Encouraging Environmentally Responsible Behaviour

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The following is a synopsis of a thesis of the same title and is presented in order to further discussion of the topic in order to validate the associated conclusions and recommendations.

ABSTRACT

Aiming to avoid the shortcomings of traditional positivist approaches for explaining environmentally responsible behaviour (ERB) the following study adopts a naturalistic methodology in search of a gestalt theory. Focusing on the question 'What are the most effective ways of increasing ERB?' qualitative interviews were conducted with purposefully selected subjects. Consumer behaviour is shown to be subject to numerous varied and complex influences governed by the dominant social paradigm. The power relationships within the current dominant social paradigm are skewed to the extent that business dominates the individual, the NGO and the government, restricting the effects of individual behavioural change. Corporate charters, which encourage maximization of consumption, and the measure Gross Domestic Product (GDP) perpetuate environmental exploitation whilst undermining improvements in quality of life. The governments solution of sustainable development is demonstrated to be a paradoxical policy, within the current economic paradigm, since high levels of economic growth are not sustainable. Encouraging pro-environmental behaviour therefore requires systemic change involving a unity of policy which facilitates sustainable action. Man's relationship with nature is presented as the key to learning and the development of ERB. Health is presented as a stimulant for responsible spending which constitutes the individuals best opportunity of encouraging change. Retardments against and stimulants for ERB are presented as practical opposites whilst individual recommendations for businesses, governments, NGOs and individuals are suggested. The resultant theory outlines the severity of political, institutional and social change necessary to avert impending environmental doom.

INTRODUCTION

Current levels of environmental degradation and resource depletion imply catastrophic consequences for humanity unless we radically change our behaviour. Previous, positivist, discussions of environmental behaviour demonstrate an apparent 'gap' between attitude and behaviour, and barriers which limit the development of pro-environmental habits. Such studies assemble responses into different subgroups by age and gender, etc. presenting results based on artificial aggregates that have no direct representation in the real world.[1] This technique is its' own undoing: 'when we aggregate people, treating diversity as error variable, in search of what is common to all, we often learn about what is true of no one in particular.'[2]

An alternative perspective is offered by the adoption of the naturalistic paradigm and its' contrasting axioms outlined by Lincoln and Guba[3] in the table overleaf.

Method

The following study utilises naturalistic methodology building on the authors tacit knowledge through a series of qualitative interviews with purposefully selected subjects: an advertising planner, a corporate social responsibility professional, a public relations manager, a venture capitalist for environmental business, an

advertising copy writer, a government advisor, an ecological publisher and an alternative transport agent.

Table 1. Contrasting Positivist and Naturalist Axioms		
Axioms About	**Positivist Paradigm**	**Naturalist Paradigm**
The nature of reality	Reality is single, tangible and fragmentable	Realities are multiple, constructed and holistic
The relationship of knower to known	Knower and known are independent, a dualism	Knower and known are interactive, inseparable
The possibility of generalisation	Time- and context free generalisations (nomothetic statements) are possible	Only time- and context-bound working hypotheses (ideographic statements) are possible
The possibility of causal linkages	There are real causes, temporally precedent to or simultaneous with their effects	All entities are in a state of mutual simultaneous shaping, so that it is impossible to distinguish causes from effects
The role of values	Inquiry is value-free	Inquiry is value-bound

Through the iterative process of interview, analysis and development of grounded theory[4], combined with an in depth review of the relevant literature, the study engages the motives and values of the subjects, developing a closer understanding of the cognitive reasoning and unconscious decision making that pre-empts consumer behaviour and the factors by which it is constrained.

Each subject was e-mailed the following diagram, designed by the author, to encourage participation, explain the nature of the interview and stimulate discussion.

Fig. 1

The first four interviews followed a semi-structured format focusing on opinions of the 'green' market, means of encouraging ERB, opinions of perceived consumer effectiveness[i] (PCE), the possibility that 'green' has a negative image and the responsibilities of companies, amongst other topics. These transcripts were subjected

[i] Perceived Consumer Effectiveness: The belief that individual actions effect social and environmental issues

to systematic comparison and extensive analysis by means of open, axial and selective coding[5] upon which grounded theory was built. This evolving, intermediary theory significantly expanded the authors tacit knowledge of ERB and the next four interviews were designed to follow a more narrative pattern in order to facilitate a more in depth understanding of personal emotions and intuitive feelings towards ERB and the lack thereof. The transcripts of these were then analysed and a summary was presented to each interviewee in order to negotiate outcomes and confirm the dependability of results. Corrected results were then analysed and developed into the resultant theories presented in this paper. This synopsis represents a further iteration of the naturalistic methodology, feedback from which will be incorporated into the final thesis.

