
COMPANIES THAT SWIM AGAINST THE TIDE? EXPLORING SUFFICIENCY?

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ABSTRACT

The earth's ecosystems are under threat. This threat ranges from climate change through to those threats that are less well known at this stage but due to become more prominent in the future such as desertification, water shortages and bio diversity collapse. The blame for this reduction and dilution of the earth's environment falls at humanity's feet. In turn our pre-eminent economic framework (capitalism) that prioritises businesses pursuit of profit maximisation and infinite growth is heavily criticised, largely because they arise concurrently with environmental destruction maximisation. Given the finiteness of the earth, we cannot continue to maximise our rate of environmental destruction in pursuit of the next profit target. To begin to bring us back into balance with the environment and to enable us to find a way through the foretold environmental strains that does not continually perpetuate future problems we need to embrace the concept of sufficiency. In so doing we will put the economy where it belongs, a social construction that is second to the environment. This is the basic platform for this paper and the proposed point of departure for future research. To research companies that appear to put the environment first and the economy second and in so doing extract the lessons that can be learnt, or at a minimum the impediments and roadmaps for change.

Keywords

Sustainability, Sufficiency, Growth, Capitalism, Profit Maximisation

INTRODUCTION

"Effects keep adding themselves to one another, with the result that the situation for later subjects and their choices of action will be progressively different from that of the initial agent and ever more the fated product of what was done before" (Jonas, 1984, p 7)

This paper outlines the point of departure for my research. The central purpose of which is to put an empirical base around the proposition of putting the environment first and the economy second and the implications of this for organisations. In building the case, the paper outlines the requirement to look beyond climate change and carbon footprints, towards wider environmental crises.

The argument is made that it is the current economic tide of capitalism and its requirement for profit maximisation and growth that has exacerbated the environmental

issues facing the earth. Further, this economic tide will continue to intensify the problems, unless we embrace the concept of sufficiency, as we only have one earth from which to draw our wealth. Embracing the concept of sufficiency and a limit to the material scale of the earth runs counter to our conventional economic notions of infinite growth. However, the paper argues that in so doing we will logically put the economy back where it belongs, as a subset rather than a controlling absolute and hence realise that we can change the economic tide to move in whatever direction we want it to. Thus, in putting the environment first and the economy second, we potentially put ourselves into a much less environmentally destructive (and potentially enhancing) position with regards to our economic interaction with the planet, that may help us avoid future crises.

Taking this notion forward, the paper discusses a platform for research that has been developed by Gladwin, Kennelly and Krause in 1995. This platform when coupled with the concept of sufficiency is the point of departure and proposed research focus, with regards to future organisational research - researching companies that swim against the current economic tide. By researching organisations that embrace sufficiency and are not "constricted by a fractured epistemology, which separates humanity from nature" (Gladwin et al, 1995, p 874) we have the potential to develop new conceptions of the organisation. Conceptions that remove "assumptions of infinite growth from theories of strategy and organisation" (Gladwin et al, 1995, p 897) and in so doing potentially turn the subject area on its head.

