. Networks…represent a challenge to hierarchies because they redistribute information horizontally’ (McMahon, 2002, 10).
Castells, for one, emphatically argues that ‘networks are the fundamental stuff of which new organizations are and will be made’ (1996, 168; emphasis in original). Kelly, predicts that networks are the way of the future for business:

The main point to understand is that we are moving away from monolithic, vertical, homogenized institutions, to extremely decentralized, extremely distributed, heterogenous and flattened organizations. Networks, in other words (1997, 255).

Business consultant Verna Allee echoes ANT sentiments by maintaining that the network is the basic pattern of ‘all living systems including business organizations’ (2003, 51). She describes networks simply as ‘sets of nonlinear, nonhierarchical relationships that nest with other networks’ (2003, 51). Birchall and Tovstiga’s call to acknowledge that companies must ‘rethink their notion of the firm as a self-sufficient enterprise’ (2005, 3) also parallels ANT analysis to some extent, although the networks they describe tend to remain within the confines of human culture - a common tendency in business network analysis. Birchall and Tovstiga emphasize the need for networks centered around knowledge and learning: ‘firms are being recognised for what they really are: nodes in a larger network of emerging and evolving ideas and opportunities’ for innovation (2005, 3, 4). These authors note that ‘the metaphor “networking” has come to epitomize our way of thinking and the way in which our economy is being organized’ (2005, 7). De Man defines business networks specifically as:

selected sets of multiple organizations, which interact directly or indirectly, based on one or more alliance agreements between them. The aim of networks is to gain a competitive advantage for the individual organizations involved and occasionally for the network as a whole as well (de Man, 2004, 4)

The technological innovations McMahon (2002) refers to enabled managers to move away from the emphasis on vertical integration within firms practised for all but the latter part of the twentieth century by giving them the ability to coordinate activities between companies (Iansiti and Levien, 2004, 5). In certain regards, of course, business processes have always been interlinked - many companies of various sizes are involved in the act of providing a single commodity to a person who wants it. Every product must be designed, resources provided, components produced, transported and finally assembled, marketing undertaken and the product distributed to retailers. Each of these steps may be undertaken by different organizations. However, most managers were not able to explicitly attend to these interconnections before the development of suitable technologies in the late 1900s (Iansiti and Levien, 2004, 5).
Sustainability networks, of course, have slightly expanded ambitions. Whether or not they include business actor networks, sustainability networks are not primarily designed to provide competitive advantage above all else. That is not to say, however, that there is no room for competitive ambition in networks which aim for sustainability.

Competitive advantage can be energetically pursued, provided it does not undermine the sociocultural and biophysical contexts which embrace it, or better still, that it actively enhances them.

Kelly (1997) believes that the boundaries of the corporation will become increasingly difficult to define. He believes that the corporation will become understood as a network, perhaps at different levels simultaneously. It could be envisaged as a web of nodes that may destabilize and reform as required, involving different people at different times, as production teams in Hollywood do. It could also be understood in broader terms, as an extended network that includes the actions of a range of people not conventionally thought to be part of the company, such as suppliers and customers.

Kelly cites the way customers update their own subscriptions to magazines via the internet, or track the progress of parcels being delivered by courier companies as examples of the way customers effectively do work that contributes to the running of business operations, thus blurring the boundaries of the firm (1997, 256). Online banking is another example of network extension. As argued in Chapter Five using ANT, the terms of reference could be expanded further to include the more-than-human world. Kelly suggests that in order to manage these networks, more emphasis on endogenous, bottom-up control is needed. He refers to this as ‘emergent’ control and anticipates that leadership will become a matter of providing vision and inspiration, rather than strict control (1997, 257). Such visions can be easily expanded to argue that businesses must become more sustaining, and to support the notion that business must work cooperatively in a strongly democratic context in order to achieve this.

Transnational firms such as Asea Brown Boveri (ABB) and General Electric (GE) demonstrate the practical embodiment of contemporary networked corporations. The energy and engineering company ABB is ‘organized as a “constellation”’ which in 2001 had ‘more than 65 business areas, 1,100 companies, and 4,500 profit centers,

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61 I discuss the role of strong democracy as a way of promoting sustainability in Chapter Eight.
coordinated by a corporate staff in Zurich of less than 200’ (Powell, 2001, 47). GE has been ‘radically decentralized’ in an effort to stimulate and support organisational learning. The company is dedicated to the transfer of knowledge (Powell, 2001, 47). Companies such as ABB and GE ‘are remaking both the geography of production and the administration of large-scale organization’ (Powell, 2001, 47). The borders between industries are also likely to become less impervious so that we might be able to see only a ‘kind of indefinite web of related organizations’ (Kelly, 1997, 263). It is argued that corporate success in this networked economic field hinges on ‘the nature and depth of their ties to organizations in diverse fields’ (Powell, 2001, 61).

ABB and GE have both demonstrated fairly strong commitment to principles of sustainability. ABB asserts that ‘to us…sustainability is not an add-on - it is an essential part of our business’ (ABB, 2004, 1). The company has produced annual sustainability reports, and measures its performance according to triple bottom line criteria following Global Reporting Initiative (GRI) guidelines (ABB, 2004). General Electric recently announced its Ecomagination strategy which is designed to develop environmental technologies to ‘deal with some of society’s toughest environmental and sustainability challenges’ (GE, 2005, 2), which it tends to conflate. The company asserts that it will endeavour to ‘develop tomorrow’s (technological) solutions’ (GE, 2005, 1). World Resources Institute (WRI) president Jonathon Lash endorses GE’s Ecomagination initiative, describing it as ‘a hugely important step by one of the world’s most important companies. It is particularly encouraging that GE is focusing its research on cleaner technologies and making a serious, meaningful and accountable commitment to achieve stabilization of greenhouse gases that contribute to climate change’ (GE, 2005, 1). These companies’ efforts may be enhanced if they approach sustainability by applying aspects of the logic and competencies which permit their network architecture to function.

Networks of knowledge in business
Peter Senge argues that because of the challenges we face such as environmental and social disruption, there is a need for corporations to become networked ‘learning organizations’. Senge defines learning organizations as those which ‘develop specific learning capabilities not present in traditional organizations’ (1997, 130), so that productivity increases and people enjoy a working environment that more closely...
mirrors their normal life values (1997, 144). Various structures encourage this attribute, such as those that rely on self-organisation and therefore have varying specific forms. As an example, Senge points to the structure of Visa International, an enormous business that despite having a total market capitalization of hundreds of billions of dollars, has only a few thousand employees working in a ‘completely non-traditional corporate form’ (1997, 131). He explains that

There is no formal hierarchical authority that governs Visa at all. It is completely a network organization. But it is an organization. It was founded 30 years ago with an original philosophy and design. It is governed by a set of ideas, a very clear purpose statement and a set of carefully worked-out operating principles. In that sense, it is more like a democratic society than a traditional corporation. Its success speaks for itself (1997, 131, 132).

Dee Hock, the founder of Visa, believes in the advantages of ‘radical decentralization, network organizations (and) virtual organizations’ - which he terms ‘chaordic organizations - a contraction of chaos and order’ (Senge, 1997, 132).

However concern has been expressed that the fascination with change within management literature overlooks the need for companies to simultaneously nurture more stable and enduring forms of knowledge (Srikantia and Bilimoria, 1997, 396). Collins and Porras found that companies identified as visionary in comparison to others gained this advantage partly because they preserve ‘core values that “form a rock-solid foundation and do not drift with the trends and fashions of the day” ’ (1994, cited in Srikantia and Bilimoria, 1997, 396). These companies avoid the ‘liability of newness’ (Hannan and Freeman, cited in Srikantia and Bilimoria, 1997, 396) by balancing ‘change with continuity so that time-honored values and practices are not summarily swept aside but sustained (Salipante, cited in Srikantia and Bilimoria, 1997, 396). As I discuss in Chapter Seven, similar concerns exist in relation to sustainability. Since network approaches can be specifically designed to access different knowledge and value systems within business, they are capable of providing stability and/or innovation. This can be achieved by accessing the relevant knowledge base and integrating it into business function.
**Business ‘ecosystems’**

Occasionally, networks relevant to business and to sustainability converge in a metaphorical sense. Iansiti and Levien (2004) draw on understandings of keystone species and other aspects of biological ecosystems to inform their interpretation of ‘business ecosystems’. They point to the influence particular ‘keystone’ companies have on other firms linked to them through production and distribution networks. They explain that corporations such as Microsoft and Wal-Mart have become adept at influencing and reordering the enormous industrial network around them, resulting in substantial advantage within the economy (Iansiti and Levien, 2004, 2). These corporations position themselves as keystones amongst the other businesses in this order, setting the pace in this regard so successfully that, as Iansiti and Levien conclude, ‘strategy is becoming, to an increasing extent, the art of managing assets that one does not own’ (2004, 1). Such companies consciously enroll other business actors and translate their interests to coincide with the direction of their own business ambitions. Business ecosystems can also be generated without the primary influence of a keystone company. For example, Linux (see Box 6.1), the producer of an open source computer operating software, has been identified as ‘the first natural business ecosystem’ (Moore, cited in Hamm, 2005, 32).

Business ‘ecosystems’ can operate on a regional basis. Silicon Valley’s renowned success is thought to have been based on networking. Companies in the region worked through porous boundaries within a ‘common infrastructure of education, finance and ideas which provided its own continuity, or “controlled chaos” ’ (Sampson, 1995, 198). This networked culture helps to ‘promote a decentralized process of collective learning’ which facilitates flexibility and a process of continuous innovation (Saxenian, cited in Sampson, 1995, 198). In Italy, the clothing industry has been essentially networked for hundreds of years, enabling it to adapt to changing circumstances (Iansiti and Levien, 2004, 5). The Italian apparel industry continues to flourish today, and is influenced by the input of keystone firms such as Benetton (Iansiti and Levien, 2004, 5). In Baden-Wurttemburg in Germany, companies of various sizes operate in a networked regional economy producing auto parts, textile machinery and machine tools (Fountain, 1998, 103).
In using biological ecosystems as an analogy for understanding business networks, Iansiti and Levien (2004, 8) argue that

Like business networks, biological ecosystems are characterized by a large number of loosely interconnected participants who depend on each other for their mutual effectiveness and survival. And like business network participants, biological species in ecosystems share their fate with each other. If the ecosystem is healthy, individual species thrive. If the ecosystem is unhealthy, individual species suffer deeply (2004, 9).

In terms of sustainability, Iansiti and Levien’s maintenance of the common ontological distinction between social and natural networks is an issue. They go so far as to stress that they are only using biological ecosystems as sources of ‘vivid and useful terminology as well as provide specific and powerful insights into the different roles played by firms’ (2004, 9). The pair make it very clear that they do not consider that ‘industries are ecosystems or even that it makes sense to organize them as if they were’ (2004, 9). Although they talk about ‘shared fate in nature’ which results from the interconnectedness of biological systems, they neatly extract humans and human enterprise from that interconnectedness as they do so. In fact they position people specifically as ‘external manipulators of natural systems’ (2004, 20).

Despite their interest in complex networks, Iansiti and Levien (2004) adhere to a form of habitual ontological categorization which actually glosses over certain types of complexity and interrelationships. They are prepared to venture into the logic of ecosystems, but only insofar as it leaves business’s position of isolation from the more-than-human world untouched. From a sustainability perspective, however, if the social (economic) and the environmental are separated into distinct conceptual categories it is done so forcibly and arbitrarily. Business and biophysical ecosystems are in fact linked, a fact which is not lost on all companies. As described in Chapter Four, corporations such as Munich Re and Swiss Re are becoming acutely aware of the impacts of non-economic actants within their networks of action (Environmental Finance, 2005a, 2005b, n.p.).

**Women’s impact on business networks**

Hierarchies are also challenged by feminist critiques and by women’s impact in the business world. In Chapter Three I noted the need to redress the gender imbalance in
the business world for its own sake and, given the demonstrated importance of empowering women to improve community development, for the sake of sustainability. Professor of Sociology Scott Lash (2003) is one who sees this trend increasing in the era of ‘reflexive modernity’ - he notes a transfer of activities from large firms to small ones in many cases. Women tend to take leading positions in small business rather than giant firms, although some women have made impressive headway in the corporate sector. Today’s start ups, says Lash, particularly of ‘patent-generating technology firms and copyright-generating new media firms…have very private, personal and intense characteristics. They are not, so to speak, as paternalistic as they were in the bygone days, not least because women now run a number of them’ (2003, 53). This turn of events, says Lash, is related to ‘the fact that so many of the employees are freelancers and subcontractors’ operating within an increasingly networked economy (2003, 53). Anita Roddick notes that the myth that women who wish to succeed in business must ‘adopt male behaviour patterns’ is challenged by evidence in the USA of:

a different profile emerging, of women managers who are effective social initiators, who anticipate problems and present possible solutions. American women build alliances, bring people together and most importantly…they develop networks. Their biggest strength is communication (2000, 122).

It is possible that the equity concerns of sustainability will be one force amongst many to lead us away from the masculinist terrain of hierarchy within MNCs to more personally responsive companies with an increased awareness of the need to deal responsibly with all actants linked in business networks.

Corporations as community networks

Some business management specialists emphasize the community aspect of networks within firms. Senge (2002) and Ackoff’s (2002) interpretation of corporations as human communities leads them to suggest that the ‘holy trinity of “modern management”…planning, organizing, and controlling’ should be superseded by systems founded on the realization that ‘people do not want to be “planned for”; they want to

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62 Reflexive modernity is the second of two ‘modernities’. The first is ‘simple modernity’. Reflexive modernity ‘involves a logic of flows. Beck’s notions of unintended consequences, of ever-incomplete knowledge, of not irrationalism but a rationality that is forever indeterminate is comfortable in the logic of flows’ (Lash, 2003, 49).
participate in articulating their aims and strategies’ (Senge, 2002, 12). In other words, people should be able to work in situations which are endogenously controlled to a significant degree. Senge therefore recommends a move away from exogenously controlled hierarchies towards corporate architectures that facilitate this human-orientated form of management, a view which harmonizes to some extent with the strong democratic tendencies of sustainability.

In a similar vein, Susan Annunzio, a change management consultant with a background in behavioural science, focuses on the sociocultural aspects of business and trade, and is not afraid to invoke moral issues as legitimate concerns of business (cited in Trinca, 2003, 64). She postulates that this is the best way to improve any business’s performance. Annunzio claims that after decades of working in the area, she “personally (has) not met the company where employees did not know how to fix it” (cited in Trinca, 2003, 64). Taking this further, Annunzio asks: “What if it were this simple?...What if the winners in the global economy were the companies who learnt how to treat their employees, their customers and the world with most respect? What if it all came down to human interaction?” (cited in Trinca, 2003, 64). Annunzio maintains that respect for others ‘will become a business imperative globally’ (cited in Trinca, 2003, 64). She could be arguing that sustainability will become a business imperative.

Social concerns figure within both business and sustainability discourses. Endorsement of community priorities can stretch the boundaries of the firm in order to accommodate more aspects of peoples’ lives than those that define them as ‘workers’. Some companies have taken steps to integrate understanding of social concerns into their management strategies. Xerox tried an innovative approach to addressing the tensions that arise from division between ‘work’ and ‘family’ life which is characteristic of modern industrial societies. Rather than beginning by designing work processes and then attempting to slot family commitments in after the fact, a strategy was devised whereby both work and family commitments were considered in the design stages. The outcome was that people were able to spend more time with their families, complete the required work more quickly and at a higher standard than comparable projects within the same organisation (The MIT 21st Century Manifesto Working Group, 1999, 7).
Box 6.1: Linux

Linux is a computer operating system. This open-source software was created as a result of the programming efforts of thousands of volunteers, lead by Linus Torvald from Finland. Today, professionals from IBM, Hewlett-Packard and Intel also contribute their marketing, technological and programming know-how to the cause. Linux continues to gain popularity - for example, it is used in Motorola phones, eBay servers, Mitsubishi robots and NASA computers on which space shuttle simulations are run. As Linux’s use expands, it challenges Microsoft’s previously overwhelming dominance and demonstrates a completely new model for producing software.

Linux does not operate in the same way as conventional corporations. It is not a single company, it is a cooperative venture ‘in which employees at about two dozen companies, along with thousands of individuals, work together to improve Linux software’ (Hamm, 2005, 32). It has no headquarters, no CEO, no annual report. Linux’s business culture has been described as ‘co-operative, meritocratic and Darwinian at the same time. Any company or person is free to participate in Linux Inc. and those with the most to offer win recognition and prominent roles’ (Hamm, 2005, 32). Linux is a ‘model for collaborating in a new way on software development that could have reverberations throughout the business world’ (Hamm, 2005, 32).

Linux essentially demonstrates a new hybrid business paradigm, involving spontaneous, emergent collective action through appropriately governed networks (Elsner, 2004, 1029). Elsner maintains that this sort of ‘collective learning and emergent institutional coordination is capable of solving the complexity and co-ordination problems of the "new" economy by increasing certainty’ (Elsner, 2005, 1029).

(Source: Hamm, 2005; Elsner, 2004).

Networks and business: problems

Network approaches are not without their problems - they are not a ‘quick fix’ nor are they always appropriate (de Man, 2004, 170). To begin with, there are immediate practical problems associated with trying to run networked production systems, particularly global ones. MNCs spanning particularly diverse social networks face difficulties in reconciling cross-cultural differences in work-related values. This is true in relation to conventional business activities as well as when considering the business contribution to sustainability. Within businesses run in different cultures, attitudes vary in relation to such issues as:
• the acceptance of unequal distribution of power versus the desire for egalitarianism;
• the degree of planning undertaken in order to deal with uncertainty;
• what attributes indicate masculinity/femininity; and
• whether identity is primarily determined by individual’s choices or by the collective (Hofstede [1980] cited in Vaughan and Hogg, 2002, 4).

While networking between companies offers improvements in productivity and efficiency, ‘Networks are demanding, constantly forcing companies to deliver at the top of their ability. Managing networks is in itself a challenging task’ (de Man, 2004, 171). When companies embrace networking as a strategy, it impacts upon firms as well as individuals within those firms. Employees, for instance, must develop new competencies to enable them to understand and cope with the networks they must deal with (de Man, 2004, 170). De Man notes that knowledge does not flow effortlessly through networks - knowledge flow must be facilitated in some way - and that networks cannot be expected to reduce managers’ workload (2004, 171). Ultimately, he maintains that networks are not likely to replace companies, since ‘trust is not the glue of the network economy’ (2004, 170). In fact, he suggests, networks are productive because of their instability, and may have the effect of increasing the level and quality of competition in industries (2004, 171).

The network conception in business - a bridge to dialogue about sustainability
Network approaches are very useful when facing sustainability’s heterogeneous challenges. The current fascination with network conceptions of business activities offers a convenient conceptual bridge for sustainability practitioners to cross. This opening is important given the significance of the relationship of language to thought. Companies may adopt network structures without necessarily promoting sustainability, of course. Visa’s adoption of a more democratic organisational form has not necessarily brought the company any closer to sustainability than many other businesses, for example - critics of the obsession with continual economic growth might not be impressed with the use of growth as an indicator of success. However, such changes do demonstrate that different types of organisation are possible. They suggest that new perspectives about what contributes to business success and what role
business should play in society are possible. This opens the way for inclusion of sustainability’s broader concerns.

When interest in networks’ ability to enhance sustainability and business performance converges, network approaches can be created which treat sustainability as an intrinsic part of business activities, while enhancing business’s potential to sustain that which surrounds it. The process skills gained as a result of operating within business networks equip business people to engage with networks for sustainability. The benefits of accessing networks in order to enhance learning (Senge, 1997), recognise and deal with interdependence (Birchall and Tovstiga, 2005), cope with complexity and facilitate endogenous control (Kelly, 1997) are just as relevant to sustainability as to corporations. The key to building or accessing networks for sustainability which engage corporations effectively is to work with the appropriate actants in an appropriate manner.

**Conclusion**

Despite their difficulties networked modes of business, backed by theory, seem to be here to stay. The business trend towards the network form offers leverage for dialogue about sustainability - there is only a short conceptual distance from twenty first century business concerns about interconnections to the realization that many of the same concerns are pertinent to sustainability. In many ways, contemporary organisational studies represent a partial view of certain aspects of sustainability, although they are not explicitly offered as such.

The need to adopt sustainability’s broader vision can be explained by accessing existing understandings of networks within the business sector. ‘Business ecosystems’ are proposed, for example. It is up to sustainability theorists to seize on the metaphor of business ecosystems and others like it, and explain why their conceptual boundaries should be expanded so that we can move beyond the tired dichotomy of the social and the natural. If this is achieved, sustainability can be defended as an intrinsic requirement of good business. This could lead to a larger, more inclusive and thorough model of the business/society/nature relationship. ‘Good business’ itself might be redefined in the process. In this tumultuous period of change the door is opened for
sustainability concerns. We now have the chance to wade into the upheaval and ensure that sustainability is built into the structure of business systems of the future.

In the following two chapters I pursue the network theme, presenting some vital constituents of networks for sustainability that business must be cognizant of and suggesting methods that could be used to engage them appropriately. In Chapter Seven, I outline the importance of traditional ways of knowing, and assert that they can and must be drawn into network approaches for sustainability. In Chapter Eight, I explain why network approaches are essential to sustainability. In particular, I focus on the market network, since it is a key determinant of corporate contributions to sustainability. Finally I suggest that deliberative democracy can bring diverse networks together in a synergistic manner with positive effects for sustainability.
Chapter Seven

The Role of Traditional Knowledge: Classical Equestrianism as Metaphor

‘The pedagogical exuberance of the more-than-human world is stunning - just stunning!’ (Patsy Hallen, 2005, pers. comm.)

I believe that, when all is said and done, the only thing that will truly count will be what residue, beneficial or ruinous, our actions and efforts will have left on the souls of those around us, and on the creatures with whom we have dealt during our lives (Herbermann, 2003, 15).

Introduction

In this chapter I discuss the importance of traditional knowledge. I use classical equitation, a form of traditional knowledge, to illustrate possible ways of imagining and organising relationships between humans and the more-than-human world. Through equestrianism, I explore differences between relations based on power and control and those which are rely on synergy and empathy. I use this analysis to argue that the discourse of sustainability should encompass a diversity of views and knowledges if it is to be useful. This story of traditional knowledge and relationships between the human and more-than-human world serves as a model that can be used to expand epistemological boundaries as corporations meet sustainability. This chapter complements actor network theory’s ambition, as discussed in Chapter Five, to see past conventional notions of the corporation and to increase sensitivity to the limitations of the ontological separation of humanity from everything else.

Traditional knowledge

The dominant discourse of sustainability is strongly influenced by dedication to progress: that is, moving beyond existing ideas to scientifically derived bigger and better ones in order to provide a brighter future. Against this backdrop, corporations’ role as leaders in sustainability is portrayed as inevitable. As a counterbalance, sustainability theorists often turn to Indigenous, local and/or traditional knowledge to illustrate weaknesses and omissions in such assumptions. Such perspectives suggest that while corporations must become more sustaining, the assertion that they will inevitably be the leaders in sustainability is contentious.

Pocock defines tradition in its simplest form as
an indefinite series of repetitions of an action, which on each occasion is performed on the assumption that it has been performed before; its performance is authorised - though the nature of the authorisation may vary widely - by the knowledge, or the assumption, of previous performance. In the pure state, as it were, such a tradition is without conceivable beginning; each performance presupposes a previous performance, in infinite regress (1989, 237).

Traditional knowledge has permanence about it. The effort invested in perpetuating traditional knowledge over many generations is designed to preserve or sustain, rather than promoting constant transformation. Shifts in perspectives do occur in traditional knowledge as a result of lessons learned through trial and error over long periods of time for example, but this is a capacity not a primary aim. Such tried and tested knowledge is itself desired to be sustained in essence, and its permanence is seen as a source of security to assist and sustain people facing challenges. People, their cultural practices and their knowledge are sustained while time is in flux - successive generations of people benefit from the preservation of traditional knowledge bases which may not significantly expand or alter even over many years. Furthermore, while arguments are often heard about whether scientists should consider the moral implications of their knowledge production, attention to morality is an inbuilt feature of traditional knowledge systems.

In contrast, the scientific knowledge that underpins progress is clearly intended to generate innovation. The knowledge base of progress is also tried and tested, but each step is assessed according to very different criteria over a much shorter time span. It is intrinsically formulated to expand, provide novel information and diversify, and does so at an ever increasing rate. It therefore has a transient aspect, although scientists build cumulatively on the knowledge of their predecessors, incorporating or superseding it where appropriate. Where traditional knowledge relies on stability as a survival tactic, progressive knowledge operates under the assumption that innovation is humanity’s best source of resilience. It assumes that each successive generation of people can benefit from a constant improvement in knowledge, an attitude which implies that newer knowledge is better and more complete than older knowledge. This often leads to the assumption that progressive knowledge is superior to traditional. However, ways of
knowing which are designed to ‘progress’ are not necessarily superior per se, they merely serve a different purpose.

Progressive knowledge underpins many of the forms of relationship and organisation that dominate modern society. Their power is, however, potentially as transient as the knowledge that infuses them. As John Raulston Saul notes:

Most of what is presented to us today as the inevitable forms of human relationships, given the dictates of such things as the market and technology, are in reality rather recent phenomena of a temporary - even incidental - nature. These are passing relationships because they are directly dependent upon the evolving forms of crude power. To develop theories about human nature and the nature of human society based on temporary variations of this sort of power - as we have often done from Adam Smith on through Marx - is to waste a lot of time on the service roads of economics (1997, 37-38).