RESULTS & DISCUSSION

Pernickety praxeology (complicated human behaviour)

Whilst significant progress, and numerous models, have been made by many scholars[6],[7],[8],[9],[10],[11] in order to explain human behaviour O'Donoghue & Lotz-Sisitka[12] (2002) amongst others[13], argue that 'factors and barriers on a flow diagram mask and 'factor out' much of the intermeshed complexity and diversity in the relational worlds of humans and other living things.' Models of behaviour must therefore, at least attempt, to reflect the complexity and evolving nature of the interrelated influences which constitute the context within which behaviour takes place, as well as those which impinge on the specifically individual level.

The model presented here (on page 5) is therefore unique in that it attempts to incorporate the effects of social, cultural, historical, institutional, technological and political influences on consumer behaviour by illustrating their infinite complexity. This complex background is described as the dominant social paradigm (DSP).

Introduced by Pirages and Ehrlich[14] in 1974 DSP is defined by Milbrath[15] as '...the values, metaphysical beliefs, institutions, habits, etc. that collectively provide social lenses through which individuals and groups interpret their social world'. It provides the context within which we construct our realities and the social, cultural and political context within which all consumer behaviour takes place.

The DSP, in this sense, clearly justifies a large proportion of (arguably pathological) consumer behaviour. Consumption as evolutionary adaptation (McDougall, 1908)[16], consumption as status-seeking (Hirsch 1977)[17], consumption and social identity (Lewis and Bridger's 2001)[18], consumption and the extended self (Belk 1998)[19], consumption and the pursuit of meaning (McCracken 1990)[20] and consumption and consumer 'lock-in' (Gronco and Warde 2001)[21] have all been explained in terms of the DSP by their respective proponents.

In search of a panoramic perspective the model considers not just 'pro-environmental' but all consumer behaviour, after all, it is this we seek to change. It also attempts to identify who effects each influences the DSP and how. With this aim four major players are identified which, the author believes, constitute the core of today's society; The government, businesses, NGOs, and individuals. These 'players' are considered to be the most significant entities with the power to affect the influences on consumer behaviour.

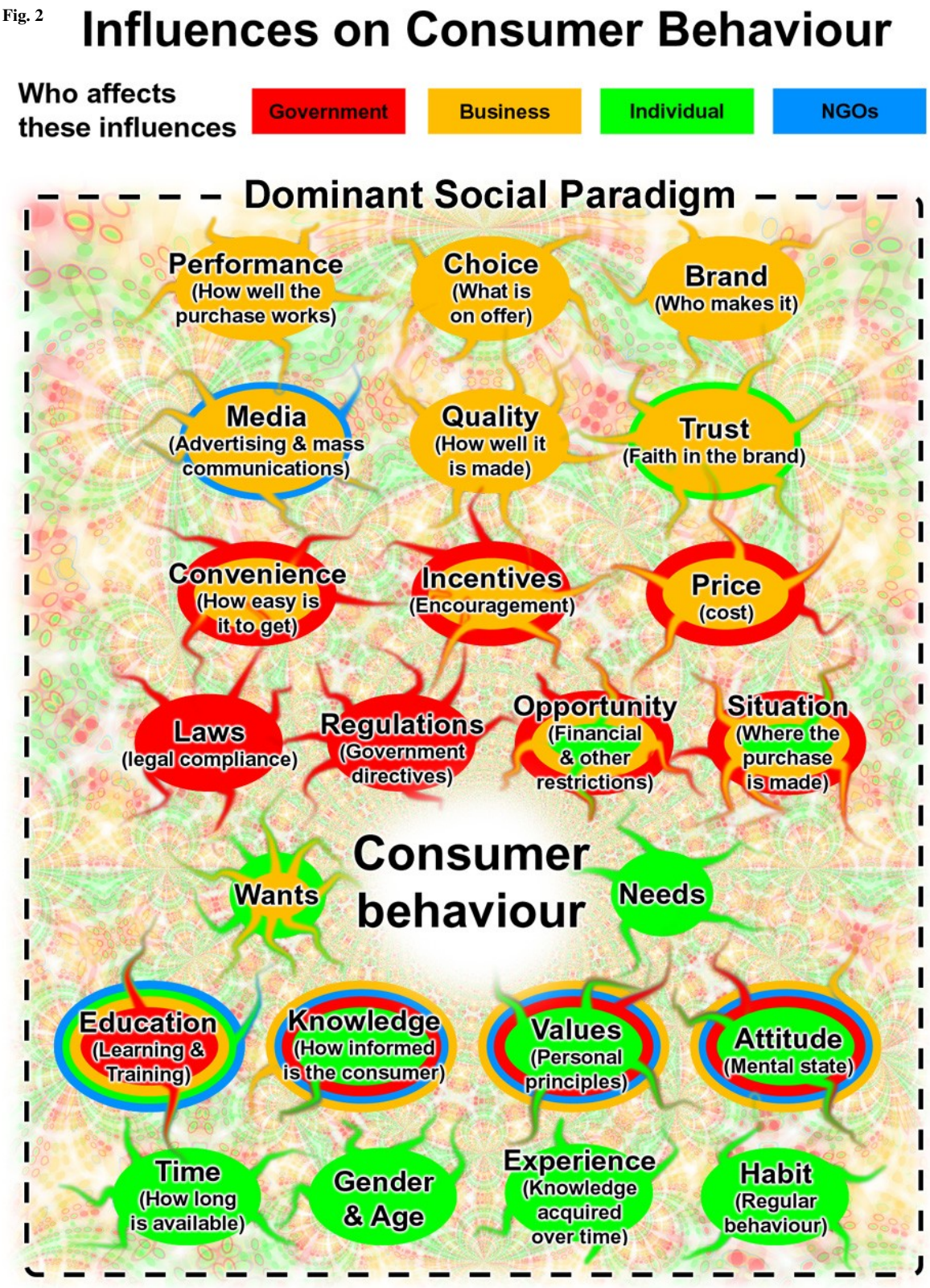
The model: Influences on Consumer Behaviour (Fig. 2) is presented overleaf.