RANGE OF CHALLENGES NOT JUST CLIMATE CHANGE

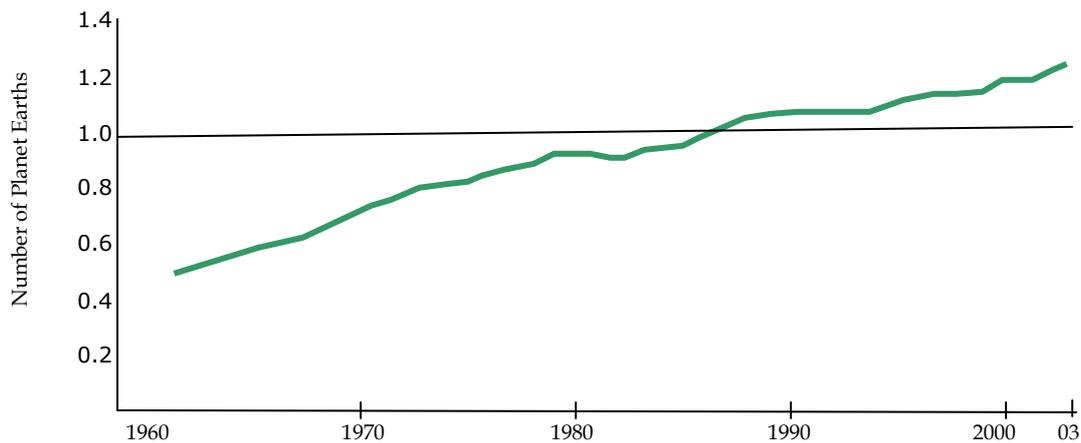
In the vanguard at the moment regarding the environmental condition of the earth are rising levels of greenhouse gases (GHG) in the atmosphere and the potential that this will create significant climate change over the coming decades. The blame for climate change falls at humanity's feet. As the following quote from an Intergovernmental Panel on Climate Change (IPCC) report in May 2007 illustrates; "since pre-industrial times, increasing emissions of GHGs due to human activities have led to a marked increase in atmospheric GHG concentrations" (IPCC, 2007, p 3)

The importance of climate change as an issue is being taken seriously by the UK government, although one could argue how seriously. Nevertheless, they recently commissioned a report, The Stern Review which states as its opening line that; "the scientific evidence is now overwhelming: climate change presents very serious global risks, and it demands an urgent global response" (HM Treasury Stern Review, 2006, p i)

As such few of us can be any doubt that there is a clear environmental issue in our midst's in the form of climate change caused by rising levels of greenhouse gases. However, climate change is only one of the environmental challenges that the earth faces. There is strain being put on the earth's environment across a number of fronts. The United Nations commissioned a study entitled the Millennium Ecosystem Assessment in 2000. This study was comprehensive in that it utilized 1,360 experts from 95 countries. The first presentation summarizing the findings of this study was released in March 2005. The opening finding of the study was as follows; "the changes that have been made to ecosystems have contributed to substantial net gains in human well-being and economic development, but these gains have been achieved at growing costs in the form of the degradation of many ecosystem services, increased risks of nonlinear changes, and the exacerbation of poverty for some groups of people" (Millennium Ecosystem Assessment: MA Findings, 2005, p 2). Hence, it is not just rising greenhouse gas levels that are the problem, rather multiple ecosystem services

are under strain. The report goes on to discuss nitrogen cycles, fish stocks, ocean ecosystems, forest ecosystems and many other systems and cycles to illustrate its point. When this finding from the Millennium Ecosystem Assessment is coupled with the World Wildlife Fund's Living Planet report on humanity's global ecological footprint¹; other research from, for example Meadows, Randers and Meadows's² "Limits to Growth" work and the Worldwatch Institute's³ annual "State of the World" reports it is clear the future does not look bright from an environmental point of view. In fact the future looks bleak and we are clearly living beyond the sustainable carrying capacity of the earth, as clearly demonstrated in the figure below.

Figure 1: Humanity's Ecological Footprint 1961-2003
 (Source: WWF Living Planet Report, 2006, p 4)



To draw from Meadows et al's work (2005), the figure above indicates that we are in overshoot. Unfortunately, a collapse accompanies an overshoot and thus it is likely there is likely to be a collapse some time in the future, as we cannot keep moving above the earth's carrying capacity as infinitum. In essence we are currently storing up future environmental issues. When we consider the past (acid rain, ozone depletion, etc) and couple this with a typical list of ecosystem services that are likely to be strained in the future, we are left with little choice but to reconsider how we interact with our environment.

¹ This work is published in the World Wildlife Fund's living planet report but is sourced from an organisation entitled the Global Footprint Network which is based in Oakland California.