Corporations certainly fit Saul’s description of ‘evolving forms of crude power’, although they may not seem particularly ‘incidental’ in everyday contemporary existence. If relationships such as those typifying corporate activity in the market are passing, by definition they are unlikely to be the primary source of inspiration for sustainability in the long term. Where then are we likely to find the life blood of sustainability, if not in the most powerful institutions of modernity? Saul points to the traditional wisdom of many cultures. He contrasts the ephemeral nature of ‘forms of crude power’ - such as corporations - with propositions which have guided human civilizations for 2 500 years:

Solon’s ideas of public justice; Socrates’ view of the citizen’s role as a persistent annoyance; Cicero’s “The good of the people as the chief law”; John of Salisbury’s “Who is more contemptible than he who scorns knowledge of himself?” There are thousands of other examples - in language and in action - of our efforts to improve ourselves by developing a responsible sense of self and society (1997, 38).

It is possible for both traditional and progressive knowledge to flourish and be interwoven within a given cultural context. Even in cultures with ‘historical’ modes of understanding (those that mark their history by transitions on a linear basis), traditional knowledge persists with progress (Pocock, 1989, 239-240). Progressive and traditional forms of knowledge do more than simply coexist - they interact, and may support or undermine one another in complex ways. Unfortunately, the connections between them
are often obscured or deemed irrelevant in the powerful worlds of policy-making and economics.

Traditional knowledge, although it can and does change, is more enduring than that associated with science and progress, an attribute that is surely necessary for sustainability. Although it involves passing of knowledge from one generation to the next, it draws the imagination away from eschatological progress through linear time. The geometry of traditional thought is quite different to that which currently dominates the discourse of sustainability. Traditional knowledge involves reflection about experience shared with people living the same sort of problems in the same sort of ‘now’ as countless others before them. It is not necessarily aiming for a more perfect destination. In fact, this shared experience transcending linear time provides resilience and wisdom precisely because it is not progressive in the modernist sense. It endures because it embodies the lived experiences of many generations, each having had the chance to grapple with the same issues. This contrasts with the modernist necessity to rapidly come to terms with artifacts of progress which may occupy centre stage only fleetingly before being replaced by the latest innovation.

Traditional knowledge offers a foundation of hard-won wisdom which may be used to judge the benefits of modern technological cleverness. When scientific progress undermines the resilience and endurance that traditional knowledge provides, it becomes pathological. For example, when traditional agrarian knowledge is displaced by scientific agricultural knowledge with little or no regard for local circumstances, the result is often deleterious to rural communities (Ableman, 1993). When the two combine synergistically, the potential for enhancing sustainability is great. If we are to live more sustainably, the positive lessons of tradition must be reaffirmed as key compasses of wisdom to guide the direction and evaluation of scientific progress. The form of traditional knowledge I present in the next section both as a metaphor for sustainability practitioners to access, and as a living system of knowledge in its own right, is equestrianism.

**Equestrianism as traditional knowledge**

The classical art of equitation was established in Europe in the early modern period. Core elements of this tradition can be traced back to Xenophon, a Greek cavalry
commander, who expounded his theories some 2400 years ago in his *Treatise on Horsemanship*. Xenophon advocated working with the horse with an attitude of respect, compassion and patience, rather than misguided attempts to dominate them by the use of force, an attitude that has endured to become the basis of classical equitation. The aim is to improve the level of performance horse and rider are able to achieve as a partnership while enhancing the horse’s physical and mental wellbeing.

There were subsequent diversionary forays into barbaric and dominating methods of working with horses which coincided with historical beliefs of ‘man’s’ identity and proper station in regards to ‘nature’. In the sixteenth century, for example, barbaric methods were often designed in an attempt to ‘subdue’ equine subjects who were essentially understood as irrational impediments to riders’ ambitions. By the eighteenth century, experience had led to a more “natural” method of horse training ‘which (built) on a sympathetic connection between horse and rider and which (diminished) the importance of the rider’s control of and dominance over his mount’ (Raber and Tucker, 2005, 14). Here, ‘naturalness’ is deemed to be found by moving away from notions of human superiority and separation, towards empathetic engagement with the more-than-human world. Classical equitation eventually abandoned the simplistic conflation of discipline with coercion that LeGuin maintains remains ‘symptomatic of the troubled relationship of the twenty-first century West to ideas such as freedom and wildness, obedience and command’ (2005, 194).

**Horses and human civilization**

I have criticized the tendency to depict culture and nature as ontologically distinct categories. The relationship between people and horses demonstrates the inadequacy of this model. Human civilization would not have been able to develop as it has without our relationships with various domestic animals, including horses. The second of a series of surges which marked human expansion occurred when people began to cultivate plants and domesticate animals (Clutton-Brock, 1999, 3). The first surge was enabled by the use of tools and fire, as links began to emerge between people and wolves, the progenitors of the domestic dog. The third surge was associated with the industrial revolution (Clutton-Brock, 1999, 3).

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63 Xenophon lived from 430 to 354 BC. Alexander the Great’s father, Philip of Macedon, followed Xenophon’s teachings when he trained and equipped his cavalry (Clutton-Brock, 1999, 109).

64 The first surge was enabled by the use of tools and fire, as links began to emerge between people and wolves, the progenitors of the domestic dog. The third surge was associated with the industrial revolution (Clutton-Brock, 1999, 3).
millennium BC in Europe and the third millennium BC in southern Russia and western Asia (Clutton-Brock, 1999, 100). We have been partnered throughout much of our history by the horse: in our conflicts, agriculture, mobility, mining, sporting activities, and emotional and spiritual life.

Although equestrian knowledge is on the periphery of modern life, this has not always been the case. In early modern times (ca. 1450-1800s) when horses were as ubiquitous are cars are now, most people in the western-influenced world would have been as familiar with the routine knowledge associated with them as their descendents are today with aspects of car-culture (Raber and Tucker, 2005, 3). The horse played a crucial role in human culture, not just as an instrument of mechanical advantage but as a force that made its mark on what we did and how we thought. Raber and Tucker contend that in seeking to understand early modern history of the West, for example, it must be remembered that ‘horse culture and the broader culture intertwined in a tapestry of images, objects, structures, sounds, gestures, texts and ideas’ (2005, inside cover), and that ‘without knowledge of how the horse figured in all these aspects, no version of political, material, or intellectual culture in the period can be entirely accurate’ (2005, 4). Human culture and development simply cannot be adequately understood in isolation from the more-than-human world.

Horses and other domestic animals are far more than just convenient and instrumental adjuncts to our lives - they form part of who we are and who we imagine ourselves to be. Over many years and in many cultures ‘images and literary representations of horses and riders promoted and defined what it meant to be human, to be an individual, to be of a certain class, to have a certain national identity, to hold a certain set of values’ (Raber and Tucker, 2005, 1-2). In Australia, horses are writ large as powerful symbols in our post-European settlement history and mythology. Our fascination with the myth of the stockman as depicted in ‘The Man from Snowy River’ and savagely played out in World War I by the Light Horsemen, is re-lived every year in the running of the Melbourne Cup - the ‘race that stops a nation’. The patriarchal tendencies of Australian society reverberate in the mythology of bush horsemen as ‘icons of Australian manhood’ and symbols of mateship (Mantle, 2004, 2). Certain horses have become cultural icons to be admired and emulated. In Australia, to be told you have “a heart as big as Phar Lap’s” is to be compared to a horse in a complimentary way. During World War I, the Waler, the
famous Australian breed of horse ‘became enshrined in the culture as both of heroic mould and martyr’ (Mantle, 2004, 244).

**The notion of domestication**

The idea of domestication is often interpreted in terms of human exploitation of weaker species. When we speak of the domestication of horses and other animals, it sets up an image of reluctant and defenseless equine captives being used instrumentally by human dictators for human purposes. The verb ‘to domesticate’ pertains to something humans do to non-humans: animals are depicted as being passive objects of domestication. Domestication is described as ‘a developmental process under human control’ (Hemmer, 1990, vii) by means of which people have ‘manipulated and changed the ways of life of other mammals since the end of the last Ice Age’ (Clutton-Brock, 1999, vii)\(^65\).

However, the assumption of human superiority and control in the process of domestication is arguably an oversimplification of a far more complicated story. We are guilty of unacceptable exploitation of other species, that is undeniable, but to interpret this lamentable fact as proof that we were always in charge is just as dangerous an assumption as the related and much criticized modernist tendency to presume that humans are separate from nature and capable of controlling it. Albert Borgmann counsels us to avoid this trap of denying agency to those we arrogantly assume can be subordinated to our will by the application of power:

One might think that the mark of human creativity is like the brand on a horse that identifies it as a human possession and denies it any possibility to speak on its own behalf. In fact, a horse is not just a human possession, but a human product, the result of millennia of breeding. But were the status of

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\(^65\) Hemmer’s book title, *Domestication: the Decline of Environmental Appreciation* refers to a loss of sensitivity to environmental surroundings that domesticated animals display in comparison to undomesticated ones. This ‘places the domestic animal at a lower stress level than the wild one under the same environmental conditions’ although it ‘also involves a drop in its adaptability to acute stress’ (Hemmer, 1990, 145). Hemmer is referring to whatever physical environment the domesticated animal is habituated to, as opposed to the ‘natural’ environment - it might be a stable or pen, for example. This decline in environmental appreciation results in ‘increasing restriction of the survival capability of the domestic animal to a rather narrow domain under human supervision’ (Hemmer, 1990, 147). In other words, certain types of interaction between the human and non-human increase their interdependence, so that the traditional knowledge built up over millennia of interaction is vital to the continuation of this ‘community of species’. It would be interesting to investigate to what degree human sensitivity to certain conditions is reduced by association with a community of species, and what this might tell us about the power relations in such communities and the implications of this as we face enormous and unprecedented changes in our social and ecological environments.
focal things to be determined by universal criteria, we would lapse into modernism. Let things speak for themselves. Horses do so with peerless power and grace (1992, 120).

Budiansky (2002) takes issue with any assumption that horses had no say in their own domestication, and are a product of human desires, even if they have retained the ability to speak for themselves. He explains that

Recent archaeological and animal behaviour studies strongly support the idea that domestication was not the human invention it was long supposed to have been, but rather a long, slow process of mutual adaptation, of “co-evolution,” in which those animals that began to hang around the first permanent human settlements gained more than they lost…Like the starlings, mice and rats, and chimney swifts that invade our homes today for the food and shelter that are a by-product of our domestic habits, those forbears of our domestic stock took the initiative. We followed (2002, 9).

Budiansky says that domestication was ‘not a matter of human will. The successful domesticated species were largely “preadapted” to their role through quirks of adaptation and evolution that had nothing whatever to do with human intentions or needs, but that turned out to be vital to their future success in our homes and fields’ (2002, 7-8). Budiansky asserts that ‘the first step towards domestication was one that nature took millions of years before we even arrived on the scene’ (2002, 8). One might even argue that people were domesticated by horses and other animals.

The relationship between horses and human culture was mutually beneficial in many regards. Research suggests that the wild horse would probably have become extinct without its association with people (Clutton-Brock, 1999, 103). ‘Domestication’, argues Budiansky, ‘for those animals lucky enough to fit the bill, proved a brilliant evolutionary strategy’ (2002, 33). Horses have certain characteristics that have enabled them to become enfolded in human communities. They can survive on a wide variety of foods and therefore can thrive on a range of diets available in various human cultures and situations; they are social animals with a culture involving processes of dominance and submission usually determined by bluff rather than physical force, which allows people to work with them; they are comparatively unterritorial, ‘not given to disruptive intraspecies combat over fixed bits of ground’; and had ‘relatively simple courtship patterns’ (Budiansky, 2002, 8).
The horse/person relationship

The relationship between humans and horses is sometimes interpreted in terms of human dominance over the subordinated horse. In the past, certain forms of horsemanship have indeed been used to illustrate what was interpreted as the ‘proper relationship between a subject (the horse) and his ruler (the rider)’ (Raber and Tucker, 2005, 2). However, a more accurate way of describing the relationship is ‘the forging of a pair bond by which the horse accepts our routine violation of its personal space’ (Budiansky, 2002, 78). I also argue that humans simultaneously learn to trust and accept the violation of our personal space by a highly sensitive being many times larger and stronger than we are, and more than capable of killing us. The relationship at its best is more cooperative than oppositional. As each member of the partnership learns to understand and trust the other, a synergy is created. Budiansky, in his scientifically-supported account of The Nature of Horses observes that

Watching a good trainer or rider at work, it is clear that human dominance is asserted and maintained largely through confidence and assurance, a language that horses through long evolutionary adaptation are well equipped to understand (2002, 77).

Even the word ‘dominance’ is contentious in this context. Henriquet insists that the ‘mindless domination or constraint of the horse…is the mark of incompetence’ and an anathema to the principles of classical training (2006, 82). Speaking from years of experience, I can say that I rarely feel as though I am ‘dominating’ the horse - it is too facile a description, and it misses the nuances of the relationship. Perhaps ‘leadership’ would be closer to the mark. The interaction between rider and horse in classical equestrianism is characterized by a continuous effort to understand each other by means of two-way communication, although each species’ motives and modes of understanding may be completely different. Michel Henriquet (2006) emphasizes that classical equitation does not aim to mentally condition the horse to the point of robotic obedience. On the contrary, the rider uses the ‘voice, touching with the whip or hand, gentle indications with the reins, caresses, and treats’ to ‘create a network of communications that go beyond constraint and panic’ (Henriquet, 2006, 81, 82). Henriquet argues that to hope for mindless obedience would be to move ‘away from true equestrian schooling into the realm of mind control and conditioned circus tricks’ (2006, 82).
As a rider, I often assume the role of leader, but if the horse really does not want to do something, or is incapable of doing it, there is nothing I can do to force her. The physics is very simple - she is bigger than me. Impressive meta-narratives about humans’ inherent capacity to dominate and control nature are no help at all to a rider attempting to persuade a nervous and resistant horse to carry her. Human dominance is not a given. In fact, even when the horse accepts my influence, there are many times when I defer to the horse’s experience and knowledge and accept my cue from her. For example, I have been lost in the bush on a few occasions and I simply act as a passenger and let the horse find our way home.

Franz Mairinger, who was a Bereiter (Senior Rider) at the Spanish Riding School in Vienna and was described as ‘a philosopher with great love and understanding of his equine friends’ (Knospe and Kinneburgh, 1984, 11), asked

> How should we look upon our horse? Do you see him as a slave and treat him accordingly, or do you see your best friend in him? So far as I am concerned, slaves always want to run away and the horse is no exception. Freedom is surely no human invention (1984, 17).

‘Freedom’ is of course a human word, and as such is unlikely to be an idea that horses conceptualize in the same way that people do, if they do at all - after all, people themselves disagree about the meaning of such things - but the point remains important. After all, it is difficult to prove that they do not have some conception or experience of what we might call ‘freedom’. Mairinger constantly emphasized the need to respect the innate nature and rights of the horse. His views were outlined in the book *Horses are Made to be Horses* (1984), published posthumously with the title he had planned to use in order to emphasize the point that horses do not exist to fulfill the whims of spoilt human beings. Similarly, the biosphere does not exist primarily as a ‘resource’ designed to support the cultural ambitions of the human population indefinitely.

Mairinger (1984) maintained that horses are willing partners in equestrianism as a democratic process - one that is based on acceptance of reciprocal rights and responsibilities rather than expectations of absolute freedom. To Franz, democracy was ‘natural’. Franz believed that provided the rider’s request is reasonable, if the horse is not doing what the rider wants it is simply because the horse does not understand what is
being asked of it. He recognized that such a claim might be seen as contentious in some quarters outside the bastion of classical equitation that he came from - he used to say he was “sticking his neck out” when he made it. Nonetheless, Mairinger rejected the use of dictatorial force as a training strategy, not just on ethical grounds, but also because he believed it simply does not work. He maintained that the necessary understanding is promoted by patient, communicative engagement, not by applications of force to resistant subjects.

Herbermann also draws attention to the importance of perceiving the horse as a willing partner, not a slave:

For the true horseman the cultivation of willing participation is a sacred bond...submission is equestrian bankruptcy. Willing participation is a joyful contribution based on understanding. Submission is based on coercion which usually leads to soulless obedience.

What kind of harmony(!) would ensue if we were to command our human partner, ‘I order you to dance with me!’ Is it really all that different if we wish to dance with the horses without respectfully inviting and encouraging their willing participation (2003, 16)?

If we are seeking sustainability through the application of modernist power structures, such metaphors are pertinent. Harmony might even be thought of as a synonym for sustainability, or at least a vital aspect of it. If our intention is to promote a more harmonious and hence sustainable existence, we too must examine the value of coercive power associated with the institutions of modernity. How harmonious are the stakeholder relationships tapped into by corporations to promote sustainability if they involve either deliberate or unconscious coercion? How might we engage with diverse networks relevant to sustainability in a more democratic and therefore fruitful manner?

**The ethics of equestrianism**

Is this relationship between horse and rider ethical? Budiansky maintains that the answer to such questions is complicated: many of the things we ask horses to do ‘build on their instincts - especially their well-developed social instincts, their acute sensitivity to social hierarchy and to subtle cues of dominance and submission’ (2002, 2). At the same time, we ask them to perform tasks that they would not undertake in other circumstances, such as the very act of carrying a rider, or activities such as traveling in a horse float. It can be
argued that the capacity to learn which enables these actions is itself innate. But as Budiansky reminds us, this ‘does not alter the fact that we have all too often confused the horse’s willing nature in the company of man with its inherent nature’ (2002, 2). In terms of the ethics of equestrianism, he maintains that

> Those who claim it is “unethical” to ask a horse to do anything it would not do of its own inclination are being naïve and foolish; but equally naïve and foolish are those who expect to teach a horse to do their bidding without taking into account its natural inclinations (2002, 2).

Sadly, the latter situation occurs far too frequently, and as a riding teacher I spend much of my time trying to encourage riders to move beyond such attitudes.

**Negative aspects of equitation**

Equestrianism has been accompanied throughout its history by prejudice and violence. It is just as embedded in cultural context as every other activity humans are involved in. Traditional knowledge forms are not perfect. Equitation has developed as the result of complex and often bloody processes, and displays traits that would not be in keeping with the ideals of sustainability. Xenophon noted a ‘“conjunction of martial heroism, horsemanship, and social privilege” that would continue to exist throughout the centuries of classical Rome and then on into the medieval and early modern periods’ (Raber and Tucker, 2005, 8). The quote from Xenophon touches on three issues which have accompanied equestrianism for thousands of years:

- power and conflict;
- patriarchy; and
- elitism.

*Power and conflict*

Horses form part of the history of industrialization itself and as with modern industry, equestrianism has a long history of association with patriarchal and military organisations. Many of the movements taught in the classical ‘high school’ of dressage - such as the capriole, a movement where the horse leaps high into the air and kicks backwards with both hind legs - were originally intended to be used on the battlefield to kill people. The charm of its description as an ‘air above the ground’ cannot completely
erase memory of its violence. Even now, when watching horses perform such movements in peaceful circumstances I am struck by both their breathtaking beauty and their display of frightening force.

The military shaped thinking about horses as well as their treatment. Xenophon, a Greek cavalry commander, dedicated sections of his work to detailing how to use weapons from horseback (Clutton-Brock, 1999, 112). Many of the techniques devised to prepare horses and their riders for the battlefield, particularly when forced to ready large numbers of combatants in the shortest possible time, were drastic and barbaric. For instance, bits\textsuperscript{66} were designed to exert mechanical advantage and even to inflict pain on the horse, rather than to act as refined and agreeable conduits of information between the rider’s hands and the horse (Budiansky, 2002). In the sixteenth century, bits were devised as technologically efficient devices to control wayward horse, with a multitude of designs created to solve a multitude of behavioural problems of equines. Then, as now happens to a large degree in corporate sustainability, technology was pursued as a panacea while inadequate attention was given to the need to spend time and energy patiently developing deep relationships based on mutual understanding and cooperation\textsuperscript{67}.

\textit{Patriarchy}

Like sustainability, equestrianism struggles with restrictions related to patriarchy. Philosophers of equitation such as Mairinger (1984) and Herbermann (2003) display the clear patriarchal bias that exists within equestrianism - these authors habitually refer to riders, trainers and even horses as male. As a residual effect of its long association with the male-dominated domains of war and industry, equestrianism retains ‘horsemanship’ as its standard reference, although horsewomen or horse people are sometimes talked about. In rural Australia for instance, while the stockman has enjoyed iconic status, ‘Reality for white women has included a long but almost invisible association with

\footnotesize\textsuperscript{66} A bit is the piece of metal that sits in the horse’s mouth to which the reins are attached.

\footnotesize\textsuperscript{67} There has often been a tragic lack of gratitude for the efforts our equine partners in war. Of the 160 000 Walers sent to war with the Australian Light Horsemen in World War I, only 1 returned. The rest could not be taken home because of the cost and risk of bringing exotic diseases back to Australia (Mantle, 2004, 244). Many were shot by their distraught riders, who could not bear the thought of leaving them to a life of hard work and deprivation with the locals. ‘Sandy’, the one horse who was brought back, belonged to a General who was killed at Gallipoli, and when he was led in the funeral procession it ‘(reinforced) the symbolism uniting war and the Australian horseman’ (Mantle, 2004, 244).
equestrianism in all its forms’ (Mantle, 2004, 247), although this has changed of late to some extent. Aboriginal women (and men) remained even more invisible.

The gender biases of the discourse are challenged by the experiences of men and women as riders. Despite equestrianism’s patriarchic overtones, in practice women are not usually at a physical disadvantage. In fact, some riders maintain that women have a clear advantage in that they are less tempted to resort to the use of strength or force than men when dealing with a horse many times heavier and stronger than they are, and are more given to empathizing with the horse. The strength of patriarchal attitudes varies between equestrian sports - in eventing, dressage and showjumping for example, where women have an excellent track record at competition at the highest level with men, it is readily accepted that men and women compete on an equal basis. In racing, however, the assumption that men make better jockeys than women remains influential, although women trainers are widely respected. Furthermore, women’s part in the history of equestrianism in Australia and other parts of the world remains largely untold and forgotten (Mantle, 2004).

Elitism

Equestrianism has often been the province of the elite, and continues to be so. Horses are high maintenance, requiring large investments in time and money to ensure that they are satisfactorily fed, housed, and their veterinary and husbandry needs attended to. It takes a great deal of time over many years to train a horse and rider, and teachers can be very expensive. The classic texts of the early modern era which form the basis of contemporary high school dressage were written by European noblemen, ‘and the art of riding that their texts describe clearly was something that could be attractive only to those with time and money on their hands’ (Raber and Tucker, 2005, 8).

Horses have served many purposes for their elite owners. In early modern times, ‘Both in the flesh and in artistic representations, they served as evidence of wealth and leisure, even of power and glory. At the highest level, horses advanced, both literally and figuratively, the political agendas of those in positions of power’ (Raber and Tucker, 2005, 2). The elitism of equitation extended not only to individuals but to groups, as Raber and Tucker explain:
Elite-specific mounted activities…could foster a sense of group superiority to and differentiation from those of less exalted status, who did not participate in or even have access to such activities (2005, 2).

In the thirteenth century, horses were often depicted as status symbols of the elite, separating the ruling classes from ordinary citizens physically and symbolically:

No animal is more noble than the horse, since it is by horses that princes, magnates and knights are separated from lesser people, and because a lord cannot be seen fittingly among private citizens except through the mediation of the horse (Ruffus, cited in Raber and Tucker, 2005, 8).

In contemporary society, horses are often used in competitive sport, which is often corrupt in the extreme if large sums of money are offered as prizes or valuable horses are involved. They remain status symbols for the elite in many instances. At the same time, however, horses have provided a clearly anti-elitist function in certain cultures. In Australia, the great racehorse Phar Lap stood as an inspiration to a populace enduring the pain of economic depression in the 1930s. His death was regarded as a national tragedy. In the same era in America, the galloper Sea Biscuit was adopted as the people’s champion by millions suffering under conditions of severe economic hardship (Hillenbrand, 2003).

It is clear that, while elements of the discourse of equitation provide valuable metaphors for sustainability, there is much within it that is undesirable. However, as famous equestrian General Decarpentry cautioned: ‘in equitation, as in politics, we should be aware of over-simplification; this nearly always complicates matters in the end’ (1987, preface). Despite its scars, equestrianism as traditional knowledge has redeeming features as a metaphor for sustainability. It illustrates the powerful desire to preserve traditional forms of knowledge even within modern industrial society - traditions which although they may not be static have a strong sense of permanency in comparison to the transience of progress. It emphasizes the virtues of humility and patience, rather than overt applications of power. It teaches riders to look beyond self-interest to the need for self-discipline and self-awareness if they wish to gain the horse’s confidence. It explores synergy between human and non-human actors. These should arguably all be important characteristics of sustainability.
Attributes of the classically trained rider

In addition to the demanding physical training undertaken by riders throughout their careers in classical equitation, there are a number of non-physical characteristics that are carefully cultivated. These include:

- humility;
- self-awareness;
- self-discipline;
- empathy;
- respect;
- patience;
- persistence/endurance.

The physical and mental/emotional development of the rider continues for as long as she/he continues to work with horses. Franz Mairinger used to liken the process to that of viewing a dark cave with increasingly strong sources of light - at first, when all you have is a candle you can see only a small part of the cave (representing that which you desire to know) and it appears there is only a small amount of knowledge to master. Once you have mastered that knowledge, however, someone hands you a larger light and you realize the cave is bigger than you had previously thought. Still, you persevere, learning about all that you can see. Once again, someone hands you a much bigger light and you understand that the cave is enormous if not infinite, and you begin to realize that the more you learn, the more you become aware of that you don’t know. You suspect that the process is unending, and that the journey rather than the destination will be your life’s work. This awareness develops riders’ humility and patience, and emphasizes the goal of seeking wisdom rather than simply knowledge. The rider must persist and endure.