There is no attempt to illustrate the direction and flow of the influences involved as they are all highly interrelated. It is suggested that each of the illustrated influences affects every other and as a whole they contribute to the infinitely intricate fractal nature of the overarching DSP. Each and every specific act of consumer behaviour follows a different pattern through the particular influences according to circumstance and no influence plays equal roles, or is actually ever the same. The personal, contextual nature of consumer behaviour makes each and every situation different. Every completed purchase arrives at the conclusion of consumer behaviour via its own intricate, individual route. The possibilities and permutations of alternative routes, encompassing differing levels of specific influences all of which exist within and feed upon the DSP to their own degree, are practically infinite.

The most significant players' colour is illustrated at the centre of each influence whilst the other players colours surround it, in order of decreasing significance. The size of each band encapsulating the main players influence roughly represents the degree to which that player affects the given influence.

The author makes no claims to have listed every possible influence and, in the spirit of Bauman, (2001)[22], considers the diagram a 'subjective work in progress' and not a definitive statement of fact. It's purpose is purely to illustrate the complexity of the many interrelated variables which influence consumer behaviour and that there is not, and never has been, a 'gap' between attitude and behaviour since the supposed void is filled by each and every one of the depicted influences.

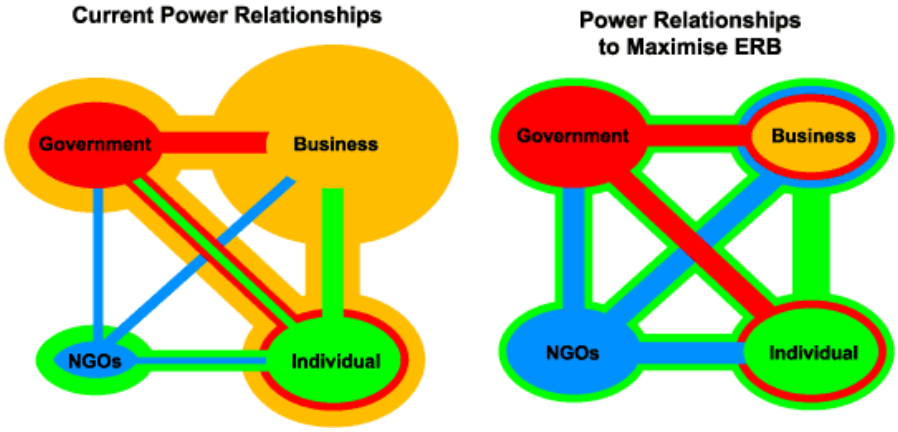
Fig. 2


Influences on Consumer Behaviour
Who affects these influences
Government
Business
Individual
NGOs
Dominant Social Paradigm
Performance (How well the purchase works)
Choice (What is on offer)
Brand (Who makes it)
Media (Advertising & mass communications)
Quality (How well it is made)
Trust (Faith in the brand)
Convenience (How easy is it to get)
Incentives (Encouragement)
Price (cost)
Laws (legal compliance)
Regulations (Government directives)
Opportunity (Financial & other restrictions)
Situation (Where the purchase is made)
Consumer behaviour
Wants
Needs
Education (Learning & Training)
Knowledge (How informed is the consumer)
Values (Personal principles)
Attitude (Mental state)
Time (How long is available)
Gender & Age
Experience (Knowledge acquired over time)
Habit (Regular behaviour)

Invisible power structures

To understand the way in which the contributory 'players' shape the dominant social paradigm we must also understand the relationships between the players and the levels of influence they wield on each other. Based on observation, business development, qualitative interviews, literature research and the clearly observable, highly damaging effects of trade liberalisation, the following diagram (Fig. 3) is an illustration of the elusive patterns of power which permeate our society and influence the DSP through their invisible, hierarchical network.