² Their seminal work "Limits to Growth" first published in 1972 and its 30 year update published in 2005 make a comprehensive argument regarding the stresses being put on the earth both from a rising population and the ability of our commercial organisations to liquidate the earth's assets and interfere with the earth's ecosystems for the purpose of an economic return

³ The Worldwatch Institute an independent research body has published a "State of the World" report every year since 1983 that highlights the growing number of global environmental issues which are emerging.

Table 1: Ecosystem Services Being Put under Strain
(Source: Hawken et al, 2000, p 153)

Production of Oxygen	Maintenance of biological and genetic diversity
Purification of water and air	Storage, cycling and global distribution of fresh water
Regulation of the chemical composition of the atmosphere	Maintenance of migration and nursery habitats for wildlife
Decomposition of organic wastes	Sequestration and detoxification of human and industrial waste
Natural pest and disease control by insects, birds, bats and other organisms	Production of genetic library for food, fibers, pharmaceuticals and materials
Fixation of solar energy and conversion into raw materials	Management of soil erosion and sediment control
Flood prevention and regulation of runoff	Protection against harmful cosmic radiation
Regulation of the chemical composition of the oceans	Regulation of the local and global climate
Formation of topsoil and maintenance of soil fertility	Production of grasslands, fertilizers and food
Storage and recycling of nutrients	

Society has clear signposts that we need to reconsider our interaction with the environment and that this interaction is a wider consideration than the current vogue of a carbon footprint.

As mentioned previously the blame for this environmental destruction clearly falls at humanity's feet. None of us could seriously try to blame the earth's cycles or its biota. Moving this blame through its logical steps, the next place to look are humanity's trading organisations⁴. As it is these organisations that sell "artefacts" yet in the process of production buy in "raw materials and labour - nature and man" (Polanyi, 2001, p 44). Hence, it is these organisations that utilise nature's services to endow us with the products of progress.

ORGANISATIONS AND THE CURRENT ECONOMIC TIDE

Organisations do not exist in isolation, they are part of and have a reflexive relationship with international economics and as Polanyi (2001, p 18) argues few would disagree that it is this system which is the axis of the material existence of humanity. The pre-eminent economic system is capitalism, which can be defined as "the investment of money in the expectation of making a profit" (Fulcher, 2004, p 3). It is this expectation of making a profit and in the majority of cases the expectation of profit maximisation⁵ and the growth of these profits

⁴ It should be acknowledged here that one way to ensure that we do not hit environmental limits is to drastically reduce the population of the earth. However, population control is, whilst a valid subject, outwith the sphere of concern for my research. For an initial discussion on population control, see Herman Daly's (1996) book titled 'Beyond Growth' or Meadows et al (2005) 'Limits to Growth.'

⁵ It should be noted that profit maximisation for a firm is an ideal as opposed to a reality, because as Godfrey (2005, p 777) states although "managers may in fact intend to maximise shareholder wealth...cognitive limits on their ability to consider all possible strategies and outcomes constrain their ability to maximise"

through time that is acutely unviable with regards to the earth's environment, as at present, materially we are limited to just the one earth.

Profit Maximisation

Organisations in their pursuit of profit maximisation buy in natural resources and man's labour and then convert this into products for our consumption. In essence natural resources are liquidated and via this liquidation we say that our companies have generated income and profits (Daly, 1996, p 80)⁶. This pursuit of profit maximisation and liquidisation of natural resources does not matter if there is infinite stock or we liquidate natural resources for income at a rate that the earth can sustain. Hence, we draw down income commensurate with Hick's (1946) definition of income (cited by Daly, 1996, p 75); whereby income is "the maximum amount that a community can consume over some time period and still be as well off at the end of the period as at the beginning."

Being as well off means that the earth has the same capacity to produce income from its stock of natural resources going forward, as it has done in the past. This is clearly not the case, both when we look back and see what we have used and lost and also when we consider the implications of Figure 1 and Table 1 and look forward and consider the natural resources and income generation from them for future generations.

