The Transformational Role of Aesthetics

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Abstract

'We cannot win this battle to save species and environments without forging an emotional bond between ourselves and nature as well – for we will not fight to save what we do not love.' (Gould, S.J., 1991, p. 14)

This conceptual paper focuses on understanding how to effectively foster transformational change, in firms wishing to embrace the uncertainties, complexities, ambiguities and dynamic nature of the sustainability challenge. An argument is developed which explores the importance of a biophilic, naturalistic, out of work, experience. This is based on its potential as a pervasive form of aesthetic experience, in acting as an emotional cue for individual transformational change towards sustainability, in an organisational context. It capitalises upon what is proposed, through the biophilia hypothesis, as our biological based attraction or emotional affinity for certain aspects of the natural environment (Wilson, 1984; Kellert, 1997; Ulrich, 1993). Moreover, such an appropriate aesthetic experience activates workers' positive emotional mood states. It is argued that these positive mood states could build the emotional capacity of workers to proactively respond with multiple spontaneous sustainability behaviours, to resolve any intra- and inter-organisational, social, environmental and financial conflicts. Finally, an important aspect to the proposed biophilic experience is its potential emancipatory and pluralistic quality. It could achieve this through a continuous process of workers reflecting upon, sharing and negotiating knowledge around the emotional, cognitive and behavioural impact of different biophilic artifacts (Goodshell, 1977, Strati, 1992; Dean et al, 1997).

Introduction

This conceptual paper focuses on how businesses, committed to the concept of environmental, social and financial sustainability, can effectively achieve systemic transformational change. As Wehrmeyer (1996) argues, external impetus for environmentally sound performance is often necessary for organisational change to begin. However, external pressure alone will not bring about the changes needed in a business enterprise. Increasingly, business has adopted prescriptive, piecemeal and mechanistic environmental management techniques, such as environmental management systems around international standards, like ISO14001. However, in light of the complexity, uncertainty, ambiguity and dynamic nature inherent in the sustainability challenge, at some bifurcation point in the organisational change process, these 'win-win', continuous improvement solutions may not adequately resolve the multiple levels of environmental, social and financial conflict. As Hart (1994) argues, the path to realising the principles of sustainable development is long, arduous and fraught with

pitfalls. Typical conflicts arise between intra-organisational stakeholder demands, such as between individual, group, organisational levels. Other conflicts arise between inter-organisational stakeholder demands and short-term and long-term goals. At this point, any incremental changes begin to fade and a transformational shift in individual and collective behaviour appears to be required. Without this transformational change, environmental and social goals are in danger of being automatically subsumed within personal political agendas and the market-driven financial, short-term imperative.

Based on the notion that organisations will endeavour to resist change and maintain the status quo, several authors have argued for a discontinuous change, based on a process called 'punctuated equilibrium'. Tushman and Romanelli (1985) argue that such a process involves the disassembly, reorientation and recreation of fundamental elements of the organisation. As King (2000) points out, central to the notion of puncuated equilibrium is the assumption that basic rules or structures in the organisation cannot change incrementally. This focus on discontinuous change and breaking with business-as-usual is described by Welford (1998) as a post-modern version of environmentalism. In terms of how to facilitate such discontinuous change, research has suggested that executives cause punctuated change by attempting to reorient the organisation in a burst (Tushman & Romanelli, 1985, Keck & Tushman, 1993).

Research Aims & Assumptions

This paper represents the conceptual underpinnings of a hypothesis. This hypothesis proposes that a biophilic, aesthetic experience could play a significant role in activating corporate transformational change towards sustainability. A conceptual argument is developed, which draws upon muliple fields, such as organisational aesthetics, emotion and sociobiology. The assumption here is that multi-disciplinary, integrative theories, mainly capitalise on the strengths of emerging organisational theories, such as organisational aesthetics, in meeting the common challenges sustainability shares with other complex-laden contemporary challenges. Moreover, by integrating other disciplinary theories, from the natural and social sciences, the distinctive aspects of the sustainability discourse can also be embraced.