Fig. 3 **The need for structural changes**



Each player wields a certain amount of power over the system. At the moment the majority of this power comes from business. The extent to which any player influences any other is represented by the extent to which its' colour encapsulates any other. For example, in the current situation individuals influence business to some extent (by buying things) and the government to some extent (by voting) but do not control them, individuals only control the NGOs. To maximise ERB business control over government and individuals needs to be reduced so that primarily government has control over business, secondly NGOs have control over business and ultimately the individual has control over the entire system (incidentally, the discrepancy illustrates that the current system is simply not a democracy!).

Discussions purporting to encourage ERB which point at the individuals' actions and dictate 'improved behaviour' as a solution to environmental degradation therefore remain largely nonsensical. Individuals' actions are governed by structural constraints and unless these factors are recognised and addressed the possibility of achieving widespread ERB remains largely impossible.

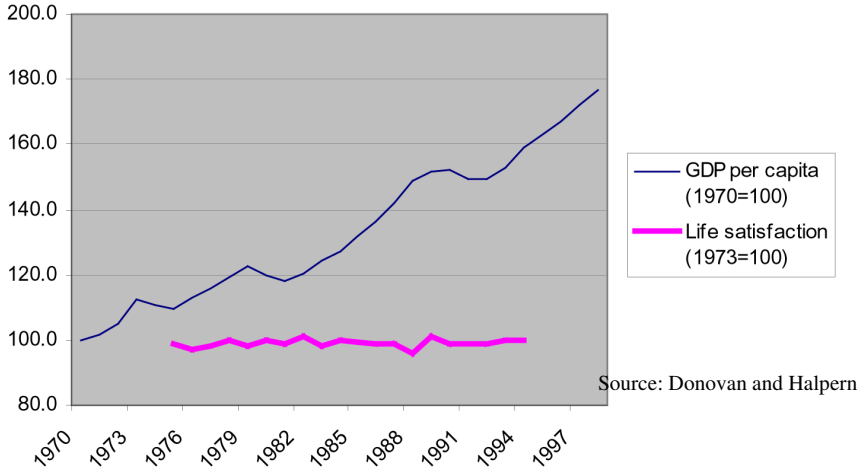
Consumption and well being

The predicament with which humanity is now faced is one which can be traced back indefinitely, along the path of mans' relationship with nature, to the days when man existed with rather than exploited his environment. The ensuing debacle is best illustrated by the observations of Erich Fromm (1976)[23] who noted that industrialisation and 'radical hedonism' do not lead to peace and harmony.

The issue Fromm addresses is the very core of the problem that underscores the current DSP and makes encouraging environmentally responsible behaviour so problematic; that maximisation of consumption is synonymous with well being. In

Fromm's view this is a failed promise and he is not alone in his observations. A recent paper by Donovan and Halpern[24] highlights the basic problem contained in the following data from the Eurobarometer survey (Fig. 4). Results of this survey were calculated by asking people how satisfied they were combined with a measure of (self-reported) psychological health or mental stress using the well established General Health Questionnaire 12 (GHQ12) measure.

Fig. 4 UK Life satisfaction versus GDP



Source: Donovan and Halpern

Whilst economic growth and hence average household income has grown over the last thirty years, life satisfaction and therefore well being has not improved, which conclusively uncouples economic growth from well being. However 'industrialism' as it was in Fromm's day, or neo-liberalism and economic globalisation as it is today has no interest in explaining, demystifying or altering this global debacle whilst it serves its' own goals.