Humility on the part of the rider is an important feature of classical equitation. Rather than invoking scientific knowledge as a symbol of human dominance over nature and a justification for pride, Mairinger uses it to gently poke fun at riders with mal-developed egos:
Try to comprehend the universe expanding for about 200 million light years. Try to comprehend that you are rushing with the Earth at about 112651 km/h...around the sun and that you have a speed of about 1608 km/h around the polar axis of the Earth. If you are still filled with your own importance, I give you up as a lost cause! (1984, 14).

Mairinger argued that riders who do not work with the horse’s natural abilities are ‘sinners against nature’ and will eventually pay the penalty (1984, 20). He had no time for those who attempted to explain away their training problems by blaming the horse: ‘Perhaps because we are not bright enough to realize that we did not ride him properly we find some excuse to account for our failure’ (1984, 20). Mairinger’s trainees were never permitted the luxury of assuming superiority over the horse, or expecting the horse to conform to human ways of thinking. Riders were to exercise self-awareness and self-discipline. Horses’ particular intellectual capacity was to be understood and respected. Mairinger expected his pupils to adjust their thinking in order to ‘try to think and feel as the horse does’ (1984, 20).

Furthermore, riders must develop self-awareness and self-discipline as they patiently work to overcome their natural reflexes which are, unfortunately, ‘the opposite of what they ought to be’ for equitation (Henriquet, 2006, 81). According to classical tradition of equitation, riders can only access a high degree of power to act with the horse if they understand and control their own innate tendencies. The rider must accommodate the horse’s way of being, rather than arrogantly expecting the horse to conform to human thought patterns and reactions. Henriquet, touted as one of the guardians of the French tradition of equitation, explains that the rider’s natural reflexes work rigorously against the desired effect. The young horse quivers with fear: the seat and legs of the (rider), who shares his anxiety, close on him, thus creating panic. The young horse, urged on, goes forward with alertness, the hand then clenches on the mouth, a sensation that he will try to remove by whatever means possible, the first one being flight...Thus we are dealing here with the re-education of the most elementary survival reflexes, which the future écuyer must conquer if (s/he) wishes to attain real finesses (2006, 81).

The concept and experience of synergy is central to the art of equestrianism. There are times that the horse and rider appear to become something greater than the sum of both parts. I have felt this myself and it is something that exists beyond the reach of words - it
is an experience not a concept. As a rider, you have an awareness of the horse’s body as if it was your own, and both of you seem to be concentrating in the same space. You are sometimes hard pressed to decide which of the pair is leading and which is following. Together, you can accomplish tasks that would be beyond the individual capabilities of either partner.

The aim of classical equitation to respect and enhance the horse’s natural abilities resonates with Ernesto Sirolli’s (1999) notion of ‘development’ as a process of revealing what is already there and nurturing it, rather than attempting to contort it into a form fundamentally out of tune with its character. Franz Mairinger said:

If you want to know how a horse should be ridden, see how he moves by himself when free. How he walks, trots and canters. How he jumps. Have a close look and see the beauty, the rhythm, and harmony of his movements. Then, sit down, close your eyes and try to burn this picture of effortless grace, beauty, and harmony deep into your mind, your heart. Never forget it. Because that is the way you should ride your horse. There in a few words is all the knowledge of the world, and your training goal! (1984, 16).

In other words, when you wish to engage with aspects of the human or more-than-human world that you are not familiar with, begin by developing an intimate appreciation of its intrinsic qualities and proceed with a commitment to preserve and enhance those qualities.

**Forms of knowledge in equestrianism**

The art of riding involves various knowledge systems:

- there has been a strong oral tradition for thousands of years;
- some knowledge is written with quantifiable aspects;
- there is an experiential transfer of knowledge, involving generations of riders, trainers and horses;
- horses are themselves keepers of knowledge - they are active participants rather than passive recipients in the creation and perpetuation of the knowledge base of equitation.
The last point is a highly significant aspect of equestrianism as traditional knowledge, particularly in relation to sustainability’s attention to the ‘non-human’. Horses themselves are keepers of knowledge, which they impart. Human knowledge is not the only one that counts. There is a perpetual cycle where experienced trainers and ‘educated’ horses teach novice riders, who are then equipped to transfer their knowledge to a novice horse, and so on. Horses can be quite adamant about the standard of accomplishment they expect from their riders. My old horse, Floyd, quickly dispatches any riders who combine an arrogant, forceful attitude with a lack of skill, although he will tolerate less able trainees if they are gentle. When sensitive but ignorant candidates are aboard, he stops in moments when they are giving hopelessly conflicting aids and turns his head around to look at them. If I offer people a ride on Floyd, I always pray that my reaction to their character coincides with his.

Equestrianism could not survive without this creation and transfer of knowledge between the species - knowledge imparted only from one rider to the next is insufficient. Herbermann says that the ‘living master-horse-pupil connection is vital’ and that those who believe a novice rider and a novice horse can together progress with anything like the same results ‘are simply writing off (hundreds of years) of hard-won experience’ (2003, 97).

The observation that equine ways of knowing are just as vital to the art as human ways of knowing carries particular poignancy in riding, because lives - people’s and horses’ - depend on it. In sustainability too, it is essential that both human and non-human ways of knowing and being are accepted as valuable in their own right and as essential to human well-being. Horses do not have to be pseudo-people to be valuable. Furthermore, the hard-won experience embodied in all types of traditional knowledge should not be written off as we struggle like novices to grasp the import of our latest technologies. Progress should not be allowed to dominate tradition.

**Mythology in equestrianism**
I have discussed some of the problems associated with tacit acceptance of the mythologies inherent in the dominant discourse of sustainability. Although I am using the classical art of equitation to explore the potential for traditional knowledge to bolster the discourse of sustainability, I am not offering it as an escape from mythology.
Equestrianism is also extensively infused by mythology. As Budiansky reminds us, the language and techniques that characterize equestrianism are informed by a range of assumptions which in many respects reveal more about the tastes of human culture than the nature of horses (2002, 2,3). Judging certain feats of equitation to be ‘magnificent’ or ‘noble’, or deeming them to be “the finest actions proper to a horse” (Xenophon, cited in Budiansky, 2002, 3) has more to do with satisfying the aesthetic desires of human observers than identifying actions that are demonstrably equine requirements of being.

The language of riding also often encapsulates human understandings of the world rather than empathetic suggestions of what the horse might experience. ‘Hands’, for example, as they are used to convey signals through the reins to the bit in the horse’s mouth are conventionally described as ‘natural’ aids. However, as Budiansky points out, it is debatable whether a horse with ‘a metal bit stuffed in its mouth…views the world in such categories’ (2002, 2-3). Indeed, it is unlikely that horses have a conception of something like ‘natural’ as opposed to ‘unnatural’.

It is just as necessary in equitation as in sustainability to highlight the tendencies of certain language and mythologies to misdirect practitioners’ efforts. As a riding teacher I often come across situations where the conventional language of equitation actually directs the rider’s attention away from the correct goal and it is then my job to highlight the assumptions lurking behind technical terms such as ‘on the bit’68. Much of the language used is mystifying when closely analyzed, becoming meaningful only when a gifted teacher manages to connect vague and misleading terminology with something the trainee rider feels. The terminology often makes no more literal sense than it did before, but experiential knowledge brings the term to life for the rider. The same is true of the

68 The term ‘on the bit’ for example is far too easily interpreted by beginners to mean a posture of the horse’s head that is achieved by the rider using her hands to manipulate the bit in the horse’s mouth. This misinterpretation tends to lead riders to the excessive use of force with the reins in an attempt to physically position the horse’s head, causing pain and discomfort to the horse and undermining the potential for communication between rider and horse. In fact, the horse can only be ridden ‘on the bit’ by skilfully maintaining a regular rhythm to the horse’s gait, which helps the horse to find her balance under the rider and therefore to become relaxed and supple without unnecessary nervous tension. If this is achieved, the horse can ‘accept the bit’ which essentially means responding to signals sent via the reins whilst remaining mentally and physically supple. The rider can then encourage the horse to taking more weight on the hind legs and to move with more power and expression. Two-way communication between the partners is enhanced - each is focused on and sensitive to the other. The majority of the rider’s influence stems from the use of her weight and legs to influence the horse’s engine - the hindquarters. The hands are far less active, although it is important that they are sensitive. Very little force is involved at all, other than that necessary for the rider to maintain her posture, and to send signals (‘aids’) to the horse via small movements of the weight, legs and hands.
language of sustainability in certain respects - until it is anchored in relation to daily experience it has a tendency to float confusingly in the realm of mantra. This does not make the discourse invalid, but it underscores the importance of grounded experience in providing deeper understanding and interpretation.

In both the fields of sustainability and equitation, language use may change as a result of experientially gained insight. Now that I am aware of the confusion associated with the use of the term ‘on the bit’, for example, I often avoid using it when teaching less experienced riders, and try to use practical language that encourages people to discover the correct feeling. Once they have mastered the necessary skills, I can then link what they have felt with the term ‘on the bit’, and continue to use it as a form of shorthand. As my friend in the Laundromat in San Francisco taught me, similar tactics may often be advisable when talking about sustainability.

In his discussion, Budiansky tends to separate human culture from equine nature, an act that does not self-evidently represent reality. The long, co-evolutionary history of close association between humans and equines might be interpreted to show that equine nature and human culture cannot be satisfactorily understood in isolation from one another. After all, as Budiansky himself points out, horses would probably have become extinct as did other large animals, had they not been able to live domestically alongside Eurasian steppe dwellers 6000 years ago (2002, 5). In the process, people benefited enormously from the horse’s capabilities, using them to undertake a wide variety of activities ranging from feeding populations, providing transportation, and fighting wars, to acting as status symbols for the elite.

**Sustainability or post-modern patience?**

Albert Borgmann (1992) interprets horse riding (although he is not specifically referring to the classical equitation of European origin) as a focal practice undertaken by artisans. He describes the ‘focal area of the horse’ as a ‘charmed island floating in a universe of technology’, as part of a focal practices ‘grounded in underlying reality’ as ‘heirs to immemorial traditions’ (1992, 122). Artisans such as horse riders, artists, musicians and gardeners can relate to each other by virtue of their understanding of focal practices (1992, 122). Borgmann refers to this group and others like them as practitioners of post-modern patience.
Elisabeth LeGuin, an academic who is both a rider and a musician, concurs with Borgmann that arts such as ‘horsemanship, statesmanship, music, speech’ are profoundly linked by practice (2005, 194). LeGuin further explains that there is unavoidably an ethical and moral component of such practices, expressed in the intimacy of each moment during the artisan’s activity. In contrast to the heated debates within the corporate sector about whether corporate social responsibility should be considered at all, morality is not a choice but an inevitable compliment to the physicality of artistic vigilance. Horse riders, following the principles which Franz Mairinger espouses, focus every step, considering whether they have asked an appropriate question, whether it was the best or right question, whether they have asked it well, whether they have been understood and why, how this will influence their next action and so on. In order to perfect their art, the artisan must listen and try to comprehend whoever or whatever is partnering her, judging the effect of every interaction as it happens. Arts such as music and equestrianism, says LeGuin, ‘resemble one another intrinsically in that they depend - and in the end, depend absolutely for the possibility of their continuation - on the incorporation of listening into the process of command’ (2005, 194).

Michael Ableman also depicts traditional farmers as artists, and applauds the way that traditional farming methods emphasize wisdom over cleverness. Such farmers experiment, he says, ‘but experimentation is subordinate to tradition. The true artist honors a balance of emotion and technique, people and land, individual and community, plant and animal’ (1993, 8). He rues the tendency of industrialized agriculture to ‘destroy information of both the cultural and biological varieties’, believing that agriculture rather than agribusiness is the source of culture (1993, 9). In the end, suggests Ableman, environmental degradation is probably ‘an outward mirror of an inward condition’ - that of the industrial mind with its obsessive emphasis on progress and its condescending rejection of tradition (1993, 9).

The deep relationship between culture and environment evident, for example, in India brings home the need to provide room for cultural plurality in the discourse of sustainability. Here, ‘The diversity of ecosystems has nurtured a staggering complexity of cultural systems that have evolved diverse ways of human-nature interactions, bringing into being remarkable traditions of socio-ecological wisdom’ (Kothari and Parajuli, 1993, 225). Communities who have learned to live prudently in their environment have done
so ‘by evolving their own systems of describing and interacting with the physical and natural world’ (Kothari and Parajuli, 1993, 225). Knowledge has been developed with the local environment, not beside it. Sustainability has been ensured by engaging with the local situation rather than by applying knowledge and values derived from external sources.

**Power and post-modern patience**

Power and ‘post-modern patience’ can be compared and contrasted. Power, such as that focused in corporations, is related to progress, development, control and competitiveness based on acceptance of the mythology of individualism and self-interest. It is not easy to gain trust when such power is wielded. The patience of artisans, on the other hand, is related to endurance and the strength drawn from it, tradition, humility, respect, self-discipline and maturity. Artisans work with nature in a relationship of respect rather than trying to dominate it: ‘In crafts, humanity enters into an intimate and active engagement with nature’ (Borgmann, 1992, 124).

Borgmann maintains that patience is stronger than power. ‘When power prevails in its paradigmatic modern form,’ he says, ‘it establishes order on the ruins of inconvenient circumstances and on the suppression of uncooperative people. Regardless power rests on destruction and remains haunted by it’ (1992, 124). Patience on the other hand has time and strength to recognize complicated conditions and difficult people, to engage them in cooperation and conversation. The powerful provoke envy and fear, the patient earn admiration and affection. By patience I do not mean passivity but endurance (Borgmann, 1992, 124).

These certainly sound like useful attributes to encourage when tackling the complex issues of sustainability that concern people from diverse cultures. In regards to the environment, Borgmann suggests that

the task of post-modern patience is to endure the limits of the land…our inability to live with the energy (our country) yields and with its capacity for wastes bespeaks an impatient and immature culture (1992, 124).

Both power and patience are legitimate parts of post-modern experience. Allen argues that ‘Since a social form of life is inevitable, power and its asymmetries will always be
with us. That is not a tragedy. There is nothing desirable or even coherent about a society unmarked by asymmetries of power’ (Allen, 2004, 124). Borgmann maintains that the technology emerging from modern institutions of power ‘is part of the postmodern destiny and should not be stopped or spurned. It would be…fanatic to reject scientific and technical sophistication’ (1992, 124). Ableman warns against viewing traditional cultural practices with nostalgia or with a sense of blind romance that would gloss over tragedy and hardship (1993, 55). At the same time, however, it is ‘part of the postmodern experience that the duress of reality should not be subjected entirely to hard solutions’ says Borgmann (1992, 124).

There is much to learn from traditional practices in relation to the modernist sustainability discourse. We can learn from the importance of responsibility in many traditional systems - traditional food growers, for example ‘take absolute responsibility for their own food - for virtually every mouthful they and their children eat. They don’t leave that responsibility to supermarkets, chemical companies, the EPA, or the FDA’ (Ableman, 1993, 60).

Power and patience should both be thought of as necessary elements of sustainability strategies. Progress and endurance must both be attended to, and this means turning not only to the power structures of modernity, but also to traditional cultural and sub-cultural knowledge. After all we are trying to find sustaining ways of living over the long term, and the power structures of modernity, despite their advertising budgets, have yet to prove their longevity in comparison to traditional systems. We should draw on the endurance and resilience of traditional knowledge and societies that Ableman notes ‘have had to adapt to changes around them: economic, political, social and environmental. That many of the practices of these cultures have survived under such pressures, some over millennia, is testimony to the power of shared traditional values, values that provide a cultural identity that allows them to persist’ (1993, 61).

Furthermore, we should take notice of the importance of traditional cultural knowledge as a survival mechanism, rather than just a quaint, ethically appealing idea. Ableman emphasizes this point - ‘true and integrated ecological sensitivity…manifested in the careful management of local resources and a fair exchange with the natural world’ is not ‘intellectually derived but born out of a need to survive’ (1993, 63). Similarly,
practitioners of classical equestrianism follow their traditional knowledge as a matter of survival not simply aesthetics. Failure to appreciate and respect the horse’s nature can have catastrophic effects on the individuals involved, human and equine. If we are to live more sustainably, argues Ableman, then this attitude towards survival ‘must become part of our culture. Without it every attempt at environmental conservation or restoration will ultimately fail’ (1993, 62).

Traditional forms of knowledge such as equestrianism are not static - they themselves can be transformed in concert with cultural shifts. Positive change may be achieved by marrying the benefits of innovation with the strengths of traditional knowledge.

Saul’s idea of equilibrium
Perhaps John Ralston Saul’s notion of equilibrium might offer a suitable image to complement and explain sustainability. Equilibrium is not static, nor without energy. It is a process, as is sustainability. It is not necessarily a stable state that can be maintained without effort once achieved. It requires honest work. Saul refers to Thomas Jefferson to illustrate his idea. Jefferson,

one of the most successful politicians of the modern era, and a man who, though full of faults like the rest of us, sought an equilibrium as best he could, put it that a great deal lay in the manner in which you ap-proached (sic) reality. If the approach was balanced “the knot which you thought a Gordian one will untie itself before you”. The very juxtaposition of our qualities produces in and of itself powers that cannot be intellectually identified by normal analysis, but which clarify our situation and open clearer avenues for action. Jung and Freud might call this the power of consciousness. I would call it the power of equilibrium (1997, 192).

There is much in this that offers hope for people seeking a more sustainable way of living. We are indeed facing many daunting and intractable Gordian knots as we seek more sustainable ways of living in industrial society. The idea of seeking equilibrium is a deep and subtle approach, recognizably in tune with the teachings of those who seek wisdom, as opposed to simply knowledge. Saul’s description of the need to strive for equilibrium, even though we are unlikely to ever reach a static state save when we are dead or deluded, is perhaps more accessible and less steeped in modernist power than sustainability. The idea of equilibrium, as harmony or balance, is after all, one with a
far greater history and longevity in various guises than the now popular discourse of sustainability, which is mainly currency of the global elite at this stage.

The equilibrium Saul espouses, ‘in the Western experience’, is dependent not just on criticism, but on non-conformism in the public place’ (1997, 194) - capabilities that he says are undermined by the grip of corporatism. Rather than the enlightened self-interest of the corporatist and economic world, Saul argues that we should pursue the ‘examined life’, making a virtue of uncertainty:

The road away from the illusions of ideology towards reality is passable only if that anti-conformatism makes full use of our qualities and strengths in order to maintain the tension of uncertainty (1997, 194).

Saul does not reject the virtue of reason, but augments it with common sense, creativity, ethics, intuition and memory. He suggests that although these attributes can be misused individually to perpetuate mere ideology or abstract concepts, together they can be applied in an equilibrium ‘as the filters of public action’ (1997, 194). While corporations pursue triple bottom lines, hard-core metrics and other pointers to ‘certain’ sustainability, Saul leads us to uncertainty in order to improve our lot:

The virtue of uncertainty is not a comfortable idea, but then a citizen-based democracy is built upon participation, which is the very expression of permanent discomfort. The corporatist system depends upon the citizen’s desire for inner comfort. Equilibrium is dependent upon our recognition of reality, which is the acceptance of permanent psychic discomfort. And the acceptance of psychic discomfort is the acceptance of consciousness (1997, 195).

Saul does not aim to conjure a picture of ‘some pure and ideal future’, however, as ‘That would be yet another ideology’. He asks instead,

how and to what extent can we escape ideology, even if it must be in a plodding, solid way. How can we limit the damage regularly wreaked by ourselves upon ourselves as the result of this apparently congenital weakness (1997, 31)?

From this perspective, seeking sustainability is essentially the act of seeking an escape from the grip of ideology, rather than hoping for a utopian future. Saul recommends ‘a more careful approach to ideas and policy’ by considering other simple but significant
oppositions: ideology versus humanism; imbalance versus balance; disequilibrium versus equilibrium (1997, 31).

The contemporary discourse of sustainability, endorsed by corporate power, is disproportionately and inappropriately orientated towards progress underpinned by rational science. In this modernist context, ‘rationality’ and ‘science’ act as powerful means of legitimating interpretations and constructing reality. Science is considered to be rational and rationality is important since it is considered to be a manifestation of prudent action and decision-making. However, while science obviously has potential when the appropriateness and efficiency of the means to gain a particular end are estimated (instrumental rationality), it has but little to offer when the desirability of alternative ends of actions is assessed (value rationality). Societal decision-making thus cannot be explicitly based on science. (Kallio et al., 2007, 49).

Furthermore, science itself is neither value free nor entirely objective. Different scientific realities can be manifested as a result of differences in the contexts in which scientific research is undertaken, the researchers who participate, and the source of funding (Kallio et al., 2007, 49). Scientific endeavour may be criticized for failing to discern the limitations of its own epistemological boundaries, despite its orientation towards ‘truth’ and ‘reality’. In other words, science’s instrumental rationality requires value rationality to discern its limitations if its products are to be optimally integrated.

Consideration of instrumental and value rationality is therefore essential to sustainability in general, and in corporate approaches to sustainability specifically. Traditional knowledge provides one avenue through which to approach negotiations relating to value rationality. Therefore traditional knowledge and progressive, scientific knowledge are both vital for sustainability. (See Table 7.1 for a comparison of some of the characteristics of traditional and progressive knowledges.) The current lack of balance between these and other forms of knowledge undermines the aims of sustainability. To use Saul’s terminology, it displays a lack of equilibrium. Some are already moving to address this lack of equilibrium. Aveda Corporation, for instance, is committed to sustainability. In order to achieve sustainable outcomes, the company works with Indigenous people to combine the scientific knowledge underpinning their enterprise with
the traditional knowledge of people who benefit by providing ingredients for the company’s products. I discuss this case further in Chapter Eight (see Box 8.5).

### Table 7.1: Some characteristics of traditional and progressive knowledge

<table>
<thead>
<tr>
<th>Traditional knowledge</th>
<th>Progressive, science-based knowledge</th>
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<tbody>
<tr>
<td>• relatively permanent</td>
<td>• associated with temporary, transient and evolving forms of power</td>
</tr>
<tr>
<td>• lived experience/practised by artisans</td>
<td>• can be used to promote comfort not just survival</td>
</tr>
<tr>
<td>• endurance/resilience</td>
<td>• underpins capitalist expansion</td>
</tr>
<tr>
<td>• diversity</td>
<td>• promoted by corporations (and others) in the global economy</td>
</tr>
<tr>
<td>• deals with fallibility via trial and error over the long term</td>
<td>• eurocentric</td>
</tr>
<tr>
<td>• informed by the need to survive</td>
<td>• linear geometry of thought</td>
</tr>
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<table>
<thead>
<tr>
<th>Patience/endurance</th>
<th>Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>• promotes respect, understanding and empathy</td>
<td>• dominates</td>
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<table>
<thead>
<tr>
<th>Intimate, respectful relationships</th>
<th>Superficial relationships</th>
</tr>
</thead>
<tbody>
<tr>
<td>• form the basis of grassroots action</td>
<td>• inevitable and essential parts of human interaction</td>
</tr>
<tr>
<td>• require deep engagement and commitment</td>
<td>• form the basis of market interaction</td>
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Instead of looking for a single, infinite development path ‘forward’, it may be better to use a model that explicitly recognizes the complexity of journeys undertaken and changes made, and as a result, recognizes that which should be spared the energies of ‘progress’. It may at times be wise to talk about the need for ‘endurance’ or ‘maturity’ rather than infinite ‘progress’. Franz Mairinger was given to reciting the phrase ‘time, age, maturity’ to overeager young pupils (such as myself), to emphasize the need for young riders to be patient in their pursuit of riding excellence. He maintained that no amount of physical and technical prowess, although they are essential, can replace experience and wisdom. Similarly, no amount of eco-efficient technology will avoid the need for wise practice stemming from patient, deep engagement with the human and more-than-human worlds. Technology may complement wisdom and patience, but it can never replace it.
As Pocock notes, behaviour in social time may be a ‘complex series of interactions between different modes of behaviour, of which tradition is…one’ (1989, 239). Not all those living in so-called developed nations are wholly dedicated to the business of modernizing and progressing. Some aspects of our daily lives will make use of ‘advances’ in technology and social innovation, some will involve backtracking to rebuild and reaffirm things that have been lost and some will involve providing space to simply exist in the moment to savour those traditional aspects of life that exist beyond cultural projects such as development. Such moments have been earned and appreciated in similar ways by people all over the world for millennia and it is difficult to imagine we meet them in a more sophisticated manner now than we have done in the past.

However, it is not always easy to integrate knowledge forms. Obviously, various forms of traditional knowledge span millennia and yet many cultures have failed to provide space for both power and patience, where the two exist. The experience and wisdom gained by the individual rider in the pursuit of equestrianism has far too often been submerged by the violence of political ambitions. Rulers of European armies in the past did not learn enough from the lessons of humility, self-discipline and tolerance their most accomplished cavalrmen gained from years of working with horses. The strength of the intimate, respectful and carefully cultivated relationship between horse and rider did not always extend sufficiently to the political arena of leaders bent on conflict and conquest. Clearly, recognition of the importance of diverse traditional knowledges has to be entrenched at a policy level, otherwise patient, local efforts may still succumb to the voracious appetite of the powerful. I discuss possible ways of achieving this democratically in Chapter Eight.

The study of equestrianism provides an opportunity to explore several key issues relevant to sustainability. We can investigate human understandings of the idea of ‘naturalness’ and the ontological separation of humans from nature, and the import of the human act of creating such categories. We can ask whether horses are ‘natural’, and whether the relationship between horses and people is ‘natural’? Some actor network theorists, for example, see horses as neither natural nor cultural artifacts, but as NatureCulture hybrids, defying placement into either category (Nash, 2005, 266). Through studying equestrianism, we can consider forms that relationships between the human and the non-human may take, particularly in relation to matters of power and control.
As a form of traditional practice, classical equitation exists as a reminder that the technological cleverness which drives human progress can complement but not replace traditional knowledge. Sometimes focus on both forms of knowledge is required and sometimes their conclusions coincide. In the case of equestrianism, scientific and technological innovations in veterinary science, husbandry techniques, equipment and other areas are widely embraced by riders and trainers, but remain peripheral to core activities. They are largely designed to enhance traditional practice.