Initially, in order to assess the potential effectiveness of a transformational change strategy, the requisite transformational change is defined, in terms of spontaneous behaviour towards sustainability. Using this measure of effectiveness, what follows represents a critique of current 'best-practice' transformational change strategies. By highlighting the weaknesses of these strategies in developing spontaneous behaviour towards sustainability, the author attempts to develop an argument for the proposed aesthetic approach to transformational change. This focuses on the need to focus on building an emotional capacity within an organisation. It specifically explores how an aesthetic experience could activate positive mood states and thereby foster spontaneous behaviour. The paper then argues for a particular aesthetic approach, the biophilic experience, which directs this spontaneous behaviour towards the sustainability agenda. It demonstrates how the biophilic experience capitalises on the distinctive latent

motivational aspects of the sustainability discourse. It finally reflects on the potential of the biophilic experience, in terms of activating transformational change.

Defining the Requisite Transformational Change: Towards a Behavioural Measure of Effectiveness

In order to proactively resolve the conflicts inherent in the sustainability challenge, the requisite discontinuous, transformational change, can be defined as a move towards a more inclusive, creative, co-operative and strategic set of multiple behaviours, categorised under the term 'spontaneous behaviour'. This notion of effectiveness is derived from Katz's (1964) original argument that performance of non-role, or extrarole prosocial behaviours is essential for a functioning organisation. Katz (1964, p. 132) asserts that 'an organisation which depends solely upon its blueprints of prescribed behaviour is a very fragile social system'. This fragility is even more emphasised in the context of the looming sustainability transformational challenge. The word spontaneous is derived from the Latin sponte, which means of one's free will or voluntarily. Klinkers & Nelissen (1995) similarly argue that such proactive environmental behaviour of all workers is an essential variable of any long-term environmental strategy within business. These helping behaviours are spontaneous in that they appear in no job description. They are not planned for or assigned as requirements of the job. This spontaneity is needed because in multiple conflict resolution situations, it is difficult to foresee the workers' individual roles and responsibilities (Katz & Kahn, 1978).

Moreover, creative behaviour of all workers is needed because systemic solutions are continually required to resolve apparent and real conflicts between a firm's environmental performance and financial performance. By encouraging all workers to contribute to these solutions, environmental and social goals are not automatically subsumed within the market-driven financial, short-term imperative. Co-operative spontaneous behaviour is needed because frequently tasks to resolve such conflict situations are interdependent and efforts are joint or interpersonal, where an individual may have only partial control over the outcome of a group or organisation's activities. By encouraging this cooperative behaviour, organisational or team effectiveness is not undermined by a drift towards excessive individual competitiveness. However, by encouraging voluntary co-operative behaviour, individual effectivenss is not undermined through a drift towards an apathetic, 'free-rider', team or organisational focus. In other words, the adoption of effective co-operative behaviour is dependent upon the context. Therefore, this cannot be planned in workers' job descriptions .

Critique of Current 'Best-Practice' Transformational Change Strategies

Halme (1997) and Wehrmeyer (1995) argue that to continually pre-empt and embrace the challenges of sustainability, a suitable strategy needs to develop a capacity for response within an organisation. In order to build a capacity to proactively respond with multiple spontaneous behaviours, developing not only skill competencies but motivational competency levels are key (Emerson et al, 1997). Therefore, drawing from

the broad concept of motivation, if sustainability activities are to be successful, a transformational change strategy must draw upon the enthusiasm of all workers.

One such strategy, the unitarist cultural change strategy, has been pioneered by 'best-practice', 'values-driven' UK companies, such as The Body Shop and Traidcraft (Jones, 1998, 2000a). Based on organisational theories from the 1980's and 1990's, management consultants such as 'SustainAbility' are currently advocating such approaches to mainstream business. These cultural change programmes aim to develop a shared cognitive competence in order to motivate the workers' capacity to respond with multiple spontaneous behaviours. Katz (1964) points out that the internalisation of organisational values, through such a cultural change strategy offers the greatest potential for fostering organisational spontaneity. Where this pattern of cognitive motivational base prevails, 'individuals take over organisational objectives as part of their own personal goals. They identify not with the organisation as a safe and secure haven but with its major purposes' (Katz, 1964, p.143). Such value expression and self-identification, Katz (1964) states, activate extra-role behaviours.