The impact profit maximisation has on the environment is captured well by Hardin in his 1968 article "The Tragedy of the Commons." His discussion of herdsman's use of common ground, whereby the utility of adding one more animal to each man's herd has both a negative and positive component captures the impact of an organisation's pursuit of profit maximisation well. Hardin outlines that for each herdsman the positive component is the additional revenue appropriated solely by the herdsman in question when he sells the extra head of cattle. However, the negative component is the overgrazing and ultimate depletion of the common ground. This is caused by the additional animals but is not carried by the single herdsman with the additional animal alone rather it is shared by all the herdsmen⁷. Consequently, "each man is locked into a system that compels him to increase his herd without limit - in a world that is limited" (Hardin, 1968, p 1244), hence "ruin is the destination to which all men rush" (Hardin, 1968, p 1244).

This very same logic applies to most of our organisations in that profit maximisation and growth in the shortest possible time is the goal and this maxim has helped to push the earth beyond its limit and is continuing to push it further. For example, as demonstrated by Meadows et al (2005, p 233) citing Moxness (2000) when they discuss the current dynamics of investment; "it [investment] is better viewed as a huge quantity of [money] capital attempting to earn the highest possible return. If it can exterminate whales in ten years and make a 15 percent profit, but it could only make 10 percent with a sustainable harvest, then it will exterminate them in ten years". Clearly, the pursuit of profit maximisation and growth is an accelerator on the road towards humanity hitting or moving beyond the limits of the earth and creating resource scarcity.

However, the blame for this pursuit of profit maximisation does not fall at the feet of organisations alone. They do not operate in the abstract, free from humanity's values and norms. To use Al Gore's term, growth is our "central organizing principle" and we see it in

⁶ "Natural capital is the stock that yields the flow of natural resources" (Daly, 1996, p 80) such as the fish in the ocean, the forest for timber or the oil deposits for petroleum. Thus it can be defined as renewable and non-renewable.

⁷ An externality by another name.

how we behave as individuals⁸. We all tend to operate to the principle of having more than last year is good, be it having another car, another house or another of whatever other trinket we or society deems appropriate.

Furthermore, at our workplace we tend, in general terms, to operate to the principle that “it is not a high but a rising income that is a sign of business success” (De Scitovszky, 1943, p 59). What is more society operates to its truth of “corporate growth enhances the social prominence, public prestige, and political power of senior executives” (Jensen, 1989, p 66). We cannot expect our companies to change unless we move our own values, norms, beliefs and truths.

Responding To Scarcity?

The pursuit of profit maximisation and growth is an accelerator on the road towards resource scarcity. When faced with resource scarcity, conventional economic thinking denotes that an increasingly scarce resource will increase in price. This price increase will then cause either or both of; a rationing of the resource to those who can afford to pay and create a spur for innovation and the development of appropriate substitutes.

The Millennium Ecosystem Assessment report and the details of Table 1 indicate that some critical resources are likely to become constrained and scarce in the future. The issue with these resources is that they are the building blocks of life for all of us. Do we ration those to only those that can afford to pay? Even if we tried to, how do we ration systems that operate on a global scale?

Given that rationing is unlikely to be feasible we are left to throw all our hopes at the development of an alternative by either the plucky entrepreneur or some other concerted societal effort. The only issue with this kind of response is can we be sure that, given the intricacies and complexity of the earth’s systems and services that the use of second best will suffice? The earth’s ecosystems operate on a global scale and are interconnected; they are extraordinarily complex and difficult to understand. So why should we think that we can replace them with a new technology? Even if we could replace them with a new technology could we do it in an appropriate time frame? Would we replace an existing earth service with something that is equally as good – something that has as great a utility for all of the earth’s inhabitants as that which it has replaced? The answers to these questions are both difficult and unanswerable, at this stage, as they require the ability to look into the future. However, the doubt surrounding them is large and the risk of getting the answers to these questions wrong is huge for all of the earth’s inhabitants. Further, when considering our ability to develop substitutes one needs to consider the following. Stafford Beer (1998, p 58-59) outlines that our brains are limited, they are not infinite, hence he argues that we are ruining the global ecology because we cannot understand it; and not just that it will take a lot of research to understand it, but that we cannot understand it all ever period, our brains are not complex enough. Adding to this, Hawken et al (2000, p 153) discuss how ecosystem services operate on such a large scale and in such detailed and poorly understood ways that many could not be replaced by technology. Whilst, the assertions of these authors ultimately hint at things we intuitively know but are impossible to verify, they do provide a warning sign to man’s hubris regarding his ability to master all of the earth’s intricacies.