The complementarity of scientific and traditional knowledge forms is often overlooked. Epistemological bias is apparent in some contemporary equine research, for example. Andrew McLean (2003) is one researcher of equine behaviour who demonstrates a tendency to misinterpret the nature and authority of traditional knowledge. He assigns epistemological authority exclusively to modern scientific enquiry, and is consequently unable to fully discern the overlaps which exist between traditional and scientific knowledge. He claims to have provided a paradigm shift as a result of his rational scientific enquiry into horse behaviour and the training methods he recommends as a corollary. He argues that he has finally provided humanity with ‘The Truth About Horses’, thanks to the power of science (McLean, 2003). McLean argues that problems with horse training ‘cannot be resolved by the traditional mind-set, or within the framework of mutual partnership’ (2003, 11).

The scientific methodology that McLean employs is valid and the research is useful. His recommendations about how to train horses are worth following. The problem lies, however, with his misunderstanding and consequent rejection of traditional knowledge. McLean’s contention that his work represents a paradigm shift and that it provides new knowledge is difficult to support. The methodology he uses might be novel in its application to horses, but the conclusions he reaches are virtually the same as those reached through thousands of years of the practice of classical equitation. The problematic mind-sets he identifies as part of traditional knowledge would be as loudly
decried by stalwarts of classical equitation such as Franz Mairinger as they are by McLean himself. 69

McLean feels sure that ‘otherwise rational’ people are threatened by the scientific objectivity that has lead him to his conclusions about working with horses, and implies that this indicates a flaw in traditional ways of knowing (2003, 13). However, it is not methodology, but conclusions which are challenging. The point he makes which proves difficult for many riders to accept is that horses do not think as people do and therefore that riders must take responsibility when things go awry - they cannot ethically or reasonably blame the horse. However, classical equitation sets this challenge for riders just as emphatically and authoritatively as McLean’s ‘objective science’ does. McLean comes close to recognising the power of traditional studies of equitation when he notes that the German Training Scale, developed according to classical principles and used by contemporary trainers, essentially captures the principles he espouses, for example (2003, 154). Ultimately however, the import of his own observations eludes him and he remains

69 McLean’s interpretation of contemporary training methods, which he confusingly relates to tradition, leads him to the conclusion that they ‘imply that horses had human-like abilities to reason, and that this fact alone reduced the chances of success’ (2003, 7). McLean similarly rejects the notion of mutual trust and confidence, on the basis that it implies anthropomorphism of equine behaviour. However, it is not unreasonable to use such terms to refer to observable states of equine being. To do so does not necessarily imply anthropocentric motive on the horse’s part - it merely enables people to talk to each other in comprehensible terms about how we interact with the horse. Furthermore, while it is difficult to prove that horses ‘love’ or feel emotions such as confidence in the same way people do, it is just as difficult to definitively prove that they do not. In the end, we do not need to have proof either way in order to work with horses.

McLean’s analysis of traditional knowledge is confused and poorly targeted - he has not understood the teachings of classical equitation. Franz Mairinger’s (1984) endorsement of democratic and respectful work with horses was not based on a belief that horses think like humans. He made it very clear that ‘Horses are Made to be Horses’ (not people) and that their intellectual capacities are very different from humans. Mairinger maintained that riders must not forget that the horse hasn’t as much intelligence as the human being, and because of that we must adjust our thinking to the horse’s thinking. The biggest mistake most riders make is that they expect the horse to think in the way they do, which is impossible. It is the rider’s duty to realise that he has to adjust his thinking and try to think and feel as the horse does (1984, 21).

Despite McLean’s mistrust of traditionally informed ways of knowing about horses, Mairinger and he appear to be in complete agreement about the fundamentals. The routes they took to find out about such things were different, but their conclusions are virtually identical. Mairinger argued that because of human’s superior ability to reason riders must act in a respectful and democratic manner, accepting responsibility when things go wrong in training. Since we are the more intelligent in terms of our ability to reason, he argued, we ‘must not blame the horse when things go wrong. The rider is at fault’ (1984, 55). This echoes McLean’s disdain for the tendency of some riders experiencing problems to blame the horse for being ‘lazy’, ‘stubborn’ or ‘bad’, or to view horses who are doing what the rider wishes as ‘brave’, ‘determined’ or ‘loyal’ (2003, 10). Both authors lament the terrible toll in equine and human life that occurs as a result of failures to appreciate the lessons they describe.
dedicated to the authority of ‘objective science’ above traditional knowledge. This is a common form of ideological blindness, and one that afflicts sustainability as well.

A study of the history of equestrianism serves to remind us that human history and progress simply cannot be understood in isolation from the non-human world. This is not just an empty metaphorical exercise. Human history itself cannot be adequately understood without investigating the way our own path has been inextricably bound to the culture of the horse.

An exploration of the history of equitation reveals how difficult it can be to extricate the life-enhancing qualities of traditional knowledge which are based on intimate and respectful relationships from those aspects of power and conflict which may accompany and dominate them. Countless thousands of horses have literally carried us and our political ambitions into war, where the deeply personal bond between horse and rider falls as a bloody sacrifice on the altar of national power. Such tangles of forms of power and relationships form a central dilemma for sustainability theorists and practitioners as well.

I mentioned previously that while traditional knowledge has a certain degree of permanence, it can change, and this is certainly true of equestrianism. One remarkable aspect of the history of equitation, for instance, is the way that attitudes to discipline and control of the horse shifted as a result of knowledge gained painstakingly over hundreds of years. Although Xenophon advocated thoughtful and respectful interaction with horses, this was not always the case. A clear trend can be seen from the brutal practices of the sixteenth century to the more sympathetic attitudes of the eighteenth, reflecting certain parallel cultural struggles over issues of discipline and control. Raber and Tucker note that the ‘apparently disparate issues’ of equestrianism and notions of control and discipline connect in a multifaceted way, intersecting in areas as diverse as the nature of political power and command, the mastery of nature by science and technology, and the shift towards increasingly civilized norms of behaviour (2005, 14).

Equestrianism might be seen as a long running experiment on the virtues of certain types of relationships between the human and the non-human. If we are wise, we can learn
from the bitter experience of generations of riders who tried force and dominance but eventually found that it was connectivity, understanding and empathy which worked, rather than repeat them by trying to wield the power of modernity to rein in a recalcitrant environment. We do not have hundreds of years, or even decades to rerun the experiment.

**Conclusion**

The emergence of the discourse of sustainability within the current political and economic hegemony is a positive sign. However, we must seriously consider the risks of depending too heavily on the form of power wielded by corporations. Sustainability demands reconciliation between power and patience, a synthesis which has too often eluded us in the past. Sustainability might be best understood as the sort of postmodern exercise that Borgmann describes - an effort to embrace both power and patience in a positive, life-affirming synergy.

Just as we understand ecological systems as complex networks of niches and overarching systems operating in various time frameworks, attention to other ways of being in the world, such those informed by aspects of traditional knowledges like classical equitation, should feature more prominently in the discourse of sustainability, if we are to find the equilibrium that Saul outlines. Notions of permanence, endurance and maturity are needed to accompany and temper the ‘onward and upward’ notions of progress that have gained ascendancy within sustainability. Attention to such considerations might help to expand the limited geometry of thought currently popular amongst elite proponents of sustainability. It would permit a more diverse and inclusive version of sustainability to gain prominence - one that is more reliably open to the diversity of human cultures as well as to non-human systems.
Chapter Eight
Networks for Sustainability

Introduction
In this chapter I explain the need for corporations to participate in network approaches to promote sustainability, rather than assuming the lead at all times. I describe the market - a network to which corporations demonstrate great commitment - as being constituted by weak interactions involving both humans and the more-than-human world, and consider the implications of this for sustainability. I then indicate a number of other important elements that should be considered in network approaches for sustainability. Finally, I explain how community engagement/deliberative democracy techniques provide a crucial avenue to deal with complex networks in practical terms for sustainability.

Networks and sustainability
Sustainability explicitly sets out to consider the complex interrelationships that exist in expansive, heterogeneous socio-cultural and biophysical networks. Systems involving the human and more-than-human worlds are examined. Network approaches form part of the essential logic of sustainability because they permit a comparatively unrestricted flow of information and ideas from many sources, bringing the interests of a diversity of actants to the table. This allows as many relevant stakeholders as possible to gain access to the discourse and participate in dialogue for sustainability.

The call for broad-based inclusion of voices in the discourse of sustainability is not just based on ideological commitment to democracy or fair play - it is a practical requisite. The efforts needed to move towards sustainability are so daunting and complex it is simply not possible to assign them to any one part of society (Saunders et al., 1995, 659). As Tonn (1999) points out, since individuals, businesses, governments and non-government organizations are part of the problem they must therefore contribute collaboratively to finding solutions. Furthermore, if government agencies or large organisations such as MNCs are left with the job of steering us to sustainability, others are given tacit approval to avoid responsibility to take action themselves (Saunders et

70 I assume economics to be a subset of the sociocultural realm.
In addition, sustainability issues are not contained within geographical boundaries and therefore must be approached through networked competencies, incorporating different ways of knowing and different value systems. To do this we need to access the formal and informal links of... (networks). A successful network will ensure that all of the stakeholders are involved, all individuals accept “ownership of”, or “responsibility for”, the...issue and that all individuals are empowered to act. Co-operation, trust, information sharing, and joint action replace sectarian interests and organizational boundaries (Saunders et al., 1995, 660).

Existing network approaches to sustainability in business
Network approaches are being implemented within the business sector in the hope that they will support sustainability. It is increasingly being recognized that sustainability issues cannot be tackled successfully by any single company in isolation (Bendell, 2005, 27) and that corporations must work with government agencies and civil society organizations to resolve the challenges of sustainability, particularly in developing countries (Ite, 2007; Eweje, 2007). For example, Ite examines Shell’s experience with implementation of CSR in Nigeria over many years and concludes that:

sustainable development in the region requires significant collaborative effort, which is beyond the responsibility of Shell in Nigeria. All the stakeholders in the development of the Niger Delta must recognize and accept the fact that no single actor in the development process (i.e. government, business, civil society, etc) or a sector of the economy (i.e. public or private) can be expected to provide all the solutions to social, economic and environmental problems of the region (2007, 13).

However, the process of multi-sectorial engagement is a difficult one, as evidenced by Shell’s attempts to adopt CSR in Nigeria. Progress in achieving desired outcomes has been slow, despite the company’s recognition of its responsibilities to assist in the promotion of community development in the region, and the need for network approaches to do so (Ite, 2007). Ite observes that one barrier has been the company’s inability to translate sustainability policies developed at corporate level to results at the community level due to:

internal corporate culture, and external constraints including company-community relations, corruption, unnecessary bureaucracy, transparency and governance (2007, 12).
Interestingly, some research indicates that corporate efforts to participate in local community development projects in regions where human rights abuse is endemic actually help to strengthen civil society and therefore democracy, thereby indirectly working to reduce human rights abuse (Theobald and Arkani, 2007).

For corporations, attention to the influence of stakeholders is familiar territory, since ‘Companies do not exist in a vacuum’, as is stakeholder theory’s implicit requirement to attend to networks (Bremmers et al., 2007, 215). Sustainability’s normative imperative to consider the needs of future generations as well as existing stakeholder groups suggests that stakeholder involvement ‘could be a key element for enhancing sustainability’ (Bremmers et al., 2007, 216). Key external stakeholders can provide valuable input into product development in order to promote product stewardship (Bremmers et al., 2007, 216). Some analysts distinguish between primary and secondary stakeholders, suggesting that corporations’ continuity is significantly affected by their relationship with primary stakeholders such as clients or governments, while secondary stakeholders such as community members exert less direct, but often important, influence (Bremmers et al., 2007, 216).

Whatever categorization is applied to stakeholder groups, it is important to ensure that stakeholder input and/or collaboration is effective. The outcomes of a study of the environmental management system (EMS) development of 2620 Dutch agri-food companies of various sizes suggested that private companies need ‘a major shift in focus’ by supplementing ‘their external focus with respect to business performance’ with ‘an external focus on EMS development, with the support of government, intermediaries and other stakeholder groups’ (Bremmers et al., 2007, 229). These researchers emphasized the need for business to work with government, for example, in a manner that engenders and maintains trust, cooperation, equality and mutual understanding in order to optimize EMS development (Bremmers et al., 2007, 229). It is argued that in this context ‘dialogue will take the place of monitoring and control’ and that ‘public-private dialogue stimulates a co-operative attitude, which is a prerequisite to benefiting from collective efforts to reduce environmental impacts’ and thereby enhance sustainability (Bremmers et al., 2007, 229). As a corollary, the use of environmental permits and reporting for the entire supply chain, rather than for
individual companies, is recommended, which would help to ‘stimulate dialogue and cooperation’ (Bremmers et al., 2007, 229).

The World Business Council for Sustainable Development (WBCSD) has initiated a range of efforts involving regional networks (WBCSD, 2002e). The WBCSD’s regional network is

an informal confederation of more than 40 independent organizations united by their commitment to providing business leadership for sustainable development in their respective country or region...All members of the regional network believe in dialogue and cooperation with governments and civil society in order to advance the sustainability agenda (WBCSD, 2002e, 1).

Various projects have been launched under the WBCSD’s regional network scheme. For example, in the Czech Republic, business representatives worked with the WBCSD and stakeholders within the country to develop three futures scenarios. In Peru, civil society leaders worked with business councils to develop a shared vision for sustainability by 2021. Practical efforts have also been stimulated - in the Philippines, business has worked for a number of years to find sustainable ways of managing waste. There are many more examples of such work undertaken with the WBCSD (WBCSD, 2002e, 2).

Personnel from both the NGO Oxfam and the MNC Unilever, after working together to begin to address issues of endemic poverty in regions in which the company operates, identified the need to tackle poverty from a number of economic angles (WBCSD, 2005a, 2). Oxfam workers’ experience in the collaboration led them to the view that reliance on a single multinational’s efforts does not guarantee improvements for the poor. They concluded that ‘There need to be other social institutions and resources in place, such as credit and savings schemes, marketing associations, and insurance schemes, as well as diversification of income streams to avoid dependency on any single company or market’ (WBCSD, 2005a, 2).

Attention to the networks within which business is nested sometimes brings lessons about the way business operates and the frameworks which constrain it. Nike, for example, began to deal with ethical issues on its own, but eventually came to the
conclusion that it is preferable to work towards systemic change throughout the entire industry (Bendell, 2005, 27). This conclusion derives from the understanding that the company should not be thought of as a closed system, and that its future ‘depends on the way customers, suppliers, investors, regulators and others relate to it’ (Bendell, 2005, 28). In a broader sense, it is recognised that even whole industries cannot effect substantial change without broader systemic societal transformations. The imperatives of the financial markets, for example, constrain corporations’ actions. Bendell reasons that ‘however we may wish to talk about the compatibility of profits with people and planet, the current societal frameworks for business are not making this a reality. The implication is that we have to make this so by changing those frameworks’ (2005, 28).

This far reaching perspective is sustainability territory - it encapsulates the need to attend to networks of interrelationships whether you are part of a company trying to become sustaining or some other ‘stakeholder’ in sustainability. It promotes integrated visions synergistically created by collaborative effort, rather than stitched together from disparate opinions, expert or otherwise. As a way to achieve this within the business sector, Bendell calls for ‘transcending leadership’, where managers see and reach across borders ‘to engage others in dialogue and action to address systemic problems’ (2005, 29). This style of leadership

transcends the boundaries of one’s professional role and the limits of one’s own situation to engage people on collective goals. It is a form of leadership that transcends a limited conception of the self, as the individual leader identifies with even greater wholes. It is a form of leadership that transcends the need for a single leader, by helping people to transcend their limited states of consciousness and concern and inspire them to lead (2005, 29).

Bendell’s assertions are very much in keeping, at least rhetorically, with the style of engagement associated with deliberative democracy, which I present later in this chapter as having the potential to facilitate sustainability.

Money: endogenous control in the market network

The WBCSD focuses on the potential for the market to provide significant benefits for sustainability. The global market network is touted as the optimal route to eco-efficiency and therefore sustainability. However as I will show, the market is a
network of shallow relations and therefore its scope to contribute to sustainability, while important, is also limited.

Currency, real or virtual, is central to market activities and money itself is a vessel for weak interpersonal relations. McMahon (2002, 11) describes money as a solution to a problem of information processing that arose as trade moved beyond barter or the sort of transactions undertaken between participants with an established relationship. Money forms part of a system designed to record the value of earlier exchanges and to dispense with the need for deeper knowledge of market participants. Money used in the market can be thought of a form of power in accordance with theories of social exchange71. McMahon explains that money is

an abstraction of the economic exchanges which preceded its current value, and has itself subsequently undergone further abstraction in its own form, for example, from cattle to coins to paper to electronic signals (2002, 11).

Money is a symbolic gesture of superficial interaction - it is the acknowledgement of a lack of intimate knowledge or strong relationship. Money is traded as a form of guarantee supported by legal structures in lieu of more deeply established trust. The power that accompanies money is attractive partly for similar reasons. Accumulated currency - that is, accumulated guarantee - is useful when we are dealing with people from other groups at a physical or emotional distance that means we are psychologically predisposed to view them as ‘other’ (Perdue et al., 1990; Vaughan and Hogg, 2002, 297).

In contrast to the currency of knowledge and power that exists in corporations as exogenously controlled hierarchies, ‘money (is) in effect the information currency of an endogenous control system’ - the market, in other words (McMahon, 2002, 11). The endogenous tendencies of the market allow for weakly democratic expression of will, in some senses. Consumers have a certain amount of freedom to chose which products or

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71 Emerson, whose work informed much of the work done in the area of social exchange research defined power in relational terms as a function of the dependence of one actor upon another. In a particular dyad (A, B) of exchanging partners, the power of one actor A over another actor B is a function of the dependence of B on A for valued resources and behaviours...power is treated explicitly as relational...and power is potential power and is derived from the resource connections among actors that may or may not be used” (Cook and Rice, 2003, 57).
services they prefer. As a result, capitalism is interpreted by many to mean the same thing as democracy, or at least as being essential to democracy.

**The market as a network of weak ties**

Is the market really founded on the actions of competitive, self-interested individuals, or is this a tendency which surfaces as a result of some other condition? The market in economic theory is typically interpreted as a bastion of competitive individualism where economists focus on ‘issues of efficiency in allocation’ between self-interested actors (Muller, 2002, 388)\(^72\). Similarly, actor network theorist Callon starts his analysis of the market by adopting the premise that ‘agents pursue their own interests and to this end perform economic calculations which can be seen as operation of optimization and/or maximization’ (1999, 183). Muller argues, however, that while such perspectives ‘help us to see an aspect of reality…those concerned with the moral implications and ramifications of the market’ - as sustainability theorists are - ‘get a very skewed picture’ when they view the market solely through disciplinary lenses such as this (2002, 388). McMahon’s (2002, 4) reasoning that money is a convenient way to process information beyond the limits of close personal and group ties suggests an alternative - that the market itself is simply an institutionalized way of organising weak ties in which self-interest surfaces easily, but is not a requirement. Furthermore, when actors from different social groups engage in market transactions, intergroup behaviour driven by ‘very basic social-cognitive processes’ (Hogg and Abrams, 2003, 422) might add to the competitive urge\(^73\).

The market which corporations operate in and which many hope will offer ‘solutions’ for sustainability can be seen as the embodiment of a form of social exchange, a form of relationship. It involves people interacting with one another. More than this, as ANT sees it, the market ‘is an institution which mixes humans and non-humans and

\(^72\) From the philosophical point of view of individualism, altruism can be dismissed as just another manifestation of egoistic behaviour, lending more force to the argument that enlightened self-interest is the only morally justifiable foundation on which to build a market. However, social-psychological research has lead to the tentative conclusion that ‘altruistic motives…exist that are independent and irreducible to egoistic motives’ (Batson et al, 2003, 291). It seems that ‘feeling empathy for a person in need produces altruistic motivation to help that person’ (Batson et al, 2003, 291).

\(^73\) Hogg and Abrams explain that intergroup behaviour is influenced by the way people create social categories that segment ‘the world of people into groups…People define themselves in terms of the groups they belong to…Because of this, intergroup relations are characterized by a struggle over status and prestige…Intergroup relations are intrinsically competitive and ethnocentric, (and) improvement can be difficult and slow’ (2003, 422).
controls their relations’ (Callon, 1999, 182). The market is a series of actions undertaken through the sort of weak social ties Granovetter (1973) and Felmlee (2003) talk about, as well as weak ties between humans and the more-than-human world. Market relations are polite and respectful at their best. At its worst, the market allows thoughtless and often exploitative interaction between subjects and objects not seen as equally valuable, or simply not seen at all. It does not deal explicitly or ideologically with deep relationships within human society, or between humans and the more-than-human world, even though these often support business activities. As Callon explains agents enter and leave the exchange like strangers. Once the transaction has been concluded the agents are quits; they extract themselves from anonymity for a moment only, slipping back into it immediately afterwards (1999, 183).

In fact, market agents may remain anonymous throughout the entire transaction. People who are completely unaware of each other’s existence can be linked through a series of exchanges within the market (Levačić, 1991, 21). This social gap between market agents usually means there is a sort of conflict of interests, and this is resolved by allocating a price to whatever good or service is at the centre of the transaction (Callon, 1999, 183). Non-human actants caught up in the market are also separated from their foundational contexts in order to be traded. Deep links must be absent if ‘commodities’ are to be created and sold. The market operates, says Callon, by cutting objects of sale free from their attachments to human and non-human anchors. Non-market items become commodities by a process of decontextualisation, disassociation and detachment (Callon, 1999, 189). In other words, the connections between the networks of market agents and commodities in the market are weak.

In the contemporary era, the influence of weak interpersonal connections is multiplied by the globalizing technology of the information age. The use of electronic information technology (IT) streamlines and accelerates efficient exchange in vast networks of weak ties. This has lead to a spectacularly efficient provision of goods and services (McMahon, 2002, 1) although this has arguably been achieved by externalizing many financial, environmental and social costs. Efficiency is a useful measure of the sort of

74 The strength of ties is determined by the number of links between actors - strong ties exist where there are many links between actors, and weak ties are supported by only one or a few links (Felmlee, 2003, 392).
success achievable within this system, and has been extended to become eco-efficiency in the name of sustainability75.

**Relating individualism to weak ties**

If the market is interpreted as a network of weak interactions, the proposal that the enlightened individual (Smith, [1776] 1991) should be thought of as the engine of the market economy faces reappraisal. Economic sociologists ‘balk at the notion that individual motives (or the mere aggregation of individual motives) can properly explain transactions between social actors’ (Cook and Rice, 2003, 70). The theoretical focus on individualism within economics is reductionist, resting on the proposal that collective outcomes can be anticipated by examining individual actions. However, it can be argued that the central position given to individualism in conventional economics is predicated on the organisation of weak ties within the market. This stance immediately permits systems analyses, seeking ‘“emergent” properties of social systems’ in the tradition of social exchange theorists such as Blau (Cook and Rice, 2003, 54). It also offers hope that we can ameliorate the detrimental aspects of unconstrained and overly rapid cultivation of individualism that Robinson, a professor of social psychology, indicates:

> is typically associated with rises in the indicators of social breakdown. Whether political and other elites know this perfectly well, and see it as ways of entrenching their privileges, or whether they are simply ignorant about social experience and behaviour is, of course, an issue of considerable longevity (Robinson, 1996, 361).

Robinson’s last comment can certainly be directed at corporations and other elites of the global political economy. This issue can no longer be ignored, however. The intellectual struggle to come to grips with the implications of individualism in relation to the general well-being of human and more-than-human existence is central to the discourse concerning business and sustainability.

The crucial point of departure for analysis is that market actants interact *weakly* with each other in networks, not that they are setting out to attend primarily to their own interests. People have less information about actants with whom they are weakly

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75 See Chapters Two and Four for discussions about eco-efficiency.
linked than with those they know more intimately. This makes it difficult to establish deeply informed empathy with distant market participants, hence it may appear that market actors are primarily motivated by self interest. In addition, it can be argued that the tendency towards competitive individualism is enhanced by its acceptance within certain societies as a normatively positive characteristic. As Tajfel pointed out, ‘social conduct is to a very large extent determined by what an individual deems to be appropriate to the social situation in which he finds himself. His conceptions of what is appropriate are in turn determined by the prevailing system of norms and values...of the social system in which he lives’ ([1981] cited in Turner, 1996, 21). Once individualism had been identified as related in some way to economic activity, it was normatively endorsed as a prerequisite, thereby possibly influencing the way in which people have acted since then.

However, if we accept the premise that the market is characterized by weak relations, we no longer have to argue about whether enlightened self-interest is a morally justifiable basis for economic life or not. The tendency towards self-interest can be seen as a conceptual artifact of the type of interaction undertaken in a network of weak ties between different social groups. Lack of empathy is not a requisite factor of robust economic exchange, it just tends to appear. Actors may indeed often be focused inwardly as they operate in the market but this is not inevitably true, as evidenced by trends such as the rise of corporate social responsibility (CSR) and ethical investment.

Furthermore, the theory that markets function optimally when actors have access to adequate information seems inappropriate if the market consists of institutionalized weak interactions. By definition, actors relating weakly are unlikely ever to have extensive information about most of the market activities they engage with. There simply is not enough time to establish deeper relationships in every case or research every product. ‘Imperfect markets’ are actually to be expected under such conditions. A perfect market is only theoretically feasible if enlightened self-interest is the core driver. There is nothing to say that self-interested individuals cannot be deeply connected and therefore highly informed. However, if weak interaction rather than self-interest is seen as the foundational characteristic of market transactions, the suggestion that adequate information can be attained suddenly seems misplaced. If more extensive information is available it would mean that the market’s weak ties had
been deepened and other links created. In other words, we would have moved beyond purely market transactions. In this case, we would not have achieved a perfect market, we would have integrated the market satisfactorily into broader contexts that allow for sufficient communication.