However, Katz (1964) also goes on to assert that the internalisation of organisational values is generally only evident at high levels of the hierarchy. Indeed, he observes that on the occasion that workers do internalise the organisational values, they often are often referred to as 'dedicated damn fools' (Katz, 1964, p.143). Lessons learnt from companies like The Body Shop (Jones, 1998), show that an unmanaged negative, cognitive, behavioural and particularly emotional response develops, which does not meet up with top-management rhetoric. Spontaneous behaviour, in this context, is described by Gabriel (1992), as a large uncolonised terrain, a terrain which is not and cannot be managed, in which people, both individually and in groups, can engage in all kinds of unsupervised spontaneous activity. Furthermore, whilst these companies have recently applied more contingent pluralist change strategies, based on behavioural approaches, such as transparent performance/skill related extrinsic rewards combined with initiatives like social and environmental accounting, they have proved ineffectual in their ability to develop multiple spontaneous behaviours. Moreover, the addition of behavioural techniques, such as performance related rewards proved at best, only effective in developing reactive behaviour and could even undermine any intrinsic cognitive motivational base workers may share, as proposed in cognitive evaluation theory (Deci, 1975). For example, although individual extrinsic rewards are most useful for obtaining optimal role performance, they are not effective in fostering continued innovative and non-specific behaviours (Katz, 1964). However, Katz (1964, p.140) argues that 'spectacular instances of innovative behaviour can be singled out for recognition and awards'. Thus, Katz (1964) expected the organisational use of individualised rewards to be related directly to organisational spontaneity rather weakly and then only to some forms (e.g. making suggestions) and not others (e.g. helping co-workers). Lawler (1984) has suggested that individual rewards are the best at motivating individual workers to exert greater effort, but can cause competition between workers. Katz (1964) also points out that collective performance related extrinsic rewards, can act as a further behavioural motivational base. However, they do little to motivate behaviour beyond the line of duty. The drawback of incentives based primarily on collective performance is that they tend to

still encourage ‘free-riding’. Any increased performance by a worker is going to be shared with all workers. So, from a rational perspective why should the worker work harder or more creatively?

At best, the combination of cognitive and behavioural strategies develop incremental change by maintaining and then endeavouring to enhance workers’ dynamic and fragmented self-concepts. This recognises that workers have multiple, shifting private and professional interests beyond the workplace and any change strategy needs to account for this psychological complexity. This leads the author to concur with Katz (1964) who argues that such cognitive and behavioural motivational strategies have a weak or limited direct effect on organisational spontaneity and transformational change. What these approaches ignore is the importance of workers’ emotional states in their motivation to behave spontaneously. As Gabriel (1999) points out, emotion lies at the heart of human motivation – emotion is motivation. It is not accidental that both words derive from the Latin *emovere,* to move. For example, seen through an emotional lens, a unitarist, ‘strong cultural’ approach could be construed as fostering guilt-based, responsibility related emotions. Assuming for argument’s sake, workers accept the corresponding moral norms of the strong corporate culture, workers who contribute to a risk behaviour threatening these norms, would experience guilt-based emotions, such as self-blame and any potential free-riders would thus be minimised (Kals, 1996). In line with this argument, the application of Schwartz Norm Activation Model (Schwartz & Howard, 1980) to ecologically relevant behaviour is popular and successful, especially when the model is conceptually adapted to specific features of pro-environmental behaviour (Hopper & Nielson, 1991; Stern, Dietz & Kalof, 1993; Van Liere & Dunlap, 1978). However, the accrued pro-environmental behaviours can be construed as compliance orientated rather than the proactive, creative spontaneous behaviours argued for in this paper. As Fineman (1996a) argues, it is of fundamental importance to understand how feelings of shame, guilt and ambarrassment can become redefined or extinguished in order to mitigate corporate behaviours such as victimising others, despoiling the natural environment or purveying dangerous products.