Governmental attempts to placate this predicament advocate sustainable development as *the* solution to improved well being and a better quality of life. To this effect the UK government has developed its' own 'quality of life barometer' which incorporates fifteen 'headline indicators' with which to monitor the progress of sustainable development. The first of these indicators is economic growth, measured in Gross Domestic Product (GDP) an antiquated, unsustainable and inherently flawed measure by which any human earning less than $12,000 (US) is considered more valuable to their country's economy if they are locked up, in jail, behind bars![25]

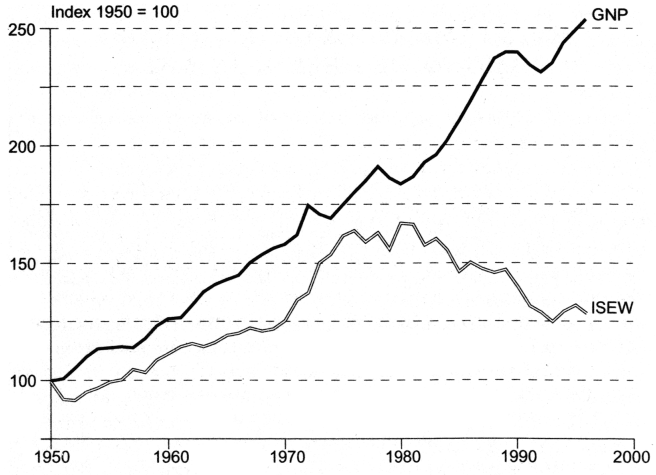
Such fallacies are clearly ludicrous, yet GDP remains the number one indicator of quality of life and none of the other indicators incorporate its' monumental shortcomings.

To this effect, various other techniques to measure economic welfare have been suggested including Daly and Cobb's Index of Sustainable Economic Welfare (ISEW). As described in figure 5, ISEW has not been improving since 1980. ISEWs calculated for several other developed countries all show the same overall pattern of levelling off and then declining[26] compounding the evidence and furthering the need for a fundamental reappraisal of progress.

Source: McLaren

Fig. 5

UK GNP growth compared with changes in the Index of Sustainable Economic Welfare



The paradox of sustainable development

The government is adamant; Sustainable development is the key to a better quality of life and is therefore the most pressing issue of our time. It formulates the core of government strategy and is *the* overarching principle which they insist must be built into policies and decisions at all levels.[27] According to their report on building a better quality of life, sustainable development requires meeting four key objectives at the same time:

1. Social progress which recognises the needs of everyone;
2. Effective protection of the environment;
3. Prudent use of natural resources
4. Maintenance of high and stable levels of economic growth and employment

These points stand in stark contrast to the Bruntland Commission's 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*'[28]. Nowhere in the Bruntland definition is there any mention that sustainable development involves 'maintenance of high and stable levels of economic growth and employment' and it is this fourth point that we are concerned with here.

The hideous contradiction of this fourth point with the requirements of the other three is clear to see. No system based on the exploitation of natural resources for economic gain can ever provide effective protection of the environment. Nor can a system which demands high levels of economic growth ever expect to attain prudent use of natural resources under the prevailing economic paradigm. Nor does it recognise the needs of future generations. When viewed together these four points present a paradox of such monumental proportions it is amazing they ever made it into print. It is also significantly worrying that our government has the audacity to promote such an incomprehensible policy (albeit shrouded by the best political jargon and greenwash[ii]) and is not called to task.

[ii] Greenwash: Disinformation disseminated by an organisation so as to present an environmentally responsible public image. Oxford English Dictionary.

The crux of the issue revolves around the actual definition and interpretation of sustainable development. In his opening address, in the government's annual report, Jonathon Porritt uses this carefully considered wording: Sustainable development promotes… 'all forms of economic growth which secure the natural capital upon which we depend'. [29] This stands in stark contrast to the government's fourth point by banishing any form of economic growth which is detrimental to natural capital in any way. The paragraph that follows the Bruntland report's oft quoted definition reads: 'The concept of sustainable development does imply limits – not absolute limits but limitations imposed by the present state of technology and social organisation on environmental resources and the ability of the biosphere to absorb the effects of human activities.' This carefully ignored paragraph clearly limits economic growth as we know it. If, as at present, the biosphere and the best of our technology can not absorb the effects of our activities we are clearly not employing sustainable practice.