The interpretation of the market as a network of weak interpersonal relations also sidesteps arguments about whether the market is inherently good or bad as weak interactions may have positive and/or negative impacts. The market is useful in some cases and not in others, just as it is sometimes appropriate for people to act at a polite distance while at other times it is necessary to work hard to establish more profound relationships. Ultimately, it is a question of which depth of relationship is appropriate at various times and for various ends, and it becomes important to understand how one influences the other. Shallow and deep relations can be understood as interwoven levels of interaction rather than oppositional choices. After all, famous analysts of the economy such as Schumpeter and Hayek have noted such links themselves:

> Schumpeter saw the drive to found a transgenerational familial fortune as an important spur to entrepreneurial activity, and Hayek pointed to the desire to provide opportunities for one’s children as central to many life decisions in a capitalist society (Muller, 2002, 393).

In fact, ‘many analysts, from Smith through to Hayek, have emphasized that self-seeking behaviour…can become a major barrier to the market’s effective functioning’ (Muller, 2002, 393). Such observations are difficult to reconcile with the notion that enlightened self interest drives the market, but fit easily with an understanding of the market as a network of weak ties.

The way that we are able to imagine and talk about ‘the market’ as if it was an entity in its own right is also a function of the distance from which actants within the market relate to each other. Since we are comparatively disengaged from other people and the more-than-human world as we trade, it is correspondingly easy to release ‘the market’ into the ether as an arena dedicated to the pursuit of self interest. The disembodied and ostensibly benign act of trading, rather than the people doing the trading, becomes the centre of attention. The market is not benign, however, it is merely shallow.
Economic sociologists maintain that ‘economic exchanges are rarely purely economic; rather they are “embedded” in networks of ongoing social relations’ (Cook and Rice, 2003, 70). In contrast, Callon asserts that the market is not embedded in networks, and that it is ‘not a question of adding social, interpersonal, or informal relations in order to understand their functioning. A concrete market is the result of operations of disentanglement, framing, internalization and externalization’ (1999, 192, emphasis in original). From the perspective of the strength of social relations (Granovetter, 1973; Felmlee, 2003), however, the weakness of ties can be seen as the precondition which allows such disassociations to take place. ‘Purely economic’ transactions are themselves social relations, and as such inevitably provide the possibility of the emergence of other forms and strengths of social relation.

The benefits of weak interpersonal interaction

The reliance on weak social interrelationships is not necessarily an inherently impoverished state of affairs - much human interaction is, of necessity, reasonably superficial. Life would be impossible if we had to engage deeply with every entity or situation we came across. In fact, this is part of the reason the market is so successful as an idea. It gives actors a legitimate way to interact as calculating agents with others in the global population of people to whom we are loosely connected. We do not have enough time to relate intimately with all, a point that becomes increasingly obvious as the global human population increases and the technology we develop makes it increasingly difficult for us to avoid one another.

Furthermore, it has been proposed that the existence of shallow, or weak, ties between people or groups is rather more than simply an inadequacy due to lack of time or effort. Weak ties offer certain advantages. They are essential sources of diffusion of information, opportunities for mobility, and community organisation. Individuals with strong, close ties to each other, such as family members and good friends, are likely to possess the same kinds of information, whereas new information is more apt to be obtained from those whose ties are relatively weak and distal (Felmlee, 2003, 395).

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76 Callon endorses the idea that ‘the market as a method of co-ordination implies the existence of agents capable of calculation’ (1999, 183). He suggests that for calculative agents to operate within the market they must be able to i) establish a list of the possible states of the world; ii) rank these states of the world (which gives content and an object to the agent’s preferences); iii) identify and describe the actions which allow for the production of each of the possible states of the world (1999, 183).
The market also enables us to access the talents of others without having to expend large amounts of time building a basis on which to interact. In market transactions, laboriously obtained trust in others is replaced by trust in institutions and laws which support market activities. The relationship between trust and market structures has been observed in studies. For instance, Guseva and Rona-Tas (cited in Cook and Rice, 2003, 71) compared the credit card markets of the USA and post-Soviet Russia. They concluded that in the USA credit lending is a highly rationalized process that converts the uncertainty of defaulting debtors to manageable risk. Lenders take advantage of highly routinized systems of scoring potential debtors, through the use of credit histories and other easily accessed personal information. This system allows creditors in the United States to be open to any individuals who meet these impersonal criteria (Cook and Rice, 2003, 71).

In contrast, when there are high levels of uncertainty actors tend to rely more on interpersonal ties in order to provide ‘some security in the context of high levels of opportunism’. Social exchange theorists observe that the existence of uncertainty promotes commitment between people while reducing the amount of exchange occurring in networks (Cook and Rice, 2003, 71). This appears to be the case in post-Soviet Russia. Russian credit suppliers faced with very high rates of default must rely far more heavily on trust based on interpersonal relationships when allocating funds to prospective clients, since they are not supported to the same degree by a rationalized process. In Russia, there is a significant lack of the sort of information about people’s credit history that American lenders commonly have access to. As a result, ‘Loans officers make idiosyncratic decisions about potential debtors, based largely on connections to the banks, or known customers of the bank. In this way defaulting debtors cannot easily disappear, as they can be tracked through these ties’ (Cook and Rice, 2003, 71).

There are many examples of businesses from other countries interacting with each other in ways that increase the strength of the ties between them. DiMaggio explains that ‘traditional arms-length market transactions (between companies) have become more intimate. New forms of coordination - “relational contracting” - have emerged that
entail much less commitment and control than bureaucracy, but more binding ties than simple market exchange' (2001, 5).

Whether the theoretical emphasis is on the weak ties discussed in economic sociology (Felmlee, 2003; Granovetter, 1973), or the processes of disassociation that Callon (1999) refers to, it is agreed that market interactions can lead to agents’ unwitting engagement with broader, deeper concerns (Muller, 2002; Cook and Rice, 2003, 70; Callon, 1999). Muller points out that while ‘capitalism is sometimes blamed for racism, sexism, and chauvinism, the most sophisticated analysts (whether of the left or the right) have noted that the market tends to break down barriers between groups’ (2002, 401). Callon observes that ‘in a network of gifts, (the agent) gets tangled in links and relations that s/he does not want and from which s/he cannot disentangle him or herself’ (1999, 193). Similarly, economic sociologists maintain that ‘a key behavioural consequence of embeddedness is that it becomes separate from the narrow economic goals that originally constituted the exchange and generates outcomes that are independent of the narrow economic interest of the relationship’ (Cook and Rice, 2003, 70). Deeper relations can begin to form, leading to ‘gift giving, forming new joint ventures across old ties, and remaining in a relationship despite the presence of new, potentially more profitable partnerships’ (Cook and Rice, 2003, 70). Preliminary contacts made through the weak ties of the market can, but do not necessarily, open the way for deeper connections.

Despite the benefits and inevitability of weak ties, however, it would be a mistake to assume that the market is the only possible way of organising endogenously controlled global networks of weak interrelations. In certain respects the market is flawed. As Callon notes, the market is particularly problematic when the nature and consequences of actions taken within it are uncertain, and at its worst ‘when uncertainties turn into ignorance, pure and simple’ (1999, 184). Furthermore, violence can easily be enacted through the existence of weak social ties and poor intergroup understanding - this is how wars are organised, after all (Hogg and Abrams, 2003, 422). The market too, can act as a vessel of interpersonal or intergroup violence, just as easily as it can transmit good intentions between strangers. This violence, facilitated by conceptual distance between market actants, can be expressed as environmental destruction or as the social
inequity which is rife within capitalism, and on which it is argued capitalism depends (Muller, 2002, 403).

If we desire to promote innovative information flows as part of a sustainability strategy, a clear role exists for the market, or something like it, to support weak ties between people or groups of people. Despite its practical benefits, however, it is important to remember that to rely on the market to solve our problems is to rely on superficial relationships between human beings and others. Suspicion of the dominance of non-economic spheres of life by ‘market forces’ is nothing new:

For at least 200 years...from Möser and Burke down to Jürgen Habermas in our own day, intellectuals have repeatedly expressed concern that the modes of thought and action characteristic of the market would permeate all human relations. The result, they warned, would be the impoverishment or disabling of the very institutions on which human flourishing depends (Muller, 2002, 397).

If they are thought of as weak interactions within society, modes of thought and action characteristic of the free market do indeed permeate all human relations, and as such are not necessarily problematic. The problem, however, comes when they are reified above all other forms of interaction to the detriment of human and more-than-human existence. ‘Free market solutions’ to promote sustainability are based on the dubious assumption that it is possible, even advisable, to rely exclusively on extensive networks of the superficial to supply our deepest needs.

**Networks of knowledge**

Within the business sector, the importance of knowledge as the basis for the new economy is recognised: ‘Knowledge has irrevocably replaced other more traditional, physical assets as the single most important factor in the creation of wealth’ (Birchall and Tovstiga, 2005, 8). The conceptual products of innovation tend to be the forms of knowledge assumed to be most relevant to business, rather than others such as tacit or traditional knowledge, however. ‘Knowledge frontiers are moving faster than ever,’ argue Birchall and Tovstiga, with the result that ‘in almost every major discipline up to 90 percent of relevant knowledge has appeared in the last 15 years’ (2005, 8). Faith in this heroic expansion of knowledge produced at the juncture of science and economics
nothing, least of all demand, ensures an “economic” answer to any problem caused by our extraordinary economies. To expect science and technology to save us from an inherently unsustainable economy is a lethal indulgence in the fallacy of the free lunch, as if knowledge could remain rich and creative when everything around it is weak and compromised. It doesn’t work that way (2004, 283, 284).

The importance of knowledge to human survival is clear. Allen asserts that ‘We are now at a point where the global urban net is practically coextensive with the sapiens ecology. In the process, we have made human existence depend more than ever on the accomplishment of knowledge’ (2004, 214). If we are dependent on knowledge, however, we cannot afford to weaken our prospects by excluding important forms simply because they are off the radar. The principle that diversity gives rise to resilience and the ability to adapt, well understood by biologists, applies just as importantly to knowledge. Allen is on the mark when he argues that

the accomplishment of knowledge cannot be cultivated by mere unknowing demand; knowledge grows with realistic confidence, not under uncertainty or desperation. By the time our all-too-human desires cross critical, irreversible ecological thresholds it will be too late to expect vitality from a baffled and demoralized culture of knowledge (2004, 284).

Traditional, Indigenous and/or local knowledge

While scientific knowledge funded according to the directives of capitalist progress may be useful for sustainability, it needs to be embedded in broader knowledge networks. We must also consider different ways of knowing and value systems which bring with them a variety of temporal orientations. Western ideas of ‘progress’ through time are clearly very important for some aspects of sustainability. However, much that people from all cultures do to sustain themselves and the more-than-human world is guided by knowledge gained through the recurring experiences of generations - i.e. by traditional and/or Indigenous knowledge, as I argued in Chapter Seven. While traditional knowledge cannot be thought to be perfect or necessarily ‘in harmony among humans or between humans and the natural world’, effort must be made to ‘respect cultural diversity in close relation to ecological diversity within the framework
of democracy’ (Kothari and Parajuli, 1993, 226). Traditional knowledge may not be any more perfect than scientific knowledge, but it is just as important.

If we accept that human knowledge and existence depends on our relationships with the more-than-human world, the call to include diverse ways of knowledge becomes a logical necessity. Once we acknowledge that nature cannot be ‘developed’ by humans, but that the human and more-than-human worlds change together, it is clear that the knowledge that underpins traditional cultures’ ‘state of embeddedness in nature’ (Kothari and Parajuli, 1993, 228) cannot be regarded as ‘primitive’ or inferior to scientific knowledge. Scientific knowledge must be applied in harmony with other forms of knowledge. It is essential that network approaches for sustainability engage traditional, Indigenous and local knowledge so that we are able to reconcile the ‘political economy of profit and the moral economy of provision’ (Guha and Gadgil, cited in Kothari and Parajuli, 1993, 229).

Further than this, we must draw a diverse range of values, beliefs, interests and knowledges into dialogue for sustainability. In fact, as Barns explains, it is only possible to discover what sustainability means in particular communal and political circumstances through ‘processes of civic dialogue’ (1999, 19). Sustainability simply cannot be provided solely by corporate derived science and technology, even though it has much to offer. Neither can it be assumed that successful traditional modes of existence can be simply transplanted from one social, economic and/or environmental context to another.

Kothari and Parajuli (1993) have studied issues relating to water use, technology and community in agrarian contexts in India. These researchers argue that in order to achieve sustainability, there is a need to ‘involve the whole matrix of democracy, governance and participation’ (Kothari and Parajuli, 1993, 231). They conclude that fundamental questions must be answered before events proceed: ‘What is the resource for? How should it be used? Who decides?’ (Kothari and Parajuli, 1993, 231). The next step should be for ‘critical discourse…(to interrogate) how the distribution of water decides what kind of agriculture to practise’ (Kothari and Parajuli, 1993, 231). The corporate notion of what sustainable agriculture might look like is not assumed to be the starting point. Corporations do not necessarily have to ‘lead’. Communities
might decide that the most appropriate thing a corporation can do in the name of sustainability is to leave them alone. At other times, corporations might be invited to participate.

**Forms of knowledge within business**

Diverse perspectives that exist *within* business organisations must be integrated, for the sake of sustainability generally but also for the sake of the organisation itself. In business, experience has shown that sustainability strategies which are derived from a narrow range of opinions, especially those handed down from above, are unlikely to be appropriate (Vorley, 2004, 35).

Robert Shapiro’s efforts within Monsanto in his capacity as CEO illustrate the problems associated with a top down approach to the formulation of sustainability strategies. A bold vision of sustainability emerged under his guidance. Unfortunately, it was debilitated by its reliance on the comparatively uniform and narrow views of a small number of managers from the upper levels of the company (Vorley, 2004, 35). It was observed that ‘Shapiro apparently surrounded himself with a handful of like-minded biotechnology enthusiasts, so there were few voices in that inner circle to provide a reality check’ (Vorley, 2004, 36). For the most part, the company’s employees were not adequately engaged during the formation of sustainability strategies. This meant that Monsanto’s sustainability vision was of little relevance to the majority of the firm’s workforce and therefore did not provide the long term results that Shapiro had envisaged.

Despite ‘parading sustainability stars [such as Paul Hawken] through its corridors’, Monsanto’s ‘rank and file never internalized what the stars had to say’ (Hart cited in Vorley, 2004, 36). Little that Monsanto did resembled ‘engagement’ of concerned external stakeholders either - the company demonstrated a pathological inability to listen (Hart, cited in Vorley, 2004, 36). Despite its pro-sustainability rhetoric, Monsanto managed to give the impression that it was trying to gain control of the world’s seed supply, silence critics, intimidate recalcitrant farmers with legal action, indoctrinate less-than-convinced Europeans about the benefits of GM and use strong arm tactics to force the European Union to accept GM products (Vorley, 2004, 36, 37). The GM technology the company produced was unleashed with a ‘we can therefore we
will’ attitude driven by economic concerns, a stance which has been characteristic of the industry (McKenna, 2005, 47).

Monsanto almost completely missed the point that sustainability requires fundamentally new business approaches inspired by effective dialogue that allows discursive plurality. This represents far more than a magnanimous gesture. Without effective engagement within deep networks of knowledge, companies simply cannot know what the best approach would be. Neither the shallow mechanisms of the market nor top-down management approaches within business transmit the requisite information satisfactorily. Monsanto appears to have paid a hefty price for its failure to grasp this. Although Shapiro’s efforts received sharemarket support for a couple of years, his vision failed to impress in the longer term and the company weakened (Vorley, 2004, 36). Monsanto’s pharmaceutical division asset was stripped and its agricultural business separated and partly sold off (Vorley, 2004, 36). The company became part of what is now the Pharmacia Corporation (Vorley, 2004, 36). Vorley argues that such mistakes relating to public concerns about crop biotechnology ‘are the key factors behind the dramatic drop in the strategic value of agribusiness sectors within life science enterprises’ generally (2004, 35).

Ciba-Geigy’s turn of the century sustainability vision also suffered from a lack of appropriate engagement with its own employees and with other stakeholders. The company’s reliance on a narrow knowledge base result left its sustainability vision as more of a ‘self-justifying orthodoxy’ (Vorley, 2004, 36) than anything else. It was based on assumptions which automatically direct responsibility for sustainable agriculture to Big Business (Vorley, 2004, 36). The company’s stance was informed by beliefs that

- Low-input farming is low-yield farming. Efficient agriculture is sustainable agriculture. First World farmers are famine fighters. Plant protection is food protection. The next era of crop protection will be high-technology ‘precision’ agriculture and protection via the seed with biotechnology. The public is irrational and needs to be nursed out of its misconceptions through ‘effective communication’ (Vorley, 2004, 36, 37).

Such beliefs are misplaced, however. Evidence shows that the wherewithal for human survival often comes from sources other than government or business. In Africa for instance, food security depends to a large extent on maize and cassava, crops which
were ‘largely adopted outside the confines of formal government initiatives or market inducements’ (Richards, 2004, 283). Even from a business perspective it should be recognised that knowledge systems outside industry support enterprise. Innovation and opportunity for MNCs to prosper often emerge from sources external to them. In Western Australia, for example, the Oil Mallee Project was instigated by a community-minded scientist and is driven from the grassroots by farmer groups primarily interested in land care, with assistance from universities and other government research agencies. Now that it is becoming more established, this project offers opportunities for business groups, including MNCs, to invest and prosper. (See Box 8.1: The Oil Mallee Project.)

If new technologies are to be usefully created and incorporated in different cultural contexts, it is important that diverse ways of knowing are integrated into the process. As Richards points out, technology is not the enemy, although it can seem that way: ‘Anti-GM protestors imagine they are fighting a technique, whereas (arguably) their battle should be mounted against a system that monopolizes potential ways of viewing the knowledge gains of modern genetics’ (2004, 284). The world should not be ‘so tied up in intellectual enclosures that the results of differently configured projects cannot spread freely and create their own unpredictable webs of interconnection and interdependency’ says Richards (2004, 284). The corporate contribution to sustainability should not dominate proceedings, in other words. If it does, the resulting technological monocultures will mean that ‘the power of technology to emancipate, i.e. to underpin new, adaptive social arrangements in a divided and fragile world, will remain latent rather than effective’ (Richards, 2004, 284). Business’s potential to promote sustainability will therefore remain largely unrealized.

In an economy increasingly dependent on ‘knowing’ and therefore requiring integration of diverse forms of knowledge within business and beyond, it may well become increasingly difficult to keep sustainability concerns out. If business success rests to a large extent on healthy dialogue between people with different perspectives, as Vorley (2004) contends, then it is likely that some of those people will bring with them a desire to attend to broader socioeconomic and ecological problems. Businesses ignore these alternative perspectives at their peril. As Vorley (2004) observes, glaring failures to comprehend the importance of alternative opinions have adversely affected transnational agribusiness. In Monsanto’s case, the company’s woes were due in large
part to its failure to appreciate and react appropriately to public concern (Vorley, 2004, 36). If Monsanto had engaged with communities in good faith, it would have constituted a practical step towards the development of corporate products and services regarded by the public as socially, environmentally, economically acceptable - sustainable, in other words. Company members’ own understanding of sustainability would have been augmented. The company itself might have been better off. Vorley maintains that ‘a general vision of sustainability that excludes the majority of its workforce and does not challenge the underlying theory of the company is itself unsustainable. Such a vision cannot survive internal or external shocks, such as a merger or the loss of key products’ (2004, 39). The corporation suffers, as does the push for sustainability.

The wisdom we need to contemplate what to do with the fruits of our scientific cleverness can be found in traditional forms of knowledge, as exemplified in my discussion of equitation in Chapter Seven. Technological knowledge and competencies can also be drawn from traditional sources. As we attempt to build networks that support sustainability, we must appreciate that differences in context mean that different ways of knowing must be drawn upon to solve specific problems. We must therefore operate in networks of knowledges - including traditional, Indigenous, local, progressive/scientific, experiential and tacit - allowing their synergistic combination rather than selecting from competing views.

Case studies discussed in this chapter suggest the need to incorporate varying temporal concerns, including a focus on the sort of positive change often equated with ‘progress’ where necessary, as well as preservation of sustaining traditions. Furthermore, it is most effective when done fairly and without bias - that is, in as strongly democratic a manner as possible. Weak, top-down forms of liberal democracy are not enough. Informed by their studies of the importance of cultural plurality in India, Kothari and Parajuli conclude that ‘the concept of democracy has to be radically reconstructed to accommodate…survival, identity, and ecological claims from the grassroots’ (1993, 225). The trick is to find a way of achieving this, and in the next section I present one possibility - deliberative democracy.
**Box 8.1: The Oil Mallee Project**

The Oil Mallee Project (OMP) in Western Australia illustrates the importance of preserving and enhancing diverse biophysical and sociocultural networks. This project, which is attracting corporate interest, was instigated at a grassroots level by researchers and farmers in an attempt to alleviate various environmental problems and provide improved social and economic stability for regional communities. The project aims to provide multiple benefits and is driven by the efforts of a network of people from communities, government, university and industry. It involves planting mallee trees in the semi-arid agricultural areas of the south west of Western Australia, an area referred to as the ‘wheatbelt’. Land salinisation is one critical problem affecting this region which is addressed by the OMP. Salinity is caused by extensive replacement of perennial vegetation with monocultures of introduced annual species. Since annual crops do not use as much water as perennial vegetation, this results in a corresponding rise in ground water tables, bringing salt to the surface. It is hoped that the replanted mallee trees, which were part of the original vegetation of the area, will help to arrest land salinisation.

A number of companies, including the state owned energy company Western Power and aluminium producer Alcoa, have expressed interest in the project. The mallee trees’ repeatedly harvestable biomass could be used to provide renewable energy, industrial solvents and specialty chemical products. Companies, including MNCs, may also be interested in securing carbon credits, an option provided by the plant’s ability to sequester carbon on the lignotuber that remains unharvested.

Clearly the project is of great interest to a number of corporations. However, the OMP owes its existence to the unplanned failure of the industrial development paradigm, which informed the creation of the wheatbelt, to completely eradicate Indigenous flora in the mid-1900s. The prevailing wisdom at the time the wheatbelt was created as a cultural project was that land should be ‘improved’ by clearing, so that the species favoured for industrial agriculture could take over. Despite criticism at that time from less influential sources, mallees were ripped out in huge numbers, so that when Allan Barton - the associate professor of chemistry whose interest in eucalyptus oil and renewable fuels sparked the birth of the project - went to find suitable plants, he was forced to seek remnant populations growing on roadsides. It certainly was not planning which provided the niche in which mallees managed to survive, or supported the diversity of ways of knowing about the land which gave rise to this innovative project. Furthermore, a key theme of the OMP is that it should be driven from a grassroots level, with farmers themselves being the primary directors. They are not keen to relinquish control to corporate players, although corporate involvement in the project is seen as having potential to enhance profitability and support the further development of the use of mallees. However, the value of corporate input to farming communities will depend primarily on how appropriately corporations are integrated into the project’s actor network.  

(Source: Gollagher, 1999)
Deliberative democracy: a way to give actants an equal voice?

How can we initiate the sort of overarching transformation of societal frameworks which are necessary for sustainability? How can we include competing values and diverse ways of knowing, such as traditional or Indigenous knowledge? How can people - in government or in business - formulate policies or strategies that attend to all the networks we rely on, including markets? It does not seem to be occurring to a satisfactory degree at the moment. Beck, Giddens and Lash (1994) contend that the contemporary problems of our ‘risk society’ are serious and cumulative effects of the hegemonic political economy rather than aberrational side effects of an otherwise well functioning model. Ian Barns (1999, 2) argues that liberal democracy is being undermined by:

- the concentration and global mobility of transnational power - MNCs often threaten healthy democracy by exerting undue influence on political processes, and are sometimes accused of deliberately behaving unethically in this regard;
- the dominance of scientific and technical expertise in a wide range of public issues;
- the corrosive effects upon policy development of the ideology of economic rationalism - governments are accused of developing policies that suit MNCs, for example;
- the weakening of citizenship commitment and capacities by an all-pervasive ethos of consumerism - often expressed as the conflation of capitalism with democracy, or market choices with democratic options;
- the questioning of the presumed universalism and neutrality of the liberal state by a range of dissenting feminist, ethnic and alternative-life style voices; and
- the undermining of the ‘grand narratives’ of progress and reason by post-modern critique.

Sociologists studying the effect of globalised consumption and production processes on communities conclude that ‘an important consequence of globalization is that civic
participation becomes a central problem-solving mechanism for maintaining civic welfare...communities endowed with high levels of civic participation are better positioned to respond to the needs of local residents’ (Blanchard and Matthews, 2006, 2241). Blanchard and Matthews’ research supports the structural interaction hypothesis that civic participation ‘acts as a buffer between the economic environment and local-well being’ (2006, 2254). They propose that:

healthy civic environments emerge as the interests of business owners and the general population intersect. When business owners and residents are on the same page, civic participation flourishes (2007, 2254).

However, community consultation often perpetuates a ‘vicious cycle’ (Hartz-Karp, 2004/2005, 15) (see Box 8.2). In conventional community or ‘stakeholder’ consultation, the tendency is to either inform, consult or involve participants. It tends to be a top down process. ‘Informing’ is translated to mean providing balanced and objective information to participants and then proceeding to ‘help them understand’. ‘Consultation’ generally means obtaining feedback on ideas or decisions after they have been produced. Stakeholder ‘involvement’ is frequently a process of ensuring that people understand and consider the issues (21st Century Dialogue, n.d.).