George and Brief (1992) argue that behavioural and cognitive motivational approaches have indirect effects on spontaneous behaviour through mood, at both the group and individual levels. Moreover, they argue that positive mood states, such as employee well-being, are important mediating factors in fostering spontaneous behaviour. Moods provide the affective colouring or context for day-to-day events (Kitayama & Niedenthal, 1994). More generally, these indirect effects are consistent with the idea that the motivational potential of extrinsic and intrinsic rewards is associated with organisational members feeling good (Clark & Watson, 1988). Indeed, results from the social psychological literature show that even amazingly small positive outcomes from different motivational approaches can influence behaviour through mood (e.g. Isen, 1970; Isen & Levin, 1972; Isen, Means, Patrick & Nowicki, 1982). As George and Brief (1992) point out, although moods do not noticeably interrupt cognitive processes and behaviour, they do influence them; this influence may be particularly significant given the pervasiveness of moods and the fact that we probably are often unaware of the broad, subtle effects of our moods. Clark (1982, p.264) argues that ‘there is now little doubt that subtle feeling

states, or…moods, are capable of influencing a wide variety of judgements and behaviours'. Mood is not focused on any particular object, event, individual or behaviour (Brady, 1970; Nowliss, 1970 & Ryle, 1950). Similarly, Kitayama & Niedenthal (1994) argue that moods represent enduring emotional states and have no specific objects to which the emotion is directed. Moods do not demand complete attention (Clark & Isen, 1982). Moods can begin and last beyond exposure to an event or an agent in a person's life space. Moods tend to persist in the absence of specific events and stimuli (Frijda, 1986). A person may have a general mood of anger or anxiety and carry it around for a period of two or three days, attaching it to all elements of life. Behaviourally, moods are configurations of activity that are not centred around an object or event, but in that fleeting manner attach now to this object, then to that; or similar configurations of activity easily evoked by a multitude of relatively insignificant events (Frijda, 1986). So in a sense, moods are not well focused but are generalised feelings that may attach to any and all events and people in a person's life as long as the mood is activated. On the basis of the pervasive, broad, enduring and subtle nature of moods, George (1989) differentiates job satisfaction with mood at work. Mood is concerned with affect at work rather than affect toward work (Abelson et al, 1982). As Sandelands and Buckner (1989) argue, mood states would not be accessed by asking, 'How do you like your job?', rather it is one of, 'How do you feel when you are on the job?'. Therefore, mood at work refers to affective states that are encountered both inside and outside of the workplace.

Exploring The Role Of An Aesthetic Experience In Activating Positive Mood States & Fostering Spontaneous Behaviour

> *'I do not know whether it is possible to love the planet or not, but I do know that it is possible to love the places we see, touch, smell and experience.' (Orr, D.W., 1993, p.432)*

It is argued here that aesthetic experiences could provide the emotional glue or context that holds an organisation's various cognitive and behavioural based motivational strategies together (Linstead & Hopfl, 2000). It is generally recognised that relatively mundane and commonplace aesthetic factors (e.g. pleasant music) can influence positive mood (Clark & Watson, 1988; Clark & Isen, 1982). Sandelands and Boudens (2000) build on this when they argue that aesthetic experiences incorporating play, art, flow, transcendence and peak experience seem to particularly take on a important role in activating positive mood states.

As Wassermann, Rafaelli and Kluger (2000) point out, the concept 'aesthetic' originates from the Greek notion aisthetikos. It is sometimes used to describe a sense of the pleasant or the beautiful, but is actually is broader and connotes any sensual perceptions (Webster's Seventh New Collegiate Dictionary). Both natural and artistically created stimuli can elicit aesthetic reactions (Carritt, 1931) and any sensual experience represents an aesthetic experience. Organisational scholars have recently begun to recognise the importance of aesthetics or an aesthetic point of view to organisations and organisational studies (Strati, 1992, 1996; Ramirez, 1996; Dean et al, 1997; Gagliardi, 1990; Ottensmeyer, 1996; White, 1996; Kuhn, 1996; Schmitt & Simonson, 1997). The

message in such recent work is that aesthetics are important to organisational research because they have an enormous – though potentially unnoticeable – influence on behaviour (Norberg-Schulz, 1971; Schmitt and Simonson, 1997).

As Fineman (2000) argues the field of aesthetics has been examined by authors such as Strati (1999) and Gagliardi (1999), where the aesthetic captures feelings of form or flow that are experienced from the places and objects where people work. The machines, office layout, colours, geographical setting, noise, music, task activities, food are objects of sound, sight, taste, touch or smell that trigger feelings of 'rightness', discord, warmth, harshness or alienation. Such emotions appear to play a crucial role within the motivational process at directing various forms of behaviour.