Moving forward, even if second best does suffice, if we continue to operate within an economic environment of growth and profit maximisation we are just putting ourselves on a

⁸ I am clearly taking an Anglo-American perspective here. I would not wish to cast dispersions on all the world’s economies and societies. Although, clearly, it appears that the Anglo-American form of mass consumerism and continual growth is the one that most countries in the world seem to be aspiring to.

different road towards resource scarcity and just storing up other future environmental shocks.

Putting the debate of whether an alternative is viable to one side. The economic attractiveness of developing alternatives or putting a price on the ecosystem services that we currently get for free is attractive to economic man. Costanza et al's 1997 article puts a monetary value on the ecosystem services at a conservative average of \$33trillion per year compared to a global gross national product of around \$18trillion per year, at 1997 prices. Viewed through economic man's eyes there is an economic boon waiting to be exploited for the entrepreneurs that begin to charge for ecosystem services. But ultimately, although the boon may take a long time to end, and the organisations can continue to maximise profits and pursue growth in the meantime, as there is a lot of room for economic expansion. The boon will end because the earth is finite.

No matter what happens after resource scarcity of the type indicated in Table 1. If an alternative is developed and nature allows us to use second best, whether it is charged for or not, we are not creating any net benefit to humanity. In effect, in the pursuit of economic gain we would appropriate that which is done perfectly well by nature, to be done by man and machine. without any "increase in welfare because we would only be replacing existing services" (Costanza et al, 1997, p 259).

Summary

Our current economic system, the current economic tide, is moving in a direction that is reckless with regards to its interaction with the earth's environment. We know that we cannot eat or breathe money and that the earth is both our source and our nourishment. We need to be more cognisant of the obvious, that the earth and its "ecosystems provide the foundations of existence for both biological entities and organizations" (Starik and Rands, 1995, p 910) and at present we are limited to just the one planet. Our conventional economic notions have helped precipitate economic crises and will continue to do so, we need to move beyond our conventional notions and question their validity within a wider earth centric view.

To the economy is a social construction and it can operate to whatever rules we apply to it. Even though in the UK we have ceded control of the economy to be some kind of machine that is about inflation and interest rates. We must not lose sight of the fact that none of these operations or institutions are outside of us, they are our construction. Further our values are ours for choosing, we can make them whatever we want them to be, they do not have to be about more material goods, they can be about sufficient material goods. In essence we need to change our current paradigm. To change is a difficult task and may not be possible without some extreme disaster that forces us to change, however, it is possible.

It should be recognised that there is no one thing that can be altered to create the kind of changes necessary. Change needs to occur across many levels, as individuals, economic frameworks⁹ and organisations are all in a reflexive relationship with each other. However, a key change required is the choices and decisions we make when operating our organisations¹⁰. Embracing sufficiency as a concept could be part of the answer that enables us to rethink what is happening and how we make decisions in our organisations.

⁹ Changes to the wider system of capitalism are discussed by numerous authors, for example, Lamberton (2005) and Schumacher (1973/1993) question the basis of current economic theory and argue for the introduction of Buddhist economic theory to enable a more harmonious economic interaction with the planet.