This scenario is not limited to government initiatives. Similar ‘vicious cycles’ occur in hierarchically managed corporations. Ciba-Geigy’s sustainability ‘Vision 2000’ relied on top-down approaches. Senior management provided videos and organised exercises to ‘assist’ employees to grasp the concepts involved. The vision was extremely uniform in perspective, and ‘partly achieved through a culture that separated employee’s personal values from their professional positions and rhetoric’ (Vorley, 2004, 33). As a result, William Vorley, one of the people employed by the company to work on Vision 2000, was left feeling incensed and patronized. He maintains that this top down attitude which essentially disengaged employees was one of the main reasons that the strategy did not live up to its potential (Vorley, 2004, 33).

Niemeyer (2004) identifies the capacity within communities to respond collaboratively to environmental issues, but contends that this capacity is muted by political systems which actually engender civic disengagement. Niemeyer suspects that citizens’ ‘will and preference’ in regard to the environment is sometimes distorted by the ‘operation of
Box 8.2 The Vicious Cycle

Traditional community consultation
‘Fixes that Fail’ (Vicious Cycle)

Experts analyse, devise solutions. ➔ Experts consult with interested/concerned

Community concern ➔ Social Capital (decline is accelerated)

Reinforcing feedback (a small change builds on itself) ➔ Solution adjusted or same

Unintended Consequences
Community of stakeholders feels unheard/angry/cynical/less trusting


politics as usual where the success of particular perspectives is more a function of salesmanship than the expression of free will’ (2004, 348). This is clearly a risk within the corporate dominated discourse of sustainability. He notes that environmental concerns tend not to be expressed strongly in normal political processes, but considers this to be a result of the limitations of conventional political avenues of expression, rather than a lack of concern or understanding among the populace (2004, 348).

Beck suggests that this unfortunate situation can be dealt with by broad democratic participation, focusing on risk ‘selection, allocation, distribution and amelioration’ (Dryzek, 2000, 164). In fact, Beck has the grand objective of subjecting economic development and technological change to democratic control, releasing them from the dominating influence of ‘experts’ (Dryzek, 2000, 164). Sagoff issues a similar call for
democratic control in the form of political deliberation when policies regarding ‘moral or aesthetic judgment’ are formulated (2004, 13). He reasons that this is necessary because ‘people who take positions about public policy often have the social good rather than their own good in mind’ (2004, 13). Hartz-Karp goes so far as to assert that ‘if our democracy is to survive, it requires deliberation’ (2004/2005, 14, emphasis in original). Since sustainability, with concerns such as for intra- and inter-generational equity, is an inherently democratic political concept, it too requires deliberation. We cannot, as Bendell puts it, leave it ‘up to the powerful to decide if they are responsible or not…if they are carrying out their obligations or not’ (2005, 32) nor to decide what their contributions should be.

Deliberative democracy and other closely related concepts described as ‘civic engagement’ or ‘community engagement’, or ‘participatory’, ‘ecological’ or ‘discursive democracy’ amongst others, offer the potential to boost endogenous control systems, embrace culturally diverse ways of knowing and deal with value conflicts associated with sustainability (Dryzek, 2000; Niemeyer, 2004; Sagoff, 2004; Smith, 2003; Riedy, 2005; Hartz-Karp, 2004/2005; Bingham et al., 2005). The aim of community engagement (not just consultation) techniques is to allow people to work in partnership with others to develop understandings, decisions, solutions or strategies, and to empower all parties involved, rather than leaving final decisions in the hands of the elite (21st Century Dialogue, n.d.). Such concepts are not new. Deliberative meetings were instituted in Ancient Greece, in the states of the western world as they emerged and again briefly in the USA in the early twentieth century, for example (Hartz-Karp, 2004/2005, 14).

Deliberative democracy is described as ‘strong’ democracy (Niemeyer, 2004, 349). In comparison to corporate-centered knowledge production, techniques based on the premises of deliberative democracy are better able to include the spectrum of values and ways of knowing which need to be taken into account when formulating sustainability policy. Smith notes that environmental issues, for instance, are inevitably sources of value conflict: when reasoning about the non-human world, individuals and groups often find themselves pulled in contradictory directions, appealing to values that they find difficult to reconcile’ (2003, 1). Such apparently dissonant values can be reconciled by giving deliberators access to necessary information, approval to voice
moral concerns and impetus to contribute (Niemeyer, 2004, 348). Deliberative democracy seeks to promote ‘discursive plurality’ involving diverse networks of people and concerns for the more-than-human world. Views can be put forward and considered using the full gamut of communicative possibilities - humour, drama, logical argument, emotion, music and so on (Riedy, 2005; Dryzek, 2000). It is important that appropriate methods of communication are used to support discursive plurality - the forms of communication used must be accessible to all participants. The sort of social learning at the centre of deliberative democracy is inhibited if participants fail ‘to communicate in terminology and vernacular’ that are meaningful to all those involved (Keen and Mahanty, 2005, 109).

Where democratic deliberation is enacted, it is an attempt to move beyond democracy as a detached process of casting votes of approval or disapproval. The aim is to allow formulation and direction of policy through participatory processes so that democracy is about ‘deliberation and communication’ (Dryzek, 2000, 129). Importantly, community engagement strategies provide room for stronger expression of environmental and social values than is easily achievable in corporate dominated discourses. Deliberative democracy techniques have been recognized for their ability to ‘reconcile humans and the environment in politics’ in particular (Niemeyer, 2004, 347). In fact, deliberative democracy has come to prominence in relation to environmental concerns (Dryzek, 2000, 164). Indigenous knowledge can also be specifically and appropriately included (Marinova et al., 2004; McGrath et al., 2005).

Dryzek argues that the network form is most appropriate for democracy, since it is capable of enabling ‘decentralized, deliberative control of the weight of rival discourses’ and because it ‘finds a home in civil society’ (2000, 133). Institutionalized networks allow a wide range of competent participants to engage discursively in democratic contests, from a local to an international level (Dryzek, 2000, 162). In fact, he argues that network approaches are valuable because they need not be limited by association with the nation state (Dryzek, 2000, 129)\textsuperscript{77}. Networks dedicated to deliberative democracy can emerge ‘when individuals or groups that are similarly

\textsuperscript{77} It is sometimes necessary to look for democratic support beyond the boundaries of the nation state. As Dryzek points out ‘one reason why high-profile groups like the Zapatistas in Mexico and the Ogoni people in Nigeria have sought allies and visibility in transnational society is to escape states trying to destroy them’ (2000, 136).
situated in one important respect, but different in other respects, decide that their common interest would benefit from joint action’ (Dryzek, 2000, 134) - such as when people come together to promote sustainability.

John Dryzek endorses the concept of discursive democracy specifically. He argues that discursive democracy should be:

- pluralistic - communicating and embracing difference;
- reflexive and self-reflexive - questioning established traditions, including deliberative democratic traditions;
- transnational - applicable even outside the boundaries of nation states where there is no constitutional framework;
- ecological - able to incorporate the non-human; and
- dynamic - open to threats and opportunities relevant to democracy (2000, 3).

Janette Hartz-Karp, who has extensive experience designing and running community engagement exercises, identifies five key building blocks which best support the process:

- the random selection of a representative sample of the population concerned;
- a thorough understanding of the issues and their implications;
- the careful consideration of diverse views and values;
- the search for consensus or common ground; and
- the capacity to influence decision making processes (2004/2005, 16).

When this happens political processes become more impartial and the terms of the dialogue can be more equitably reframed. As a consequence, deliberative democracy has the potential to engender trust in political processes.

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78 Unlike others, Dryzek does not use the terms ‘deliberative’ and ‘discursive’ interchangeably in his discussions of democracy. He describes discursive democracy as a ‘more critical strand of deliberative democracy’. He considers that a ‘defensible theory of deliberative democracy must be critical in its orientation to established power structures, including those that operate beneath the constitutional surface of the liberal state, and so insurgent in relation to established institutions (2000, 2).

79 In one case, citizens from northern Sierra Nevada who got together to plan forest management achieved this goal by holding their meetings in a library so ‘they could not scream at one another’ (Sagoff, 2004, 201).
Hartz-Karp (2004/2005) nominates two critical conditions that must be satisfied in order to support deliberative democracy. For a start, an atmosphere of trust must be established - in the form of a ‘“container” in which honest and open dialogue can take place and people are clear that it will matter’ (2004/2005, 16). The second essential step is to ‘create the conditions for participants to reframe the issue so alternative and emergent solutions or trade-offs are possible’ (2004/2005, 16). Reframing is stimulated by drawing on different perspectives and forms of knowledge. This is a very important step for sustainability.

Participants are encouraged to approach deliberation with a commitment to reciprocity and agreement to give equal consideration to all arguments. ‘Enlarged thinking’ is encouraged. Inflexible strategies which aim to deliver specific and predetermined outcomes must be left at the door (Niemeyer, 2004, 349). Imagination plays an important role in encouraging enlarged thinking, because it helps people to see things from others’ perspective and frees us from ‘private conditions and circumstances that limit and inhibit the exercise of judgement’ (Smith, 2003, 26). This is a critical step for sustainability. For example, as I explained in Chapter Five, sustainability strategies created within corporations often suffer from myopia induced by the conditions and circumstances in which they are immersed.

Dialogue⁸₀ - as opposed to debate - is encouraged in order to encourage learning and thinking together (Ison, 2005, 30). This contrasts with ‘symbolic politics’ where vested interests such as corporations vie for dominance within the political discourse (Niemeyer, 2004, 349), an exercise which ‘disenfranchises not only nature, but humans too’ (Niemeyer, 2004, 366). In deliberative dialogue, conflict between divergent viewpoints can be approached in a constructive manner. Keen et al. contend that conflict should be thought of as

⁸₀ ‘Dialogue’ can be distinguished from ‘debate’. Ison explains that ‘Debate-based communication is often grounded in situations of conflict…the roots of the word ‘debate’ mean “to beat down”’ (2005, 30). He defines dialogue as ‘a sustained collective inquiry into the processes, assumptions, and certainties that compose everyday experiences’ (2005, 30). It involves ‘sharing understandings and assumptions and the reasoning behind these assumptions in order to build richer pictures and act jointly’ (Ison, 2005, 30, 31).
an inevitable part of change rather than a sign of failure of people or the system;
• a step towards a solution, rather than a signal to give up;
• shared, rather than being the responsibility of a person or group;
• part of a process, rather than an outcome, barrier or excuse; and
• a matter for negotiation, rather than the end of the line (2005, 15).

Actor network theorists might approve of deliberative democracy’s propensity to overcome conflicts borne of the limitations of bounded rationality. It has a greater capacity than most conventional techniques of liberal democracy to give voice to essential diversity. Deliberation allows the cognitive abilities of a group to be combined ‘in much the same way as multiple processors working in series increases the power of computers’ (Niemeyer, 2004, 249). This synergistic effort leads to the development of highly sophisticated views informed by the values of a wide and representative range of actors. The complex issues pertaining to sustainability can therefore be dealt with optimally. Hartz-Karp maintains that deliberative democracy can circumvent the deficiencies of conventional stakeholder consultation, by creating a ‘virtuous cycle’ of interaction and communication (2004/2005, 16) (see Box 8.3).

The virtuous cycle associated with community engagement moves beyond the limitations of the vicious cycle caused by adherence to community consultation strategies (see Table 8.2). There are three critical levers which enable community engagement: (1) inclusion, (2) deliberation and (3) influence:

1. Inclusiveness ensures participation that is
   • representative of the relevant population;
   • inclusive of diverse views; and
   • based on equal opportunity to participate.

2. Deliberation involves
   • speaking honestly and openly;
   • seriously considering differing viewpoints and values;
   • thoroughly understanding the issues and their implications;
   • reframing issues;
• seeking a range of solutions;
• searching for common ground.

(3) Influence
• the capacity to influence policy and decision-making is necessary so that participants consider the process is worth being involved in (21st Century Dialogue, n.d.).

Box 8.3: The Virtuous Cycle

Community is engaged
• Representative
• Deliberative
• Influential
Resulting in
• Issue reframed
• Mutually acceptable solutions.

Reinforcing Feedback
(a small change builds on itself)

Increased understanding of solution
Increased trust within community
Solutions tested

Community concern

Social Capital
(growth is accelerated)

Community Engagement
Deliberative Democracy
Building a Cooperative Environment (Virtuous Cycle)


Deliberative democracy: seeking wisdom for sustainability
This virtuous cycle of communication can provide wisdom, as opposed to simply knowledge. Baltes and Staudinger define wisdom - needed for sustainability - as that which ‘coordinates knowledge and judgements about the fundamental pragmatics of life around such properties’ as:
Psychologists have demonstrated empirically that ‘intrapersonal, interpersonal and extrapersonal relations significantly (contribute) to people’s ability to demonstrate wise judgement’ (McKenna, 2005, 50). Given that my personal appreciation of this effect came first through my experience with classical equitation, I contend that ‘interspecies’ or even ‘ecological’ relations probably belong on this list as well. Whether or not this is the case, the evidence psychologists have produced about human interactions leads to the conclusion that ‘wisdom is a collectively anchored product and that individuals by themselves are only “weak” carriers of wisdom’ (Baltes and Staudinger, [2000] cited in McKenna, 2005, 50). In the context of deliberative democracy, wisdom can emerge as a result of the ‘social, ethical and discursive competence’ (McKenna, 2005, 40) unleashed through dialogue. Collaborative synergy can help community members of all descriptions weigh up the potential for corporate contributions to sustainability, since the wisdom they tap into ‘can separate negative changes which are intended for empire building for developing and maintaining power from those that promote necessary change’ (McKenna, 2005, 42).

Although traditional knowledge is ‘the mother of wisdom’ (McKenna, 2005, 44), the desire to access wisdom in contemporary life should not be interpreted as a call to ‘ask a tribal elder to open the proceedings of our next conference and then get on with the real business…(or) feng-shui our office’ (McKenna, 2005, 43). Borgmann’s (1992) advice about the need to cross the post-modern divide by melding modernism with postmodern patience remains relevant. We need to formulate sustainability strategies wisely, embracing the positive innovations of the contemporary world (such as eco-efficiencies provided by the business community) while preserving sustaining traditions (McKenna, 2005, 43). Deliberative democracy can help us to choose which of the formidable gifts of corporate enterprise are appropriate for sustainability, while tempering its negative impacts.
Power and control in deliberative democracy

Deliberative learning and planning processes create power in a particular way. As in classical equitation (described in Chapter Seven), the democratic power derived through patient deliberation ‘is not just about domination,’ it is ‘more subtly about the power to act’ (Keen and Mahanty, 2005, 113). In the case of classical equestrianism, the power to act is achieved through mutual understanding and union between horse and rider, rather than domination by the human. Similarly, social learning techniques such as those used in deliberative democracy access power ‘not only from the resources we command and the knowledge we hold, but also from belonging’ (Keen and Mahanty, 2005, 113). As Keen and Mahanty explain:

We gain power and knowledge from the social groups with whom we associate, provided we can maintain agreement on core values and principles, or re-negotiate the nature of our belonging to that group (2005, 113).

This observation can be expanded. As demonstrated by classical equitation, the process which yields power and knowledge is not limited to social groups of people - the more-than-human world is also involved.

The power to act in relation to pressing sustainability concerns is achieved in part by ensuring that communities feel that they ‘own’ the problems they face as well as any strategies designed to tackle them. Researchers working on community programs to ameliorate land degradation have noted that a ‘Key to the creation of alternative visions is participation. Participation is also educational, and the process can elevate the debate and help everyone achieve deeper levels of understanding about ecological issues’ (Soulé, 1995, 6). People tend to resist top-down direction which does not engage them appropriately ‘but will often support progressive change if they have some role in its formulation’ (Soulé, 1995, 6).

Dryzek is confident that discursive democracy can provide more equitable distribution of power by spanning discourses, promoting a deep understanding of other perspectives and enabling people to reflect critically on the content of discourses they are immersed in (2000, 163). This means that discourses, such as that of sustainability,
could be subject to democratic control, rather than being left to the discretion of the elite of the global political economy, and that a variety of ways of knowing could be contributed. If corporations were truly engaged in such dialogue, the discourse of sustainability could be owned by all and not dictated by the political elite. Business people such as Jan Wallinder support this view. He emphasizes the need to spread the locus of responsibility: ‘There can be tremendous benefits if we share this responsibility (for sustainability) through open dialogue within a global community of interest’ (Whole Systems Associates, 2000, 1).

**Achieving deliberative democracy**

Dryzek concedes that the form of discursive democracy he proposes is rarely achieved, other than when:

> a tradition encounters a crisis which its adherents recognize but cannot solve using the resources of their own tradition. Solutions can be proposed by a competing tradition using language intelligible to adherents of the tradition in crisis (2000, 163).

We are currently faced with such crisis. Multinational corporations, the leviathans of capitalism, increasingly recognize the need to temper the negative impacts associated with their activities and to become sustaining contributors to global society. A number of them are devoting great energy to the cause but they certainly have not achieved this aim as yet, and time is of the essence. It would be prudent for corporate actors to acknowledge that ‘the resources of their own tradition’, as Dryzek puts it, are insufficient. Language is an issue here. Dryzek notes that unfamiliar knowledges must be put to the receiving group in crisis in terms they can digest. Furthermore, those assisting must be able to comprehend the problem. However, as demonstrated in the collaboration between Oxfam and Unilever (WBCSD, 2005a), establishing linguistic and semiotic bridges between such groups can be a time consuming and difficult process. Deep engagement is required. Wisdom is required.

Dryzek (2000, 172) notes that broadly accessible discursive democracy is inhibited by poverty which limits people’s capacity to communicate. Impoverished people may not have the requisite time, access to technology, or education to enable them to participate fully in deliberative democracy, in national or international contexts. Some suggest
that the efficacy of discursive democracy techniques therefore depends on equitable
distribution of material wealth. Dryzek, however, feels that since the gap between rich
and poor is widening with little hope that this inequality will be reduced in the near
future, we should attempt to promote discursive democracy to the best of our ability in
the meantime (2000, 172).

Dialogues for sustainability may be undertaken by people from various groups seeking
input for policy, including governments, community groups, NGOs, and businesses
(see Table 8.2 for examples of deliberative democracy techniques). They may be
confined within organisations for specific purposes. Corporations, for example, might
establish a wisdom council or a world café (see Box 8.4) within their ranks to
determine company policy on sustainability, or they may participate in community or
regionally based projects with or without government involvement. Governments’ role
as providers of incentives, regulation and constraints as part of a market framework
designed to stimulate sustainability in business practice can be informed by community
engagement/deliberative democracy.

In Vermont, the State Government passed legislation relating to land use and
development which enshrined public engagement in development and planning (De
Weese-Boyd, 2005). Under Act 250, community members have the power to work
together to prevent development projects which they consider will threaten the
community’s well being in the long term (De Weese-Boyd, 2005, 335). All large
commercial and residential projects require permits under Act 250. The community has
already attempted to use this power to prevent Wal-Mart from building a super store in
a vulnerable downtown area that was important to the community. The community was
also concerned about the likely economic effect of such a development (De Weese-
Boyd, 2005).

While Act 250 is not perfect, researcher De Weese-Boyd notes that:

it grants citizens in Vermont an avenue to participate in shaping the
development of their communities not open to citizens elsewhere. To the
extent that citizens in Vermont do engage in the process, and actively seek
to preserve the components of the law that invite citizen participation, the
potential for the viability of Vermont’s communities to benefit from this
trend-setting law is undeniable (2005, 347).

De Weese-Boyd argues that Act 250 ‘offers a framework for the development and
viability of communities in the larger, international context’ (2005, 345). Such regional
or national legislation designed to uphold civic engagement as a right can fortify the
autonomy of communities around the world (De Weese-Boyd, 2005, 345).

Engagement of a variety of stakeholders in development processes is important. For
example, in various places in Europe, the use of space in urban redevelopment projects
(‘brownfield’ developments) is guided by input from a range of stakeholders, including
citizens and residents (Altherr et al., 2007). In Berlin, the framework for
‘Gleisdreieck’, a competition to design park spaces has been designed by drawing on
input from public participation processes. Residents’ views were accessed via surveys,
group interviews and a three week long online discussion (Altherr et al., 2007, 158).
These stakeholders’ perspectives tend to differ from that of the developers. Citizens
tend to emphasise the need for green spaces to cater for daily use, whereas developers
tend to highlight green spaces’ contribution to the overall image of the development
(Altherr et al., 2007, 517, 518). The processes of community engagement that were
undertaken allowed citizens’ views to be incorporated in the design of the urban
development. Both citizens and developers tend to favour conventional green parks, in
contrast to nature conservation experts who are more concerned with the preservation
of habitat (Altherr et al., 2007, 520). This highlights the need for incorporation of a
diverse range of perspectives during the design phase of development projects.

In addition to providing a basis for the formulation of policy, participatory processes
can be undertaken to guide the development and application of technological
innovation. For example, Achterkamp and Vos (2006) provide a framework to
incorporate stakeholder involvement with processes of sustainable innovation in
business. They note two advantages of this approach in particular: ascertaining locally
acceptable criteria for sustainable outcomes and activating and/or enhancing relevant
organizational practices to suit.
In their analysis of policy instruments for sustainability-oriented organizational learning, Müller and Siebenhüner make the point that since ‘no all-encompassing solutions are available for most of the current problems’ of unsustainability, learning processes are vital to sustainability (2007, 234). One of the key elements of social learning necessary for this process in business and elsewhere is the advancement of ‘societal conflict resolution and discursive capabilities (deliberative approach)’ (Müller and Siebenhüner, 2007 234). Culture change within an organization, facilitated by policy direction from upper management levels, can be facilitated by ‘integrating staff members from all hierarchical levels’ in order to establish a broad base for the learning process’ (Müller and Siebenhüner, 2007, 234). Within companies, effective dialogue can lead to wise practice - thought to be essential for businesses trying to survive in the knowledge economy (McKenna, 2005, 50; Benn et al., 2006, 158), as well as for those aiming to become more sustaining. Benn et al. point to increasing calls for accountability as a driver for ‘corporations to collaborate with civil society and governments to address negative externalities’ (2006, 158).

As an antidote to any residual preoccupation with the ‘myth of the triumphant individual’, McKenna calls for the application of ‘principles of cooperation and collaboration…that admit tacit knowledge, practical considerations, and various perceptions and insights into wise management practice’ (2005, 50). The sort of management philosophy he advocates can be supported by open dialogue that allows diversity of opinion and knowledge to surface and balances the necessary but inadequate structures of codified knowledge and technical rationality within organisations (McKenna, 2005, 49). Increasing use of deliberative techniques might help to remedy the way management practice is too often portrayed as ‘democratic and responsive’ while actually being ‘extremely conformist and authoritarian’ (McKenna, 2005, 42). It would help to minimize ‘mindlessly valorized’ change for its own sake, drawing on the collective wisdom and experience of the group to distinguish desirable transformations from those which are not (McKenna, 2005, 42).

Similarly, Müller and Siebenhüner note that ‘stakeholder dialogues have a high potential to introduce new knowledge into (an) organization’ and reveal key stakeholder preferences to the organization, which it hardly obtains through the market (2007, 234). They observe that
Being located at the boundary between the organization and its environment, stakeholder dialogues can also help the organization to clarify its boundaries and its position on certain issues that have not been formulated so far. Even if these dialogues bring to the surface existing mismatches between the organization and stakeholder claims, they might trigger off learning processes. According to the organizational learning literature, these mismatches between the organization and its environment have led organizations to reflect upon their underlying norms and core beliefs about their practices (Müller and Siebenhüner, 2007, 237).

Government-driven programs for deliberative democracy are also important. The existence of democratic networks that traverse territorial boundaries demonstrates that democracy need not be intimately linked to the state (Dryzek, 2000, 129). However, national and sub-national governments will continue to be influential in many respects, and their policy making processes can be enhanced by applying principles of deliberative democracy. Governments ranging from local to international levels can stage community engagement programs of various types.

Business representatives can participate in these events by acting as expert witnesses, for example. In this way, business perspectives can be democratically included without dominating proceedings. There are instances where this has occurred already. At a Community Engagement Over-arching Workshop staged in October 2005 as part of the policy development process for the Perth Coastal Planning Strategy (Western Australian Planning Commission, 2006), business representatives were among the expert witnesses invited to talk with the group. As one business person from the construction and development industry remarked to the group, the representative views reached through transparent and equitable deliberative processes may be more readily accepted by business communities than decisions reached via conventional government avenues. The speaker further suggested that outcomes of deliberative democracy processes could be very helpful to business, because they provided relevant and accurate information about community wishes. He thought that if businesses took heed of outcomes reached through democratic deliberation, it could save them a lot of time and effort by avoiding difficult and detrimental stakeholder conflicts.

Traditional, Indigenous and local knowledge can be included as well (Marinova et al., 2004; McGrath et al., 2005). People of all cultural backgrounds will bring certain forms of traditional and local knowledge with them. Indigenous people can participate
as deliberating citizens and/or as expert witnesses, depending on the type of community engagement procedure being implemented. In events where equitable demographic representation is required, an appropriate percentage of Indigenous people can be actively sought to take part in the deliberations. Indigenous groups often use forms of community engagement that can be incorporated into larger decision making processes. Lois Olney, an Indigenous person who acted as a Juror in a Citizen’s Jury that had been set the task of considering the value of deliberative methods in Western Australia explained that in Roebourne:

Indigenous people form a Bush Assembly or Circled Meeting to discuss relevant issues in their community, the elders being the ultimate judges of fairness and cultural practices of respect for the elders. Issues are resolved through Bush Assemblies or Circle Meetings, then reports are passed to relevant people for the next process (The Jefferson Center and the Department of Planning and Industry, Government of Western Australia, 2005, 19).