To seriously encourage environmentally responsible behaviour nothing short of a change in the economic paradigm is required. The economic system, upon which we all depend, dictates the vast proportion of the dominant social paradigm through which we interpret and perceive reality. As it stands this reality is one imbued in contradiction and paradox which ignores both the basic laws of thermodynamics and the natural laws on which all life support systems depend. Truly sustainable development involves **ecological** economics in which commodities are valued in accordance with nature; nothing short of this will suffice. The following diagram (Fig. 6) is presented in order to clarify the apodictic definition of sustainable development.

Fig. 6

Corporations have too much power

Whilst the illustrated power relationships (in figure 2) exist, ecological economics will obviously struggle to take root. Rapacious business has a vested interest in maintaining the current system and, thanks to the corporate charters, a mind of its' own.

'Whereas, in the early days of capitalism, corporate charters emphasised that companies existed to serve society, the rules of the market are now such that they must compete ruthlessly for survival.'[30] Corporate charters legitimise rapacious business by extending the rights of corporations and making them less accountable to legislation than individual human beings.

Corporate personhood, as it is known, began in the 1800s with a British Act in 1844 which allowed corporations to define their own purpose. The power to control them hence passed from the government to the courts. In 1855 companies gained additional power with the introduction of limited liability. Personal assets of shareholders were henceforth protected from the consequences of corporate behaviour, paving the way for unscrupulous business. The masterpiece of corporate governance was formulated in 1886 in an unprecedented decision by a US court which recognised the corporation as a 'natural person' under law.[31] The 14th amendment to the constitution decrees that 'no state shall deprive any person of life, liberty or property' and is to this day used to defend corporations and strike down regulations seen as threatening to the 'life' of business.

Corporate charters, as they stand, work primarily for the interests of big business. They are, however, not set in stone and have been re-written before. The taxation, tariffs and state regulation that crept in at the end of the 19th century to curb domineering monopolies and cartels is one example of, at least partially, successful state intervention. The question now, in an era where business power exceeds that of the government, is whether democracy is too sick to heal itself from this cancerous calamity. As with a model which equates consumption with well being and sustainable development with continued economic growth, exposing the paradox of rapacious business as a socially responsible entity is essential to the development of environmentally responsible behaviour. The fact that no politician dares place redefined corporate charters on a manifesto, let alone debate the problem in a serious open manner, corroborates the juvenility of our political system.

Nature is the key

Despite political procrastination many thinkers offer reasoned solutions to man's plight. Jonathan Bate observes that 'thinkers from Rousseau (1754)[32] to the late-twentieth-century Greens have proposed that man's presumptions of his own apartness from nature is *the prime cause* of the environmental degradation of the earth'[33] (added italics) in his insightful book 'The Song of the Earth'. Bate documents the changing meaning of the word 'culture' from 'a cultivated field or piece of land', at the end of the eighteenth century, to 'a type of intellectual development or civilisation in a society; a society or group characterised by its distinctive customs, achievements, products, outlook' in the mid nineteenth century. This development, amongst others, is seen as representative of man's continuing detachment from nature and has led to the Oxford English Dictionary's current definition of nature as 'the phenomena of the physical world collectively, including plants, animals, and the landscape, as opposed to humans or human creations'[34]. Humans now define themselves as 'opposed' to the source of all nourishment, support and indeed the creative powers that instigated their very existence!

David Key[35] proposes that outdoor activity and immersion in nature can stimulate opportunities for self actualisation (the pinnacle of Maslow's 'hierarchy of needs'[36]) which he convincingly links to the development of ERB. Peak experience, self-actualisation and nature are inextricably linked. Education has always been the fundamental and universally accepted, long term, objective for encouraging ERB which was confirmed by this study (every interviewee recognised the value of education as a means of increasing ERB). The importance of the link which Key makes between nature and the ability of education to formulate environmental understanding and concomitant environmental behaviour are essential, particularly to educational policy. Concordant to the natural impetus and setting the 'framing of experience' has been shown to impact considerably on the level and retention of

knowledge gained through learning, which partially explains the inability of information campaigns to facilitate behavioural change.

Maiteny (2002)[37] reports that 'Pro-environmental behaviour change is more likely to endure in the long term if it is rooted in, and driven by, significant and meaningful experience – if a person's 'heart is in it'…' Experiences, especially those involving nature, can have a significant effect on the way we learn which can directly improve individual environmental behaviour.