¹⁰ "the people who most often apply economic concepts are managers making strategic decisions in business organisations. This same group makes most of the decisions that have the potential to affect the balance of nature. Thus it is within this group that changes in thinking about the relationship between economic activity and ecological sustainability are most critical." (Stead and Stead, 1992, p17)

At this stage, we are faced with a range of options with regards to how we move forward when faced with the potential for environmental catastrophe, we can either do nothing or we can do something. Further if we do something we can either challenge the existing economic tide (swim against it) or we can choose not to challenge (flow with it).

OPTIONS

Do Nothing

A do nothing response is one that is not actually being nor has been followed by humanity, as no matter what one's personal take is on the current effectiveness of the agreements and actions being taken, we are making some progress on issues such as climate change and we have made progress in the past on issues such as commercial whaling or the destruction of the ozone layer, to name a few. However, for the sake of completeness the do nothing option is discussed briefly, if only to discount it.

A do nothing response can be reasoned from a rational of who knows what the future will hold so why change. As Barrett (1996) discusses it is uncertain (as it is with every view into the looking glass of the future) whether future generations will envy our standard of living¹¹ or not. If they are likely to, we (the present generation) should consume less and invest¹² more with regards to the environment. With the converse holding that if we (the present generation) are likely to envy future generations we should make full use of "usufructure to the fruits of the earth" (Barrett, 1996, p 13). The use of the word "usufructure" is an obvious escape clause for Barrett to use given its meaning of profiting without damage. However, the element of doubt with regards to the standard of the environmental dowry we are leaving future generations is slim. We know for example, that future generations will not have the benefit of oil, as we currently understand and use it and we hope they can identify suitable alternatives.

The interplay between whether we will envy future generations or they will envy us whilst being an interesting point of debate is limited. Our past performance is a clear indicator of our likely future performance and at the least a call for us to move away from doing nothing to an application of some precautionary principle.

Within the context written here the precautionary principle is meant within the broad axiom of if we are uncertain about the future we should proceed with caution and conserve what we have, as opposed to the United Nations definition of the word¹³. As when we look back and change our perspective from what might happen to what has happened, the tales of environmental destruction are telling. We are now faced with a world where, to name but a few, the world's fisheries have been over fished¹⁴, where many great whales have been hunted to near extinction, where lead in petrol has polluted hundreds of thousands of children and where the ozone layer, although saved from complete destruction, will take another hundred years to fully recover.

¹¹ Using standard of living as a measure is obviously limited. Firstly because Barrett fails to define what he means by standard of living and secondly because standard of living could just include material goods for some or access to the natural environment for others.

¹² Within the context of Barrett's writing, the term invest is used in the broadest sense of the word as opposed to a monetary investment scheme per se.

¹³ Principle 15 - In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation, UN General Assembly (1992: Annex 1)

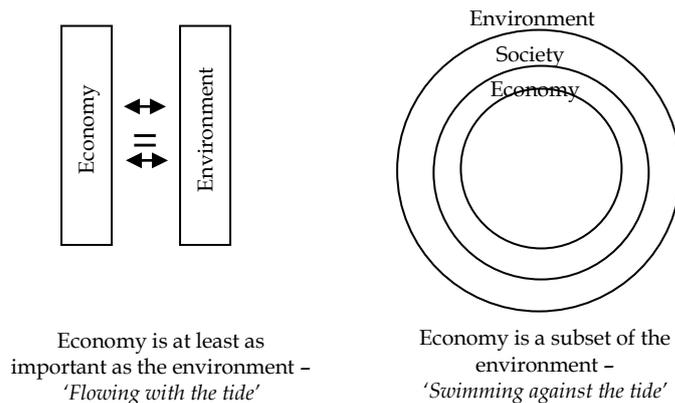
¹⁴ See UN Millennium Ecosystem Assessment Findings Report (2005)

In summary, a do nothing strategy is not being pursued by society nor is it ethically appropriate to play roulette with future generations environmental dowry if we are armed with enough evidence today. As a consequence, doing nothing is not a valid option.