The members of the jury recognized that Indigenous people in Western Australia have difficulty in ‘participating in current political discussions’ (The Jefferson Center and the Department of Planning and Industry, Government of Western Australia, 2005, 15). The jury unanimously concluded that Indigenous people’s voices should be heard and hoped that ‘the government (would) find innovative ways to integrate their views into the views of the citizenry as a whole’ (The Jefferson Center and the Department of Planning and Industry, Government of Western Australia, 2005, 15). The group was not able to decide how Indigenous views might be best incorporated into decision making processes (The Jefferson Center and the Department of Planning and Industry, Government of Western Australia, 2005, 15). Business must also learn how to accommodate the views, knowledge and wishes of Indigenous people, and this is beginning to occur to some extent. There are companies who are building groundbreaking partnerships with keepers of traditional, Indigenous and local knowledge. (See Box 8.4: Aveda Corporation.)
The Swedish corporations Ericsson, Telia and AP Fastigheter combined to establish a forum called FutureComFactory in which to consider the future of society and of what they refer to as the infocom industry. Jan Wallinder, the CEO of FutureComFactory, explains that over several years he had ‘come to see that an important part of my own life purpose is working for a sustainable future on this planet. I wanted to figure out a way to connect that passion with my work at Telia, the largest telecommunications company in Scandinavia’ (Whole Systems Associates, 2000, 1). He ‘thought that the role of infocom in a sustainable future was an important question’ (Whole Systems Associates, 2000,1). The group began to explore ‘the hard issues and how the infocom services industry might help or hinder the development of a more sustainable future’ (Whole Systems Associates, 2000, 2).

Wallinder recognizes the importance of telecommunications in everyday life, affecting ‘transportation, the environment, material and energy resources, and food and health supplies’ (Whole Systems Associates, 2000, 1). He recognizes the reflexivity in this connection: ‘They all impact on our businesses. And our businesses impact on them’ (Whole Systems Associates, 2000, 1). Part of the process involved convening a World Café involving ‘influential people from groups with very divergent perspectives’ (Whole Systems Associates, 2000, 3). This was not intended to be a meeting of self-interested individuals, however enlightened, aiming to promote their own viewpoint. Neither was it intended to remain safely in the province of the usual ‘rational’ business speak - divergent discourses were embraced. Wallinder saw this as something the participants found challenging.

Wallinder is excited about the effect of the Café, and although unable to predict its ultimate benefits sees great potential for the ongoing use of such techniques. He notes that the setting seemed to encourage participants to abandon the idea that any of them alone ‘had the power to push the others into submission to their own solutions’ and that they shared the hope that future generations would be proud of their efforts to contribute to sustainability (Whole Systems Associates, 2000, 6). Wallinder noted a ‘special kind of listening’ happening within the group. He thought that people were excited about going back into their own situations with their new understandings…and that such ways of having conversations may make it easier to get action, but it’s not the same way we think about it most of the time - with voting and long lists of action steps’ which lead to little or no action (Whole Systems Associates, 2000, 7, 8).
**Issues of concern**

A number of analysts have studied the effectiveness of participatory processes and identified issues of concern (Aldred and Jacobs, 2000; Burton et al., 2004; Lowndes and Stoker, 1996; Oels, 2003, Tippett et al., 2005; Webler et al., 1995). This research demonstrates that there is no guarantee that deliberative democracy will inevitably result in sustainable outcomes. Analysts note a previous lack of rigorous evaluation of the effectiveness of community involvement in such processes and have undertaken evaluatory analyses in order to begin to address this lack (Burton et al., 2004).

Empirical analysis of community engagement strategies is problematic. Burton et al. note ‘the difficulties inherent in using a classic experimental design to evaluate processes as complex as community involvement and (propose) a theory-based approach’ (2004, 1). These authors recommend critically reviewing the underlying theoretical claims of both community involvement and of area-based initiatives (Burton et al., 2004, 1).

Burton et al. argue that there are two key reasons for the lack of empirical analysis of community engagement processes, which are a reliance on the rights-based procedural justification for involvement at the expense of substantive justifications which in turn eschews empirical testing; and the complexity of community engagement (2004, 31). Complexity is caused by a number of factors:

1. the desire to integrate a number of stakeholders and perspectives synergistically;
2. community engagement is complicated in ‘principle and practice and thus exhibits conceptual complexity’; and
3. engagement is not a ‘fixed entity, nor is it a substantive intervention in the same way as building factory units or renovating poor quality housing (Burton et al., 2005, 32, 33).

As these researchers point out ‘the procedural justification of involvement needs no empirical testing, although the practical expression of the principle can and should be described empirically in order to be able to judge the extent of its realization’ (2004, 31, 32). They recommend methodological pluralism in evaluating community engagement processes, where complex relationships are primarily explored via qualitative means (2004, 32).
Smith points out that deliberative democracy and environmental concerns are not necessarily linked in a positive sense because decisions derived from deliberative processes may not necessarily meet the approval of all environmentalists (2003, 76). Provided the processes in question are fairly run, this is as it should be from the point of view of sustainability, since equity concerns dictate that neither environmentalists nor any other interest group should be permitted to dictate terms.

Other problems with participatory processes have been identified. For example, Grant and Curtis (2004) note that participation is not a panacea for managing in an environment where powerful stakeholders increasingly challenge agency intentions and contest management approaches. Public participation literature demonstrates that participation can lead to increased conflict between stakeholders and to disillusionment with government when participants are dissatisfied with the processes or outcomes of these initiatives.

A particular problem arises when staff charged with running the participatory process lack interpersonal and communication skills ‘particularly in regard to identifying value differences and the resolution of conflict’ (Grant and Curtis, 2004). Grant and Curtis (2004) note that selection of appropriate participation practices depends on a suitable understanding of the particular context in which they will be applied (2004, 143). Tippett and Griffiths suggest that ‘developing effective training in facilitation and an accessible learning resource to support facilitators in their work could help address this lack’ where it exists (2006, n.p.)

Eweje notes general acceptance of the proposal that sustainable development will be greatly enhanced if improved cooperation between civil society and business is achieved, irrespective of the level of government (2007, 19). At the same time, however, Eweje cautions that strategic reliance on collaboration between civil society and business should only be endorsed if it produces significant impacts and can be replicated throughout developing countries (2007 19, 20). Such collaborations do not always provide the desired outcomes - examining analyses of partnerships between business and civil society, such as have occurred in Brazil, South Africa and India, Eweje concludes that partnerships may actually ‘undermine alternative approaches to dealing with systematic problems with the global economy that create maldevelopment’
Eweje’s concludes that ‘Corporate citizenship may not produce significant development results unless (civil society organizations) are strong partners in collaborative activities’ and that government may have an important role to play in optimizing the gains from collaboration (2007, 20).

However, the observation that deliberation is not a fool-proof method of setting the compass for sustainability is not basis enough to reject it. In the long run, there is nothing to say that any of the schemes we try will enable the majority of the planet’s human population to live sustainably. However, since deliberative democracy techniques are uniquely able to provide synthesis of knowledge, values and purpose they offer a route that is worth taking to sustainability.

In the public sphere, we will continue to rely on exogenous political control systems to a large extent in all scales of governance, but this can be complimented by deliberative democracy. (See Table 8.1 for examples of deliberative democracy techniques.) Interestingly, the members of the Citizens’ Jury held in Western Australia to consider the merits of deliberative democracy supported this view:

Given that various methods of community engagement have been trialed within Western Australia, Australia and around the world, we concur that community engagement (deliberative democracy) is an effective vehicle for decision-making on public policy.

We unanimously recommend that methods of community engagement continue to be used and expanded in Western Australia on a routine basis, monitored by an independent body and integrated into the workings of government (The Jefferson Center and the Department of Planning and Industry, Government of Western Australia, 2005, 14).

There is no need to provide a one-size-fits-all prescription for implementing deliberative democracy - in fact, to do so would contradict the ideals of democratic engagement. Nonetheless, as Hartz-Karp stresses, if democracy is to thrive a paradigm shift must occur. Community engagement must become an essential part and official part of governance, enshrined in national and international law where appropriate (2004/2005, 19). The costs of failing to organise robust community engagement events far outweigh the costs of running them, as far as Hartz-Karp is concerned (2004/2005, 19).
**Conclusion**

Corporations have a vital role to play as part of networks of other actants in promoting sustainability. Corporations, and the markets they operate in, do certain things very efficiently and where the outcomes provided by these capabilities support sustainability there are important gains to be made. However, by definition, the success of sustainability strategies must be assessed using a broader vision than those associated with the neo-classical economic world of MNCs and the hegemonic global political economy. It is unreasonable to expect corporations to lead the push towards sustainability in all instances. Furthermore, the free-market as a network of weak ties to which corporations are significantly bound, does have something to offer in terms of finding more sustainable ways of living, but it is just one important network amongst many.

Deliberative democracy techniques can be used to integrate diverse ways of knowing, and promote the equity and discursive plurality essential to sustainability. This can occur at various levels - within a company, between industry groups, on a regional basis or at local, state, national or international levels of government for example. Deliberative democracy techniques may be usefully instigated by a variety of industry, community, and government groups, depending on the circumstances and issue at hand. For example, it is argued that corporations need to work in collaboration with civil society groups if corporate citizenship is to be optimally effective. It should also be noted that public participation is not a simple panacea for dealing with the difficulties of achieving discursive plurality. Imbalances in power, and failures in process can result in unhelpful or even negative outcomes.
Aveda Corporation, owned by Estee Lauder since 1997, manufactures and sells a range of personal care and lifestyle products and services (Bonda and Sosnowchik, 2004). Dominique Conseil, head of the company, is dedicated to sustainability. In particular, he sees the company’s ‘connection to indigenous people’ as being very important, explaining that anthropology taught him ‘to accept and to value differences and not to judge’ (Bonda and Sosnowchik, 2004, 4). The company states that it is ‘committed to building sustainable business partnerships with indigenous people worldwide in the sourcing of its plant-derived ingredients’ (Aveda, 2005, n.p.). In this and other respects, the company claims to be ‘dedicated to changing the way the world does business’ (Aveda, 2005, n.p.). Recently, the Songman Circle of Wisdom, a group of Indigenous leaders from Western Australia, and Aveda collaborated to establish the Indigenous Plant Certification protocol, the first of its type in the world (Aveda, 2005, n.p.). The protocol is described as ‘a model for Global indigenous leaders to practice sustainable business in their own communities’ (Aveda, 2005, n.p.).

Indigenous people in Western Australia provide Aveda with a harvest of *Santalum spicatum*, or sandalwood, which is used as a perfume. The company works with local Indigenous people to ensure that they are paid a fair price for the traditional knowledge and contemporary effort that allows them to harvest sandalwood sustainably (Laurie, 2004, 5). Such schemes are welcomed as positive developments by many Indigenous people who fear the impacts of ‘bio-prospecting for drugs or cosmetic products’ and who therefore regard plant rights for Indigenous people as a crucial issue (Muir, cited in Laurie, 2004, 5).

At one stage, Aveda marketed an ‘Indigenous’ line of products, which was ‘originally introduced to connect the modern consumer to the timeless wisdom and values of indigenous peoples’, ‘to raise awareness about the beauty of their sustainable lifestyles and to generate funding for key indigenous programs through sales’ (Aveda, 2003, n.p.). However, in 2003, Aveda discontinued its ‘Indigenous’ product line and undertook to give up rights to the ‘Indigenous’ trademark, according to the wishes expressed at a meeting of Indigenous people from the Americas and Australasia (Aveda, 2003, n.p.). The company stated that by its action ‘Aveda hopes to stand in solidarity with indigenous peoples in their quest for recognition of intellectual property rights in their traditional wisdom’ (Aveda, 2003, n.p.). In doing so, the company demonstrated a willingness to work democratically with its partners for the benefit of all involved.

Aveda has adopted particular management and architectural characteristics specifically to promote sustainability. Two people - Mary Tkach, the head of environmental sustainability and David Hircock, the advisor for sustainability affairs - have the power to reject any product or service innovations that threaten to derail the company from its sustainability mission (Bonda and Sosnowchik, 2004, 7). Conseil also rejects strategies such as franchising, even though they promise to be financially lucrative in the short term, because he feels they are likely to cause the company’s core orientation to sustainability to degenerate into greenwash (Bonda and Sosnowchik, 2004, 7). Conseil feels that Aveda’s association with the powerful corporation Estee Lauder can have benefits in regard to sustainability. For instance, when negotiating with suppliers about the quality of raw materials, he observes that it can help to be supported by Estee Lauder’s bargaining power (Bonda and Sosnowchik, 2004, 7).

(Sources: Aveda 2003, 2005; Bonda and Sosnowchik, 2004; Laurie, 2004; Marinova, 2005; Marinova and Raven, forthcoming).
<table>
<thead>
<tr>
<th><strong>METHOD</strong></th>
<th><strong>World Café</strong></th>
<th><strong>Wisdom Council</strong></th>
<th><strong>Citizens’ Jury</strong></th>
<th><strong>Deliberative Poll</strong></th>
<th><strong>21st Century Town Meeting</strong></th>
<th><strong>Citizens’ Assembly</strong></th>
<th><strong>Millions of Voices</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Who participates?</strong></td>
<td>12 - 1000 invited people - not randomly selected citizens.</td>
<td>Series of meetings of 8-24 randomly selected people. Different people participate in each meeting.</td>
<td>15-24 randomly selected, demographically representative ‘jurors’.</td>
<td>Statistically representative random sample of people.</td>
<td>300-5000 people demographically representative of relevant population.</td>
<td>Two randomly selected citizens from each electoral district in region.</td>
<td>1 million citizens in town meetings and forums across nation; millions more engaged via television.</td>
</tr>
<tr>
<td><strong>Why run it?</strong></td>
<td>To allow people to explore problems drawing on their own wisdom and experience; cross-pollination of ideas; strengthens relationships.</td>
<td>To involve all members of a community in order to create choices, reach consensus and solve difficult problems.</td>
<td>To find out what informed members of the public want; promote trust; obtain transparent and unbiased view; resolve conflict/ develop plans; influence decisions.</td>
<td>To find out what public would think about a subject if informed and given the chance to deliberate with peers.</td>
<td>To engage citizens in public decision-making processes at local, regional and national levels.</td>
<td>To provide non-elected people with the chance to influence government decision making about a particular issue.</td>
<td>To involve national citizens in dialogue; to frame discussion and bring results to decision makers.</td>
</tr>
<tr>
<td><strong>How does it Work?</strong></td>
<td>People sit in small groups round café style tables; one person stays at each table others keep moving to new tables; final group discussion.</td>
<td>Meetings chartered by community; dynamic facilitator helps proceedings; participants choose topics; statements reported back to larger community.</td>
<td>Jury deliberate ‘charge’ in facilitated meetings over 2-5 days with expert witnesses; common ground sought; report produced.</td>
<td>Participants polled on opinions about an issue, then attend conference with small group interaction and expert panel; then polled again.</td>
<td>Dialogue supported by key-note polling, networked computers and interactive television for immediate feedback.</td>
<td>Deliberation in public hearings and group meetings over months; Experts provide assistance. Government acts on outcome.</td>
<td>Issue defined by citizens’ jury type forum; series of forums across nation using variety of approaches; results compiled on online database.</td>
</tr>
</tbody>
</table>

(Sources: 21st Century Dialogue, n.d.; Department of Planning and Infrastructure, Government of Western Australia, 2005).

Table 8.1: Sample of community engagement techniques
However, there is evidence of success where the basic requirements for successful deliberation and participation can be met.

Deliberation should be an important facet of sustainability because it can facilitate expression of a plurality of values and knowledges relating to the human and more-than-human worlds. Traditional knowledge, for example, can be more readily included in deliberative democracy than in corporate dominated stakeholder consultation which privileges knowledge forms underpinning capitalist ‘progress’. Furthermore, deliberative democracy sets out to ensure equity and fairness in representation, so that the integrity of outcomes can be trusted. This is particularly important when dealing with political issues of sustainability that are typically complex and heterogeneous and therefore susceptible to manipulation by symbolic politics. Of course, the relative success of deliberative techniques must be evaluated qualitatively and quantitatively. Its positive and negative impacts must be identified. Normative assumptions about the value of deliberation should not cloud evaluation of the efficacy of deliberative techniques in any instance. Nonetheless, deliberative techniques can bring sustainability benefits in the right context and offer a path to access the complex networks that are relevant to sustainability.
Chapter Nine
Conclusion

Unless one believes that god will intervene, I think we have found the ultimate context for understanding knowledge. It is an ecological context of artifactual performance. It is a context not of science, discourse, or formal rationality, but of the global sapiens ecology, an artifactual ecology made to work by the accomplishments of knowledge (Allen, 2004, 285).

In this chapter I summarize the key concepts of my thesis. I begin by providing a brief overview of my analysis of the concept of sustainability and that of the corporation, and a review of the history of corporate engagement with environmentalism and sustainability. Next, I outline my main conclusions about the reflexivity of the meeting between corporations and sustainability. I then provide an overview of the importance of network approaches in business, in sustainability and in the intersection between the two. This leads to recommendations about how corporations might best contribute to sustainability. I also suggest future directions for research that are needed to advance work in this field.

Sustainability
As discussed in Chapter Two, the concept of sustainability is a sociologically and politically significant response to ecological and socio-cultural crises of modernist development. It is presented as having the potential to encompass ecological, social and economic concerns networked across local, regional and global scales. Sustainability’s meaning is contested - it is interpreted according to a variety of perspectives, ranging from radical to conservative. Some conclude that sustainability’s underlying philosophy issues a fundamental challenge to the modernist worldview, while others see the two as compatible. These disagreements are an inevitable result of the fact that as a political discourse, sustainability uses the language of rhetoric which stretches around a range of goals and values. It cannot rely solely on a single intellectual discipline such as science. This diversity of interpretation prompts some people to dismiss the concept, while others see its mutability as a source of resilience.

The notion of sustainability is associated with power - there is power at its conceptual heart and in the manner the associated discourse frames and legitimizes the terms of
debate. Particular forms of power are invoked in order to remedy problems shared by
the ‘global community’. The Brundtland Commission’s concept of sustainability needs
political power if it is to effectively catalyze change, of course, but the application of
power is fraught with the danger of arrogant misapplication. In many respects, the
modernist idea of sustainability itself is conceived in arrogance, since it underplays the
fact that many Indigenous communities have lived sustainably for generations - rather
than just talking about it or planning for it. For them, sustainability is not just an idea,
it is a lived experience, so deeply ingrained in culture that it does not require any
special reference. It is a matter of survival.

Critics express concern about sustainability’s elitist tendencies. The Brundtland
Commission’s definition of sustainable development was formulated by an
economically and politically elite group (the World Commission on Environment and
Development). Subsequently, powerful groups played central roles at the summits held
at Rio and later Johannesburg. As a result, the discourse of sustainability carries a
residual bias towards their worldview. It has been criticized for emphasizing the role of
corporations, for example. In order to explore these charges I undertake an extensive
analysis of ‘sustainability’ and ‘sustainable development’, examining the similarities
and differences between these two terms. I conclude that they are conceptually distinct
and argue that discourse that focuses on ‘sustainable development’ carries a heavy bias
towards modernist development paradigms that have been widely criticized. I therefore
conclude that ‘sustainability’ is the appropriate focus for discourse.

As I argue in my consideration of ‘sustainability’ and ‘sustainable development’, the
elite worldview which dominates the discourse has left it with potentially debilitating
universalizing tendencies. Some problems, such as climate change, do require
coordinated action between international groups if effective remedial action is to be
taken. However, the need for international cooperation should not be interpreted as
endorsement of universalizing approaches which privilege particular perspectives and
values to the detriment of others. The problems sustainability seeks to deal with are
heterogeneous. Therefore, solutions should also be heterogeneous. As key players in
the global political economy, corporations, including multinational corporations, are an
important part of the heterogeneous mix relevant to sustainability. For better or worse,
their influence is virtually unavoidable. Therefore, the central research question posed at the start of the research for this thesis was:

How can corporations best contribute to sustainability?

The hegemonic discourse of sustainability focuses on culturally specific ideas of ‘nature’, ‘development’ and ‘progress’, and as a result lends itself to cooption by Big Business. There are many who suspect that the promises emanating from the brave new corporate world of sustainability conceal a malformation of responsibility to suit the ends of the powerful:

Our ancestors feared that corporations had no conscience. We are treated to the colder, more modern fear, that perhaps they do (Berle, cited in Sampson, 1995, 103).

Whether or not such fears are well founded, corporations are likely to be with us for some time, and their power must be dealt with constructively if we are to promote sustainability.

The corporation
To determine what role corporations might play in sustainability, it is necessary to consider carefully what the corporation is, and whether its philosophical and ethical underpinnings are compatible with sustainability. This analysis is described in Chapter Three where I draw on a range of analyses of corporate identity, leading to the conclusion that the corporation can be thought of as a nexus of power. Corporate structure and identity are given life by a combination of socio-cultural, biophysical, political and legal forces. For example, corporations depend on biophysical attributes for the provision of ‘resources’ and for waste sinks. Legal frameworks are vital because they provide ideological and coercive support for the creation and perpetuation of corporate power. Almost universally, laws are accepted that identify the corporation as a legal personality; allocate control rights to shareholders; endorse limited liability; insulate corporate identity from ownership changes by enabling shares to be transferable; and delegate management power to a single internal authority. These properties have limitations in regard to sustainability, which focuses on interrelationships rather than individualism; is enhanced by endogenous democratic
forms of control rather than exogenous, hierarchical ones; and promotes responsible engagement rather than legally sanctified non-responsibility.

In economic theory, firms are often conceived of as atomistic identities - homogenous, solitary monoliths competing with each other in the free market. The atomistic notion of the firm is informed by the liberal faith in individualism as the most efficient and democratic path to economic success. As I argue in this thesis, the notion of the corporation-as-individual is paradoxical, however. Although it is identified as a singularity, the corporation is a collective in disguise that exists in defiance of the ideology of the free market. I contend that its economic success derives from the collaborations within and around it, rather than solely as a result of the competing interests of individuals.

I argue that the atomistic interpretation of the corporation obscures its internal complexity and its reliance on larger networks in which it is embedded. I show that in terms of sustainability, the corporation can be more usefully thought of as a heterogeneous actor-network that enrolls human and non-human constituents to form a locus of power. These corporate actor networks are not inevitably stable or resilient. Despite their size, they are not intrinsically powerful - their power derives from relational effects. There is a range of potential influence lurking beneath the perceived surface of the corporation and a range of external influences that critically determine corporate existence and identity. The research undertaken in this thesis indicates that in order to facilitate the development of sustaining companies, these influences must be understood and accessed. I conclude that corporate identity may be transformed in the process.

Feminist, anti-racist, ecological and anti-colonial critiques draw attention to other aspects of corporate structure and function that are antithetical to the ideals of sustainability. For instance, corporations are typically masculinist organisations, a tendency which is manifested in management styles and in terms of the number and type of jobs women hold within corporations. The evidence from this research shows that inherent biases such as this must be rectified in order for corporations to become truly sustaining. Failure to do so will not only undermine corporations’ capacity in relation to sustainability, but their credibility as well.
I argue that the corporation is not a concrete entity, but an idea which survives with the permission of the socio-cultural contexts and biophysical systems that contain it. Marked differences in contemporary organisational forms of firms operating in different cultural contexts, such as variations in patterns of corporate governance and definitions of the purpose of a company, illustrate the cultural character of the corporation. Organisational changes over time can be seen to be related to changing technologies - networked business arrangements for example are enabled by contemporary technology. Such variations demonstrate that the corporate form is changeable. The corporation is only one possible artificial construct amongst many and ‘nothing about its definition says it must endure or that it must be the central instrument for ensuring social welfare’ (Moss Kanter, cited in Sampson, 1995, 219). The analysis in Chapter Three showed that the corporation is an inherently political creation - if political pressure is great enough, it may be transformed or replaced. Given the extent of the challenges we face, it must be either refined, transformed or replaced.

**Corporate sustainability performance so far**

Since the surge of environmentalism that began in the 1960s, corporations have had to deal with challenges to their modus operandi. As outlined in Chapter Four, corporate attitudes to environmentalism and sustainability have altered in response to external pressures and internal understandings of the threats and opportunities involved. There are also clear sectoral variations. The general trend in approaches has been from one of resistance and denial in defense of the status quo, to more proactive engagement with a view to securing win-win solutions. Corporate responses which effectively attempt to shield the individual corporation from external threats are informed by an atomistic conception of the firm.

Corporate sustainability strategies commonly remain within the confines of ecological modernization - or ‘eco-modernization’ - with an emphasis on the potential for eco-efficient technologies to liberate humanity from unsustainable practices. Over time, the scope of analysis has widened, moving from a focus on individual companies to coordinated approaches between companies from a particular industry or region. It was

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81 It is not necessary to continue to endorse the corporate form in order to perpetuate either industrialism or capitalism. In the long run, it may not be necessary to retain any of the three.
also noted in Chapter Four that firms have undertaken work with other stakeholders in
networks for sustainability. In addition, many business people argue for refinement of
the legal and political framework conditions within which companies operate, in order
to make them more conducive to sustainability. Despite encouraging improvements in
corporate sustainability performance, however, it is difficult to nominate any
corporations or groups of corporations which are unequivocally sustaining at this stage.
This may be because the ‘greening of business’ discourse tends to underestimate the
degree and type of organisational and framework changes needed to implement
sustainability.

Corporations and sustainability - co-evolution of concepts.
In Chapter Five, I propose that corporations meet the discourse of sustainability in a
reflexive or ‘co-evolutionary’ process – I argue that both may be influenced by the
interaction to some degree. I contend that sustainability issues a subversive challenge
to the atomistic identity of the corporation, since it is explicitly concerned with
diversity, equity, and complex interrelationships in the human and more-than-human
domains. It emphasizes holistic, collaborative approaches that are not in keeping with
antiquated ideas about ‘individual corporations’ or unadulterated competition.
Therefore, I conclude that if corporations are serious about engaging with the discourse
of sustainability, they must review their own organisational structure and identity, and
prepare for change. Furthermore, sustainability analyses - undertaken through the lens
of actor network theory (ANT), for example - drive home the point that corporate
power is a relational effect derived from extensive socio-cultural and bio-physical
networks. As a consequence, it is clear that corporations require socio-cultural and bio-
physical ‘licenses to operate’, not just economic ones.