However, Pinder (1998) observes the lack of attention by researchers to the role of aesthetics in the emotional aspects of work motivation and organisational behaviour (e.g. Strati, 1992; 1996; White, 1996; Kuhn, 1996). As Wasserman et al, (2000) point out, this could be because both these notions maintain an unclear link to productivity and efficiency they have not been centre-stage issues in organisational research. Yet both are clearly recognised as essential elements of organisation (Cacioppo & Gardner, 1999; Fineman, 1996; Gagliardi, 1990; Strati, 1992).

One reason for the link between aesthetics and emotion is given by Goleman (1995), who points out, our species developed the capacity to both sense and feel long before we refined the capacity to think and reason. He speaks of human beings as having 'two minds': a rational mind (which is centred in the cerebral cortex) and an emotional, sensual mind, whose functions are centred in other brain regions, such as the limbic system. In many or most day-to-day circumstances, the two minds work in harmony, with the emotional mind considering circumstances and the rational mind electing choices from alternatives available to the person for action. But he stresses, from an evolutionary perspective, the emotional mind preceded the cortex. Simmel (1950) similarly argues, 'if one arranges the psychological manifestations in a genetic and systematic hierarchy, one will certainly place, at its basis, feeling, though not all feelings (after there has been perceptual activity), rather than intellect.' The tight link of emotions with aesthetics are emphasised by Fineman (2000), who reminds us that it is our corporeal being that is 'working' and 'producing' during activities we describe as emotional. The pleasure or indeed pain feelings that can attend an aesthetic creation defy a simple cognitive-appraisal analysis (see Elster, 1999; Vetlesen, 1994).

Following Foucoult's ideas (1979), aesthetics can be seen as a form of knowledge (Strati, 1992; Dean et al, 1997), which can be controlled in order to gain power. In other words, an understanding of the different possible meanings of aesthetic aspects of an organisation provides a source of power and control over workers' emotions and behaviour. Therefore, organisations trying to evoke positive mood states in workers may therefore assume they may be able to do so, by manipulating aesthetic symbols (Goodshell, 1977). Although, this modernist conception of aesthetics may be tempting to senior managers, it is important to recognise that workers are particularly sensitive to the use of power. A cynical, calculative compliance attitude may be the workers' response

which senior managers may be blissfully unaware of, in their state of false consciousness and wishful thinking. By offering a pluralistic, postmodern opportunity, a more emancipatory, empowering aesthetic experience could be envisioned, which could mitigate these negative affects. Through full worker participation and discourse in the design, implementation and review of an aesthetic experience, the aim of such initiatives could be construed as fostering self knowledge and development, through self- reflective understanding of the emotional impact of different aesthetic symbols.

Exploring The Role Of Biophilic, Aesthetic Experiences In Fostering Positive Mood States And Spontaneous Behaviour Towards Sustainability

> *'Destructiveness is not parallel to, but the alternative to, biophilia. Love of life or love of the dead is the fundamental alternative that confronts every human being. Necrophilia grows as the development of biophilia is stunted. Man is biologically endowed with the capacity for biophilia, but psychologically he has the potential for necrophilia as an alternative solution.' (Fromm, 1973, p.366)*

In the context of the transformational change process, the main aim of this paper can be construed as facilitating a reflexive discourse, around the potential of one particular pro-environmental form or template of aesthetic experience, in activating positive mood states. As previously stated, any and all physical surroundings elicit an aesthetic experience. However, considering western society's pervasive consumerist forces, there is a need to explore how a pro-environmental aesthetic experience can be designed to activate positive mood states. In the context of these forces, it could be assumed that not every form of pro-environmental aesthetic experience has the capacity to activate positive mood states.

As Kitayama and Niedenthal (1994) argue, a critical aspect of emotion is that it entails activation. An emotional person is activated and prepared to act, depending on the strength of the feelings aroused and the potential objects of the aroused energy. This is particularly appropriate when endeavoring to activate positive mood states. Considering the enduring and broad impacts of moods, the activating aesthetic experience must be pervasive enough to break free of the potentially negative, equally pervasive current mood state. As Gagliardi (1999) indicates, the activating impact of an aesthetic experience is dependent on the specific 'pathos' – or pattern of sensibility (Kubler, 1962). This represents the particular way of perceiving and 'feeling' reality an individual has learned by living in a particular physical-cultural setting and which he/she shares with the other members of that culture. Put in another way, these patterns of classification, interpretation and reaction to perceptual stimuli are called shared 'sensory maps' (Gagliardi, 1990), in contrast with shared 'cognitive maps' (Weick, 1979). Cognitive maps can be conscious or unconscious but are 'knowable'; sensory maps are learned instinctively through intuitive and imitative processes over which the mind exercises no control and integrated automatically into life daily. Depending on the features of this sensory map, an experience or an object may leave us indifferent, reawaken our senses or it may repulse us. The central question becomes which form of pro-environmental experience has the potential to reawaken our senses by tapping into these sensual maps