Man's continued exploitation of and detachment from nature, encouraged by the undemocratic system, are conclusively detrimental to well being. By acknowledging our interconnectedness with the natural world we are offered an advanced understanding of our place and purpose on the planet; we learn to see the world anew, have respect for natural resources, understand waste flows and the unsustainable nature of unfettered consumption; we appreciate the true value of natural phenomena and comprehend the importance and responsibility of stewardship; we learn to live within the system that sets such obvious limits on our physical industry and glean the most important knowledge we require to transcend earthly realities and fulfil our innate spiritual potential.

The key to all of this is nature. Pure, unadulterated nature. As with the imperative to re-write the corporate charters we can not afford to ignore the significance of nature for encourage ERB.

Pushes and Pulls

The majority of influences and limiting factors of consumer behaviour are actually not entirely prescriptive since it is possible to live a truly Gaian way of life, through abstention for example, as a monk. However unacceptable this behaviour may seem it proves that the supposed 'barriers' to environmental behaviour are not entirely limiting and are hence better described as 'retardments'. Conversely nothing can guarantee specific types of behaviour but several pulls towards, or stimulants for, ERB contribute to its' likelihood.

The several examples of this, identified through the research for this study, are listed in the table below and although not inextricably linked they do formulate rough pairs upon which prospective solutions can be based.

Table 2. Retardments & Stimulants to ERB

Retardments to ERB	Stimulants for ERB
WTO, IMF, World bank Fiscally driven rapacious business	Nature Interaction with and understanding of Nature
Cost Larger upfront expenditure	Incentives & ETR Assistance with investment, environmental tax reform & ecologically responsible pricing
Corruption Illegal activity and evasion of insufficient and poorly implemented fines etc.	Laws & Regulations Well implemented rules with sufficiently detractive and clearly enforced fines etc
Greenwash Purposeful & ignorant misinformation plus needlessly excessive information	Knowledge Unbiased, independently regulated information Unified, standardised communication
Confusion Competing, conflicting information overload	Simplified communication Minimal, unified eco-labels and information initiatives endorsed by a single, non governmental, authority

Privatisation Selling of state services	Co-operation Joint ventures in which stakeholders have a say
'Green' Image Perceptions of high cost and low performance	'healthy' & 'Intelligent' image Attributes that are 'worth' paying more for
Niche thinking 'Green' marketing equals limited appeal	Government example Mainstream leadership and assistance for niche products to migrate to mass markets
Habit / Time Ingrained behaviour, perceived lack of time	Convenience Ease, opportunity and incentives to start and maintain new habits
Ignorance Gaiaphobia	Education The Ecology of adventure / Peak experiences
Opportunity Financial, social, cultural and situational restrictions	Choice & Incentives Improved supply and assistance with investment
Pessimism Apathy, old values, negative perceptions	Optimism Inspiration, social interaction, cultural diversity

The conclusions which can be drawn from these observations form specific approaches for improving opportunities for ERB within the current system, which are detailed in the main thesis. The overriding message however remains clear; behaviour can and will change if the influence of the DSP and the other inhibiting factors are counteracted by suitable incentives and alternatives. It is no longer acceptable to assume behaviour will change through the use of information campaigns. It has been clearly shown; information alone does not change behaviour[38],[39],[40],[41].

STRATEGIES

The following strategies are presented for the four 'players' (The individual, NGOs, Government and Business) and represent their most effective way of increasing environmentally responsible behaviour within the current system.

Individuals

In an economically driven capitalist state, in which business wields more power than government, financial votes present stronger signals than ballot box based activity. Each and every penny we spend as individuals contributes to the current system depicted in the 'power relationships' diagram. To facilitate the change towards a system more conducive of ERB, individuals need to be aware of the implications of their purchases (e.g. shopping at Esso contributes to funding the Bush administration which in turn campaigns against the Kyoto Protocol. Shopping at ASDA funds Walmart which is responsible for devastating communities throughout the States etc.) and encouraged to engage in a concerted campaign to improve business's ERB via responsible spending.

NGOs

The recommendation for individuals highlights the need for awareness. Awareness of the evils to which we are locked-in through the current system and awareness of alternatives which more appropriately match our values. This is, essentially, the battle against ignorance for which we have seen education holds the key. The power of education resides in the framing of experience and it is this which NGOs must address. The most effective way that NGOs can increase ERB is to garner awareness and encourage individuals to vote with their money.