On the other hand, corporations influence the discourse of sustainability, affecting its
trajectory and meaning. In Chapter Five I show that much of the language used
perpetuates existing power relations, establishing corporations as prime movers in the
push for sustainable development. Corporations make themselves strategically large
within the discourse, often consciously. This act provides big business with a degree of
immunity to pressure applied by governments to mend its unsustainable ways. It also
positions corporations as the primary and rightful beneficiaries of economic profit
gained in the pursuit of sustainability.
The language of sustainability is frequently subordinated to language that serves to perpetuate business-as-usual. Some business leaders talk about ‘sustainable growth’ or ‘sustainable profit’, for instance. When sustainability’s terminology is hijacked in this way, its broader perspective is jettisoned. Acceptable meanings of sustainability are selected by vetting the language used to describe them. Language that carries too challenging a message is rejected. Despite the perils of language adoption, it is worth pushing for significant change in rhetoric since this can act as a powerful precedent to changes in thinking and subsequently to cultural changes. The journey from rhetoric to practice is complex, however, as illustrated by the range of interpretations and responses to sustainability within the business sector, as explained in Chapter Five.

**Networks in business**

One of the main arguments in this thesis is that since the network form is useful in dealing with complexity and uncertainty, network approaches should be used to ensure that corporations’ engagement with sustainability leads to appropriate outcomes. Network approaches for sustainability allow the integration of diverse perspectives and values relevant to the discourse. Endogenous control, which is generally more appropriate for sustainability than exogenous control, can be created through network approaches which encourage robust dialogue. Approaches built on identification and analyses of networks are also gaining precedence in other contexts, including business (see Chapter Six). These can be accessed in order to promote the cause of sustainability.

Around the world, intra- and inter-organisational business networks are being built and accessed in response to a number of transformational pressures, most of which are sustainability issues. New forms of business organisation and management style are currently being created in such profusion that no single model of the twenty-first century corporation covers all the possibilities. Endogenously controlled management systems are being adopted, replacing or complementing hierarchical, exogenous ones. As explained in Chapter Six, there is a strong belief that in future, most business organisations will be constructed in network form. Companies’ rationale for existence is also being questioned. These shifts are occurring to the extent that the meaning of the word ‘organisation’ is deemed by some to be changing. I argue that as corporations
undergo radical changes in morphology and function, it is possible that sustainability can be integrated as a fundamental requirement of business in the process.

The shift to networked styles of business and production essentially represents a response to a narrowly defined selection of sustainability issues. As I argue in Chapter Six, the growing emphasis on network approaches in business therefore provides an opening for the discourse of sustainability. If people working in business are familiar with the logic of networks, sustainability theorists can argue that the perceived boundaries of business networks should be expanded. It also means that business competencies exist which can be transferred and applied to create sustainability strategies. In some cases, the conceptual links are very clear: management theorists already talk about ‘business ecosystems’, and corporations as communities. Although models such as these tend to maintain the ontological distance between the corporation and the ecosystem, or the corporation and society, this thesis stresses the opportunity for sustainability practitioners to seize on them and expand their boundaries.

Traditional knowledge for sustainability

Traditional knowledge should be included in the discourse of sustainability. In Chapter Seven I use traditional knowledge related to classical equitation as an apt and appealing metaphor for the role of traditional knowledge in the discourse of sustainability. This novel examination of equitation demonstrates that even within modern industrial society, different modes of behaviour, such as those based on traditional and progressive knowledge, inevitably interact. European civilization, for example, has been profoundly shaped by the relationship between human and horse. It has benefited from the utilization of traditional knowledge of equitation in food production, transport, war and so on. Traditional knowledge associated with classical equitation has endured for centuries in Europe, despite other enormous cultural changes that have occurred. Importantly, equestrianism appreciates the importance of the knowledge which horses themselves keep and impart, even though it cannot be perfectly understood in human terms. Similarly, I argue that effective sustainability strategies, including those that corporations participate in, require sensitivity to diverse socio-cultural and biophysical realities that extend beyond the human world.
I take the innovative approach of using equestrianism to demonstrate the fallacy of the ontological divide between nature and culture which underpins conventional understandings of the business/nature relationship. As NatureCulture hybrids, ‘domestic’ horses embody the interrelationship between the human and more-than-human world. They cannot be classified as creations of either the natural world or human culture - they are both. As hybrids, they have significantly influenced human history and culture, and have arguably benefited as a species from their relationship with people.

Artisans such as classically trained riders engage with the more-than-human world in a respectful as opposed to a dominating manner, through patient and systematic practice rather than overt applications of power. Classical equitation aims to improve the level of performance horse and rider are able to achieve while enhancing the horse’s wellbeing. In classical equitation, an attitude of empathy towards the horse and respect for his/her innate and distinctly non-human character is fostered. Equestrian and other artisans rely on their ability to ‘incorporate listening into the process of command’ (LeGuin, 2005, 194). Their practice has inherently moral and ethical components.

Classical riders equip themselves for their task by developing humility, patience, endurance, self-discipline, and empathy for the horse. These properties resonate with those associated with wisdom, which is also required in the search for sustainability. Riders’ educational journey therefore echoes that of sustainability, since it involves the ‘getting of wisdom’ rather than just the accumulation of information or attainment of technical proficiency. This overlap between the wisdom that supports the art of equestrianism and that which helps people get through life generally would not surprise Franz Mairinger - he used to say “you ride as you live” (pers. comm., 1977). Approaches that incorporate key aspects of classical equitation, such as respect, patience, self-discipline and the ability to listen, understand and communicate effectively are of great benefit to sustainability.

The power derived from modernist actor networks such as corporations has useful properties for sustainability, but as I point out in Chapter Seven, it is insufficient by itself. Modernist power is applied under the banner of progress and development, underpinned by science. The organisations created by power are transient - the
interactions that occur in institutions of modernity such as the market are essentially passing relationships. On the other hand, patience drawn from traditional, Indigenous and local forms of knowledge, and practiced by particular kinds of artisans, enhances endurance and stability. The fact that these forms of knowledge have existed for very long periods of time demonstrates their value for sustainability. They are derived from the need to ensure survival. Patience is stronger than power in terms of its ability to endure - it brings a mature capacity to understand and live within biophysical limits, the goal of sustainability. I therefore conclude that traditional forms of knowledge should be included as integral parts of networks for sustainability. Power and patience are both essential parts of contemporary experience, and of sustainability.

One of the main messages of this thesis is that sustainability strategies should integrate the benefits of power and patience in a synergistic equilibrium. In fact, this exercise lies at the core of sustainable development. It is imperative that the discourse of sustainability is not dominated by any particular perspective, including that of corporations. Scientific and traditional knowledge are both vital. Scientific knowledge can contribute substantially to sustainability, provided it is not permitted to undermine the resilience and stability that traditional knowledge provides. The transient creations of ‘progress’ must be grounded in and evaluated according to traditional, Indigenous and local knowledges, which exist in most cultural circumstances. Sustainability must be accessible to people from diverse cultural backgrounds with different values and ambitions. It must also be open to those who speak for the more-than-human world, for its sake and for humanity’s sake.

**Deliberative democracy**

Since sustainability is a political discourse (see Chapter Two) it must be approached using methods that are capable of integrating diverse perspectives holistically. Therefore, as explained in Chapter Eight, network approaches are essential for sustainability. Sustainability requires a macro-view, but this should remain sensitive to cultural contexts. It also requires engagement with a matrix of relationships ranging from weak to strong. Global efforts, including those in which multinational corporations (MNCs) are involved, should complement rather than replace the myriad micro-level cultural ways of knowing that simply cannot be translated into a universally understood language in any more than a rudimentary sense. Furthermore, sustainability
cannot be measured solely by quantitative means, as is possible in certain forms of intellectual inquiry undertaken within a single discipline. Sustainability is not the exclusive province of ‘experts’.

As discussed in Chapter Eight, deliberative democracy/community engagement techniques offer a way of achieving the necessary synthesis of values, goals and knowledges. Deliberative democracy is a strong form of democracy that rejects mere consultation or discussion in favour of informed dialogue. It can access communal wisdom as well as knowledge, and builds a sense of belonging to a group with ownership of the issues under examination. Topics or questions are approached in the spirit of reciprocity, where people commit to engage in good faith with all perspectives offered. Deliberative democracy embraces discursive plurality, and enables issues to be reframed as an essential step towards sustainability. This is partly because the deliberative process assists participants to see things from the viewpoint of others. Often, a stronger community commitment to social and environmental issues is revealed than that which surfaces in conventional political processes. Indigenous, traditional and local knowledge can be effectively included as a complement to scientific or progressive knowledge. Deliberative democracy enables communities to achieve the ‘power to act’ as opposed to being subjected to any hierarchically imposed power which dominates. It provides a means of integrating power and patience. This is vital for sustainability.

Corporations and corporate groups can use deliberative processes internally to access the full range of potential within. They can also participate in deliberative techniques instigated at local, regional or national levels of government. It is possible that international processes of civic engagement can be designed that include corporations. Community engagement processes can be tailored to suit the needs of all participants by using different modes of communication as necessary.

**How can corporations contribute to sustainability?**

Many of sustainability’s imperatives lie beyond the mandate of corporations as they are currently imagined and structured. Sustainability concerns are not reducible to the material and economic foci of conventional corporate enterprise. Corporations must
therefore be prepared to accept the discipline of working within broader networks on
the path to sustainability.

The claim made by some that corporations should be at the helm of sustainability needs
qualification. I maintain that this contention undervalues the contributions of other
actants within networks for sustainability, and it asks too much of corporations
themselves. While they have much to offer, corporations certainly do not have the
authority or capacity to ‘bring’ sustainability to everyone else. The eco-efficiency that
business promises as a path to sustainability is worthwhile, but incomplete as a strategy.
While hopes for a sustainable future are almost certainly doomed if corporations do not
play an active role, it is doubtful that the problems we face can only be dealt with by
corporate action. Sustainability requires wisdom, as defined in Chapter Eight, not just
quantifiable knowledge designed to deliver economic benefit. Corporate efforts
towards sustainability are likely to be most effective when coordinated within broader
networks of action, in attempt to achieve a form of the equilibrium to which Saul

Corporations cannot benevolently donate sustainable lifestyles to Indigenous people,
for example. At best, Indigenous communities can invite companies to work with them
in a sensitive manner that supports the sustaining traditions that exist. Indigenous
people familiar with the practices of living in sustaining cultures are arguably more
qualified to explain it than corporate personnel who are generally only grappling with
sustainability as a theoretical possibility. I contend that there will be instances where
the best thing a corporation can do in the name of sustainability is to keep out of the
way. Furthermore, if corporations are entrusted with the job of leading the way to
sustainability, it gives them license to intrude whenever and wherever they feel like it,
while giving tacit approval for others to avoid taking responsibility. If this occurs,
sustainability could amount to little more than justification for MNCs to pursue neo-
colonialism with renewed vigor, rather than becoming an empowering ‘global agenda
for change’ (WCED, 1990, xiii).

A stated previously, sustainability is explicitly concerned with the complex
interrelationships that determine the outcomes of development strategies. It therefore
requires network approaches. These can be engineered to facilitate comparatively unrestricted and equitable flow of relevant information, and permit the integration of diverse, often disparate values. The challenges set by unsustainable practices are far too daunting and too heterogeneous to be tackled by one societal group or from one cultural perspective.

As Chapter Eight shows, corporations can contribute to sustainability most effectively by embracing network approaches. They can participate responsibly in larger, democratically run networks dedicated to sustainability. Deliberative democracy can play an important role in such networks. In addition, companies can undertake their own research and development and/or support relevant research networks in an effort to generate technological and sociological innovation for sustainability. Firms can also utilize network approaches within their own jurisdiction in the process of establishing company or sectoral sustainability strategies.

Corporations can make substantial contributions to sustainability by attending to intra- and inter-organisational structure and management strategies. As indicated in Chapters Four to Eight, characteristics which sustaining corporations of the future might embody include:

- strategic responsiveness;
- incorporation of sustainability as an intrinsic part of business, not just an add on;
- an appreciation of interconnections within relevant internal and external networks;
- meaningful and extensive engagement with stakeholders;
- organisational structures and management practices that engage employees appropriately in company sustainability strategies;
- trustworthy, fair and responsible behaviour, regardless of financial performance;
- preservation and enhancement of social capital;
- adoption of performance analyses that extend beyond the conventional financial bottom line to include social and ecological concerns;
• respect for and participation in strong democratic processes;
• demonstrated respect and care for other concerns, values and ways of knowing, including those relating to the more-than-human domain;

Multinational corporations focus heavily on the market as a route to sustainability. Eco-efficiency strategies aim to optimize use of materials and energy in business in order to procure maximum economic advantage in the market. My analysis and conclusions about the market, as described in Chapter Eight, are novel and important. I conclude that although the market is conventionally interpreted as the cumulative effect of the actions of self-interested individuals, it can more helpfully understood as a network of weak ties in which self-interest is a tendency, not a prerequisite. Weak interpersonal interaction is thought to be an effective way to provide stimulus for innovation. Sustainability can be improved by appropriate technological innovation driven by ‘market forces’, which do provide a degree of weakly democratic endogenous control. At the same time, however, the market’s potential in terms of sustainability is limited by the weakness of the interactions which take place there. The market’s advantages are most beneficial when balanced by the constancy gained through traditional, Indigenous and local communities of knowledge, where deep engagement is nurtured. These forms of knowledge are compatible with the strongly democratic endogenous control necessary for sustainability. Sustainability networks should be built to include a range of ‘depths’ of relation and associated knowledges – from the shallow links of the market where appropriate to the deep, intimate relationships that families, communities and partnerships rely on. This analysis represents a key and original contribution to the discourse of sustainability.

The benefits corporations have to offer through their actions in the market need to be guided by appropriate framework conditions if they are to be most effective. Framework conditions that could be implemented to promote sustainability, as listed in Chapter Four, include:

• the need for strong democracies that override corporate political influence - strong democracy must include room for deliberation;
• appropriate and effective local, regional, national and international regulation - e.g. legislation preventing externalisation of non-economic costs of corporate activity, and removal of tax incentives that perpetuate unsustainable practices;
• scope for effective social movements to champion human rights and environmental protection;
• revision or elimination of the legal concept of limited liability and of the corporation as a fictitious person;
• promotion of fair trade, and equitable access to the free market for all who desire it;
• increased development of non-corporate forms of business, such as cooperatives or community businesses;
• amelioration/restriction of harmfully speculative aspects of the financial markets.

Some of these recommendations are more likely to be implemented than others. Imminent changes to laws which ensure limited liability or ‘corporate personhood’, for example, are unlikely to be enacted at a global scale in the foreseeable future.

**Recommendations**
In Chapter Two I listed several themes which consistently appear in sustainability discourse. It is clear that corporations, and MNCs in particular, can participate in constructive ways to deal with many of these themes, sometimes assuming a leading role (see Table 9.1).

It is essential that corporations understand the potential for deliberative democracy/community engagement techniques to guide them in their efforts to become sustaining. In fact, civic dialogue is an absolutely essential step in determining what constitutes sustainability in any given cultural context, whether or not corporations are involved. Furthermore, corporate performance can benefit from the knowledge gained through effective community engagement, saving time and money, and avoiding future trouble. Corporate credibility in relation to sustainability can be enhanced by appropriate engagement with relevant communities. This endeavour can be further
enhanced by the recognition of the role of the market as a network of weak ties in networks for sustainability.

Corporations are major players in the transition to sustainability, but adjustments need to be made in order to make their contributions as effective as possible. The way people within companies perceive the corporation needs to change as does the way others perceive it. Corporations must revise the way they position themselves in relation to society and to the rest of the world. Corporations need to relinquish modes of acting that persist as residues from outdated notions of development, and their past roles in it. While some corporations are taking exploratory steps in these directions but change is not occurring fast enough or at sufficient magnitude as yet.

**Future research**

There is a pressing need and enormous scope for future research in the area of corporations and sustainability. Broad theoretical analyses and specific case studies are both needed. In order to facilitate the transformation of corporations and the change to sustainability, interdisciplinary approaches which shed new light on old themes are called for.

Case studies will continue to be of great benefit to those trying to understand and create the conditions that support sustaining companies and business networks. Studies of specific business strategies developed in the name of sustainability, and evaluations of their success, are needed as a source of information and inspiration. This applies to individual companies, industry groups, firms organised in industrial ecologies and to corporate participation in broader networks. Framework conditions need attention. The correlation between organisational structure and commitment to sustainability also merits ongoing research. For example, the success of companies listed on the Dow Jones’ Sustainability Index (DJSI) warrants investigation. The extent to which sustainability is a symptomatic or causative influence of their solid business performances should be determined. It would be useful to build databases of case studies and/or best practice. This would provide information for quantitative analysis of the usefulness of particular techniques.
Table 9.1 Corporate involvement in sustainability

| Key sustainability theme                                                                 | Potential for corporate involvement                                                                                                                                                                                                 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| The hope that people should be able to live well and happily                                                                                                                                  | It is possible for corporations to contribute, but their efforts are neither inevitably nor uniformly supportive of this aim. Corporations are unlikely to lead in this area - more the province of communities/societies to determine the corporate role. |
| The need for synergistic and holistic approaches                                                                                                                                             | Corporations will often, but not always, have an active role to play. Holistic approaches can be undermined if corporate power and knowledge dominates.                                                                                  |
| A sense of crisis and the need for people around the world to work together to overcome it                                                                                                     | Corporations can work positively with others in global, regional and local networks. There is a danger that corporations might take advantage of people’s fears to push ‘corporate colonization’. Corporations are unlikely to lead consistently in this area, because of issues such as lack of public trust in big business, and since industry cannot solve all crises. |
| The requirement for social justice and equity                                                                                                                                                | Corporations must accept discipline within broader networks to achieve this aim. Constitutive problems with equity and justice within corporations must be addressed.                                                                         |
| The value of democracy, empowerment and participation                                                                                                                                          | Corporations must accept discipline to participate fairly in strongly democratic networks. Corporate action must not undermine democracy or community. empowerment/participation. Corporations should not be expected to lead the broader community’s agenda in this area. |
| The need for social and institutional change                                                                                                                                                    | Reform of corporate structures is necessary. There is a need for reform of architectures of political economy in which corporations act.                                                                                     |
| Global and local issues and the relationship between them                                                                                                                                        | MNCs have an important role as powerful global organisations. Corporate perspectives on global issues are important, but must not be permitted to dominate or set the agenda.                                                             |
| Inter- and intra-generational concern                                                                                                                                                             | Corporations have a role to play. However, they are unlikely to be leaders in policy creation, given the constraints of the market’s propensity to short-termism.                                                                 |
| The search for more sustainable production and consumption patterns                                                                                                                           | There is an important role for large corporations: they can lead in certain areas and sectors e.g.: eco-efficiency, Life Cycle Analysis, Cradle-to-Cradle design, industrial ecology, the move to service-based industries and so on. |
| The importance of accountability and precaution                                                                                                                                                 | Corporations must be clearly accountable to broader social networks. Corporations must adopt the precautionary principle.                                                                                                         |
The rate of organisational change in contemporary firms around the world means there is a need for ongoing consideration of the concept and structure of the corporation as it relates to sustainability. Innovative combinations and permutations must be evaluated as they arise. Comparisons between business responses guided by different cultural influences will continue to be valuable. For example, it is imperative that the potential threats and opportunities for corporations based in the growing economies of the Asia-Pacific region to contribute to sustainability are investigated. If companies in this region of rapidly expanding economic power do not support sustainability effectively, plans to implement sustainability at the global scale may well be rendered impotent. It would be useful to identify the potential for cross-pollination of ideas between emerging corporations and businesses that are further along the path to becoming sustaining. Perhaps the usual pattern of corporate engagement with environmentalism and sustainability experienced elsewhere could be circumvented or fast-tracked, or a better path suggested. Rhetoric’s function as a precursor to change towards sustainability within business is another relevant topic for more research. The effect of the relationship between language and power within the discourse of sustainability is closely related and similarly worthy of continued investigation. Empirical and theoretical research, boosted by case studies, is needed in this area. The findings of such research could be applied to accelerate change towards sustaining corporations.

There is much work to be done in relation to the network theme. Researchers can showcase best-practice network designs that aid sustainability and/or business performance in particular situations, in order to identify any lessons that may apply to other contexts. Although specific strategies are unlikely to be directly transferable to other areas, insights about processes used in the formulation of strategies, for example, will be salutary. The reasons behind the growing popularity of network approaches in various disciplines can be explored, as can the potential for their synergistic combination. The parallels between network approaches in business and in the discourse of sustainability require further investigation. Are they related? Have they emerged independently or is there a common catalyst? How can these approaches be integrated for best effect in particular instances involving specific corporations?

The conception of the market as a network of weak ties rather than the culmination of self interest requires further interdisciplinary research. This is an important area that
deals with foundational beliefs of economic theory. Studies could be undertaken that explore the empirical and theoretical parallels between observations of human behaviour patterns developed in economics and social psychology. The implications of this understanding of the market for policy makers, communities and business people must be considered. Such research could yield insights which help people to decide to what degree the market can be relied upon as a path to sustainability and what sort of framework conditions best support its strengths.

Attention to the constitution of networks of relation in terms of their depth may prove to be a useful way to approach the development of sustainability strategies. Researchers could try to discern any correlation between the constitution of matrices of weak and strong relationships and sustainability. Combinations of weak and strong ties which optimally lead to sustainability might be identified, or researchers may highlight processes which determine the optimal conditions for any given context. We may find that particular ratios of strong to weak ties are needed, or particular ways of integrating them (in addition to deliberative democracy techniques), or both.

Deliberative democracy/community engagement techniques are essential to sustainability as well as to healthy democracy generally. There is enormous potential for work to be undertaken in this field of research. Case studies depicting specific instances of community engagement and their results will be instructive. They can add to knowledge about what forms of engagement work best in particular circumstances. General theoretical debate related to deliberative democracy is also necessary. For example, any cultural biases which lurk behind the cover of such techniques need to be identified, if broad-scale adoption is desired. The normative assumptions that support democratic empowerment may not be readily accepted in all cultural circumstances, and alternatives may have to be sought. Even where deliberation is embraced, practitioners need to be sensitive to any potential distortions of the process which may creep in. Research can shed light on problems which may occur.

Finally, traditional forms of knowledge such as equestrianism, which survive beside scientific knowledge in industrial society, have been inadequately researched and documented. Given the importance of traditional, local and Indigenous knowledge in its own right and, of course, to sustainability, additional steps should be taken to
remedy this situation. Individual case studies can reveal the character and content of traditional knowledge and provide further insight into the extent to which knowledge gained in a traditional context is transferred and applied to challenges in other spheres, including sustainability. It would also be useful to identify instances where traditional knowledge has failed its keepers, and to think about why, in relation to sustainability. The factors which determine whether meetings between scientific and traditional knowledge result in desirable or undesirable outcomes can be examined in greater detail through case studies. This might assist in the creation of effective networks of knowledge for sustainability.

Requiro sapientia - seek wisdom
The dominant discourse of sustainability runs the risk of diverting our attention from wisdom to technocratic cleverness by emphasizing those forms of human activity that can be measured in terms of material improvement through time. Eco-efficient technological ‘solutions’ to unsustainability are delivered by applications of ‘rational’ science in order to perpetuate the western idea of ‘progress’. As powerful as it is in certain respects, however, rational science is fundamentally not designed to answer all the questions of human existence that should be held up for consideration within the discourse of sustainability. Its methodology is spectacularly successful for some purposes, but not all.

Although this focus has its uses, it forms only one part of the many considerations that hold our attention. What of the changes that need to be made now to retrace our steps and regenerate what we have lost? What of the parts of our lives that we do not wish to change progressively to anything? What of the profound philosophical questions of human existence - arguably the most important - that people, both collectively and individually, have grappled with for millennia? Who are we? Does life have a meaning? What sort of communities do we want? What do we mean by love? Whom do we love? What do we mean by well-being, success, happiness? What legacy do we want to leave for our children? These dilemmas - central to sustainability - are met in cultural spaces that are not readily defined by linear improvement. These are not ‘irrational’ or ‘unreasonable’ questions, they simply cannot be answered by rational scientific means alone. They call for wisdom.
It is important to note that challenging the underlying premises of some corporate versions of sustainability is not to dismiss the valuable changes that have been achieved, the potential for future change, nor to doubt the sincerity of people working in corporations who are dedicated to achieving sustainability. The point of this analysis is to open further avenues for innovation and change. At the same time however, there is no guarantee that corporate-led endeavour will inevitably lead to a sustainable future or that corporations will continue to occupy the position of power to which they have become accustomed. Corporation actor-networks may be reordered. It may transpire that non-human actants will be the primary catalyst for reordering - perhaps the atmosphere, if it warms too greatly because of the enhanced greenhouse effect, will simply cease to allow some insurance companies to exist, for example. The general concept of the firm itself also faces revision. In many ways, the discourse of sustainability issues a subversive challenge to the privileged identity of the corporation.

The need to seek wisdom for sustainability emphasizes the need for us to draw on all the resources of knowledge available to us and attend to a broad spectrum of values and aims. Our success in this process cannot be measured according to the narrow qualitative metrics commonly employed by corporations or within the market. We will have made best use of the human capacity for knowing that we are so proud of if we are able to combine all forms of knowledge at our disposal in order to reach sustainability.
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