and ultimately activate positive mood states and foster spontaneous behaviour towards sustainability? It is clear that many consumer artifacts and experiences have this capability to tap into our socio-cultural defined pathos and activate positive mood states. In the context of our lingering consumer-defined pathos, is an effective pro-environmental experience an oxymoron?

In order to answer such a question, this paper draws on the sociobiology discipline, which argues for the existence of a biological determinant or learning potential in our shared pathos. More specifically, the paper draws on a hypothesis originally put forth by Wilson and Kellert (Kellert, 1997) and traces back to Fromm's ethical concept of biophilia (love of life or emotional commitment to life (Eckardt, 1992)). The biophilia hypothesis claims that humans possess a biologically based attraction to certain aspects of the natural environment and that their well-being depends, to a great extent, on the relationships with the surrounding natural world (Kellert, 1997). Put in another way, we all share a conditional positive affectivity trait in certain natural environments. Reflecting upon the preferred visual aesthetic preferences, Ulrich (1993) points out that there is a consistent tendency across diverse groups and cultures to prefer certain natural views, such as savanna-like scenes and settings with water features over nearly all urban landscapes. Barash (1977) explains that such a trait is a pattern of potentials built into the heridity of the species as a whole. This potential stems from the view of that human behaviour is the product of adaptive dispositions, 'A flexible, modifiable and perhaps rather fragile set of inclinations' (Barash, 1977, p.286). Barash added, 'Practictioners of sociobiology…. do not necessarily advocate biological determinism of human behaviour. The difference between determinism and genetic influence is the difference between shooting a bullet at a target and throwing a paper airplane; the paper airplane is acutely sensitive to environmental influences such as wind and its ultimate path is not entirely predictable by the thrower.'

Kals et al (1999) point out that the lack of empirical research on this trait and on its motivational function. However, its existence is supported by the fact that there are only a few conclusive theories or empirical research on the mechanisms that account for the link between fostering various emotional bonds towards nature. On a theoretical level, all classical schools of thought are represented from a psychoanalytic approach that argues with the metaphor of mother earth (Gebhard, 1994) to the application of learning theories (Fietkau & Kessel, 1987). It is argued here that, whilst these theoretical perspectives have much to offer, the biophilia hypothesis fills a much needed gap in understanding the motivational process in terms of aesthetics and emotion.

Like pleasure and pain, emotional affinity towards nature falls into the evolutionary category of certain instinctive universal feelings that serve the preservation of the individual and species, which have developed prior to all cognitive processes with concepts, judgements and conclusions. Various feelings of inclination towards nature include love of nature at the extreme (Gebhard, 1994; MaaBen, 1993a, 1993b). These different levels of emotional attachment are thus not easy to explicate by a set of cognitive appraisals and attributions. Thus, emotional affinity towards nature can be distinguished from its cognitive counterpart interest in nature (Langeheine & Lehmann,

1986). One can have a scientific interest in nature issues without feeling any emotional affinity. Interest motivates gathering knowledge to explain and understand phenomena. Emotional affinity motivates contact through sensual, aesthetic experiences (Kals et al, 1999).

The advantage of offering an aesthetic experience based on these biophilic, genetic preferences, in contrast to consumer-based experiences is that the resulting positive mood states could prove more pervasive. Even for artistic artifacts, Gagliardi (1999) argues that the capacity of the object perceived, needs to continually surprise by the novelty of its form. Therefore, as Isen (1990) points out, some aesthetic experiences, such as listening to certain works of music, have been shown to elicit positive feelings and produce only short-term increases in creativity. As Ulrich (1993) argues, the positive effects soon wear off, offering the example of a worker listening to the work by Mozart; any positive short-term effects will soon be attenuated if this is the sole work played all day. Of course, our need for a continual supply of consumer artifacts, based on our 'throw-away' consumer society, exemplify the short-term impact of socio-cultural forces on our pathos. However, Ulrich (1993) postulates that if humans have a partly genetic predisposition and emotional affinity for certain natural settings, if this same worker was exposed to these settings, any ensuing positive mood states and creativity might well prove longer lasting.