Flow With Or Swim Against The Tide

We (society) are faced with potential environmental shocks and we can respond by doing something that either flows with the current economic tide or swims against it. This statement of flowing with the current economic tide or not is with regards to the context of the response and whether there is a challenge to the primacy of current economic thought and whether economics is being given equal billing to the environment or not. Within my terminology, if the economy is being given equal weighting or being put first relative to the environment this is a flow with the tide response. In that no particular direction is being followed the solution can go with the flow of profit maximisation and as discussed above, will result in continued environmental scarcity and destruction. If the environment is being put first and the economy second, this is a swim against the tide, in that there is a direction of travel away from the prevailing economic tide. There is a recognition of environmental limits and as a consequence the primacy of this understanding places the economy into a subservient second place to that of the environment.

Figure 2: Flowing With or Swimming Against the Tide



The management literature is replete with potential solutions that can help put organisations on the right path with regards to their interaction with the environment¹⁵. All of these solutions have merit, in that they discuss organisations taking on board numerous initiatives to create a lighter environmental footprint by for example; shifting perspective to take a wider longer term view, reviewing the solution they are offering (transport vs. cars), exploiting eco-efficiency gains (dematerialising) or treating waste as input materials for other companies and hence creating a business ecosystem. However, these solutions whilst valid on the road to a more sustainable planet are ultimately limited unless they are framed by a recognition that the earth is materially limited. In so doing, the next logical conclusion

¹⁵ For a discussion of the range of solutions, reference sources include, but are not limited to; Van Hoek (1999), Carter and Dresner (2001), Green, Morton and New (2000), Vandermerwe and Oliff (1990), Purser, Park and Montuori (1995), Hawken et al (2000), Dyer and Singh (1998), Iansiti and Levein (2004) and King (1995).

is that the environment and its ability to support life has to come first and the economy second. Without this recognition, companies may move, but it is unlikely they will move far enough. Whilst, we may enable a situation where each individual uses products or services that create less depth of footprint on the earth, if we continue to pursue growth we will just create more lighter footprints and ultimately still end up in the same place, environmental crises and the realisation that the earth is materially limited.

This move away from continual growth is difficult to contemplate, it runs counter to our understanding of how the world operates, particularly the economic world that provides us with our occupations and salaries. Our experience with non growing economies has not been pleasurable; one only has to consider recent recessions in the UK during the 1970s and 1980s or even the general depression of the 1930s, to know that no growth or contraction within our current economic frameworks is a painful process. The challenge of moving to a world where we face up to material limits and sufficiency appears enormous, yet it is one we must take. We cannot continue to let "organizations act in a global economic system that is independent of the ecological system" (Jennings and Zandbergen, 1995, p 1015). To draw upon an analogy; "even if the cargo on a boat is distributed efficiently, the boat will inevitably sink under too much weight – even though it might sink optimally!" (Sachs, 1998, p 88 citing Daly and Cobb 1989). Given there is only earth, we need to recognise the concept of sufficiency.

SUFFICIENCY AND CALL TO ACTION

Sufficiency exists hand in hand with eco-efficiency because of the material limits of the earth. Indeed, "efficiency without sufficiency is counter productive – the latter has to define the boundaries of the former. A society in balance with nature...can be approximated only through a twin-track approach: intelligent rationalization of means and prudent moderation of ends...an efficiency revolution remains without direction if it is not accompanied by a sufficiency revolution" (Sachs, 1999, p 88)¹⁶.

Embracing sufficiency and putting the material limits of the environment first is a concept that appears to have proved difficult for management scholars to move beyond what mostly appears to be a call for action and a laying out of principles versus detailed specifics. This is not to be unexpected, however to move beyond the principles, if possible, is the point of departure for this research.