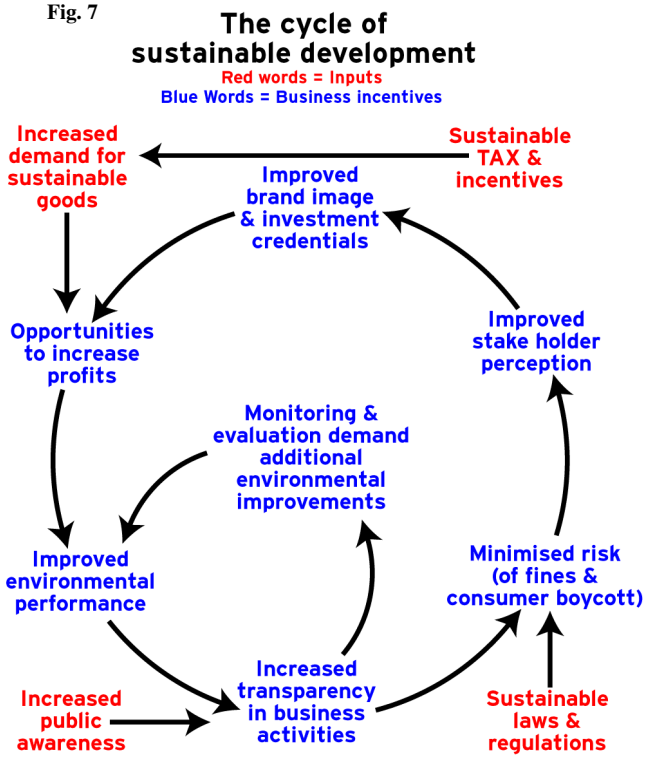
Government

The government has an obligation to employ long term thinking and engage in concerted long term policies to inspire and promote ERB. There is, undeniably, a role for government to represent the individual and constrain the current power of business in order to level the playing field and allow ERB a chance to evolve. The recommendation for government is therefore to align words with actions (for example by adopting the true meaning of sustainable development, or the ISEW instead of GDP, or by taxing 'bads' rather than 'goods') which influence the DSP towards ERB and the long term perspective which this demands. Lester Thurow presents a neat summary: 'The proper role of government in capitalistic societies is to represent the interests of the future to the present'[42].

Business

Business itself would also benefit from the application of long term thinking which provides its' most effective way of increasing ERB. This in turn would inspire cyclic product development and a commitment to the true meaning of sustainable development which is already, albeit slowly, percolating through society and inspiring social change. However, without serious financial incentive, appropriately implemented legislation or a change to the corporate charters (which remain the governments tasks) some businesses will never change their behaviour whilst there remains an opportunity for fiscal reward through exploitation. However, a certain element of truly sustainable development already exists within business circles. This may not involve the same, ecological, imperatives environmentalists promote but it is a valuable start which, if stakeholders take advantage of the feedback loop involving increased transparency and consistent monitoring and improvement, could provide a means for change. This, along with the other fundamental objectives for truly sustainable development, is illustrated in figure 7 'The cycle of Sustainable Development'.

Fig. 7



CONCLUSION

Through the use of an naturalistic method of inquiry, more concerned with truth than tradition, this study unearthed several significant contradictions and problems of paramount importance to encouraging a sustainable future. These can be clearly summarized as follows:

Maximisation of consumption does not lead to well being
GDP is a fundamentally flawed measure of progress
The governments' version of sustainable development is a paradox
Business has attained too much power through the corporate charters

In order to encourage more environmentally responsible behaviour these problems must be replaced by sustainable solutions: i.e.:

New corporate charters which demand that businesses serve society
An economic model based on ecological principles and values
An alternative measure of progress, incorporating spiritual growth

In addition to these fundamental requirements for a sustainable future several recommendations have been made detailing ways of encouraging ERB within the given system. Of these (see Table 2), nature was highlighted as the most important, since its' destruction is humanity's main problem whilst it also offers our best opportunity to facilitate environmental learning and encourage sustainable action.

However, the potential of these recommendations is severely limited by the overriding systemic problems detailed above. If these larger, controlling issues are not addressed the effectiveness of other strategies and approaches will be limited. Minor strategies will all fail in the long term if the structural, systemic issues outlined above continue to undermine their objectives.

Thus, the only answer to the question 'what are the most effective ways of increasing ERB?' is 'fix the structural system'. It is therefore self defeating to encourage individual ERB if these larger problems are not addressed. Until political spin, greenwash, corporate power, conventional capitalist economics and inappropriate measures of progress have been stripped from the institutions which govern our society there is no possibility of a sustainable future. If our political system is incapable of delivering such paradigmatic change there are only two options left for humanity: catastrophe or revolution.

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