One of the most coherent platforms for the point of departure, is that offered by Gladwin et al (1995). This article begins by stating that; "modern management theory is constricted by a fractured epistemology, which separates humanity from nature" (1995, p 874). Further, they argue that this separation has led to a situation where management theory is operating in a world where there are no limits and that this leads to "injudicious assumptions" and "fallacies of misplaced concreteness" (1995, p 875). Clearly, what any embracing of limits and sufficiency is about is "ecologically responsible consumption" (Shrivastava, 1995, p 939) - less quantity of stuff in the human experience and more quality. This requires a shift in our paradigm.

Gladwin et al (1995) offer three paradigms for consideration, technocentrism, eco-centrism and sustainocentrism. They argue that technocentrism is our current paradigm and because of the context of profit maximisation and growth is limited with regards to the environment. That eco-centrism is impractical because it "subordinates humans to the

¹⁶ Sufficiency is commensurate with scale as discussed by Daly (1996) amongst others.

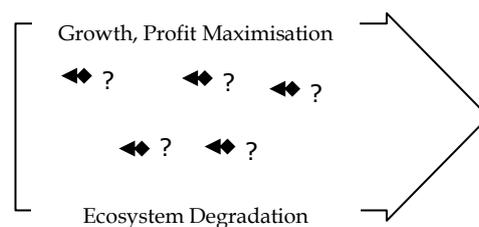
biosphere” (1995, p 888) and that it is an “ontological fallacy to claim that human intellect is subservient to the biosphere” (1999, p 888). Their preferred paradigmatic solution to enable society to operate in harmony with the environment is sustainocentrism. Whereby, sustainocentrism recognises that man is “neither totally disengaged from nor totally immersed in the rest of nature” (1995, p 890) and that we are now the stewards of the earth as well as a constituent part. That consumption must be scaled down, that we should embrace post materialisation and that growth cannot go on forever because of biophysical limits (against the economic tide of infinite growth and profit maximisation).

The question to be asked is can we move beyond the development of these paradigms in the abstract. Are there organisations already operating to the paradigm of sustainocentrism? If there are, are these organisations the seeds of change? Are there organisations out there that are doing their best to swim against the tide and put ecological sustainability¹⁷ first and economic sustainability second? Are there organisations that will enable the move to a new paradigm, because they are doing their best to operate to a new paradigm? If so what can we learn from them, their form, their rationale, their structures, their targets and their planning processes to name but a few areas and what do they teach us about management theory? In essence are there organisations whose owners, managers and employees espouse the idea of operating in harmony with the environment, espouse the concept of sufficiency and reject never-ending profit maximisation? What does this mean for the modus operandi of the organisation? Further, as Gladwin et al (1995) highlight what can we learn about strategy and organisation once assumptions of infinite growth are removed from these theories?

Because these organisations are likely to have to move with the economic tide to a certain extent in order to survive, these organisations are likely to be flexible and fluid in their decision making in order to find the room they need to move against the tide. This denotes that they are, at this stage, unlikely to be well established large organisations. But rather smaller, newer, more flexible organisations that are likely to have a strong entrepreneurial mosaic within them. The entrepreneurs and organisations that could be the seeds of hope, for example, are those that describe themselves as being “environmentalists doing business, not a business doing the environment” (Ecotricity, 2006).

Searching for and researching these types of organisations is emergent and open ended. It is a research of informed direction, but not conclusive direction and it is likely to yield many fruitless threads. However, it is the kind of research we must do in conjunction with other sociological research, if we are to move ourselves onto a new footing with regards to our interaction with this one, limited planet.

Figure 3: Companies that Swim Against the Tide?



¹⁷ Sustainability as used here and throughout this document is that is the opposite of unsustainability as described in general terms by Ekins (2000, p 6) where he described “an environmentally unsustainable activity [as] simply taken to be one which cannot be projected to continue into the future, because of its negative effect either upon the environment or on the human condition of which it is part.” As opposed to the more common definition of sustainable development as development that “meets the needs of the present without compromising the ability of future generations to meet their own needs” (UNWCED, 1987, p 8)

ACKNOWLEDGEMENTS

There are many and they know who they are.

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