The other advantage of activating positive mood states through offering such biophilic experiences is that workers could potentially be motivated towards greater pro-environmental spontaneous behaviour in general, as to some extent this behaviour will symbolically be in their self-interest. In other words we will creatively conserve what symbolically provides us with a sense of well-being. Authors such as Fischerlehner (1993) claim that fostering this emotional bond towards nature can serve as a motivation to protect it. Without developing this expanded form of emotional self-interest towards the environment, it is argued that competing financial pressures will always be favoured within behavioural and cognitive based motivational approaches.

However, considering the pervasiveness of the consumer, socio-cultural pathos, it is clear that solely advocating certain visual aesthetic experiences based on the biophilia hypothesis would not activate positive mood states. They may have the ability to develop positive mood states, once activated by other more consumer-based aesthetic stimuli, but could be extremely limited in terms of activation themselves. Therefore, in order to activate such positive mood states, the aesthetic, sensual experience, linked to the biophilia hypothesis needs to be maximised. A naturalistic experience appears to offer the most potential in terms of a full sensuous, biophilic experience impacting on all five senses. Lyons and Breakwell (1994) argue that affinity towards nature may be instigated by positive experiences in nature such as observing animals, phenomena of weather or the change of the seasons. Stays in nature are considered especially helpful to build up emotional bonds (MaaBen, 1993a). There is an extensive discussion on the effects of direct encounters with nature and the assumed resulting emotional bonds toward nature and nature-protective behaviours. On an empirical level, the few existing data support the hypothesis that direct encounters with nature (e.g. playing or walking outdoors, experiencing nature with all five senses) can promote affinity toward nature and,

subsequently, behaviour to protect its natural functioning. Langeheine and Lehmann (1986) have shown that such concrete experiences of nature lead to willingness and behaviours to protect nature. Finger (1994) demonstrated that experiences with nature are powerful predictors of nature-protective behaviours by showing that environmental experiences are even more important than environmental value orientations. Qualitative analyses conducted by Fischerlehner (1993) supplement these quantitative data and confirm the basic assumptions of the positive effects of experiences with nature. These comparably few theoretical discussions and empirical findings provide the foundation for modern intervention programmes aiming to promote ecological behaviour by providing direct experiences with nature (Bolscho, Eulefeld, Rost & Seybold, 1990; Eulefeld, 1987).

An important research issue concerns the effectiveness of simulations of natural environments (from colour photographs, videotapes to interactive, multi-media simulations of natural environments), compared to real environments, in eliciting positive mood states and other positive responses. As Ulrich (1993) points out, there is evidence that simulations can sometimes be at least partial substitutes for real nature in terms of eliciting short-term aesthetic liking and restoration. However, he asks the question that might simulations lose much of their effectiveness in long-term exposure contexts? He postulates that it seems likely that, over a long-term exposure situation, real environments may be much more effective than simulations in sustaining positive responding owing to the on-going visual changes and multi-sensory stimulation inherent in real environments.

In terms of the design of this naturalistic aesthetic experience, this paper takes an integrative perspective, as advocated by Fineman (2000). For example, Kals et al (1999) propose that whilst experiences with nature, dispose people to positive mood states and nature-protective behaviours, these effects are mediated or moderated by the extent to which this experience has meaning for the individual concerned. As Gagliardi (1999) argues, the design of an aesthetic experience needs to account for the subjective and contingent willingness to embrace the quality of the object. This revolves around maximising the cognitive meaning placed on the biophilic experience. In other words, the cognitive meaning, as well as the sensual arousal of the biophilic experience, needs to be fostered for the individual to develop a positive mood state. Moreover, this integrative perspective endeavours to capitalise on workers' emotional, cognitive and behavioural motivational bases. This combined perspective represents a new phase of growth in motivational psychology (Kanfer, 1990; Pinder, 1998). Put in another way, Pinder argues for the inclusion of the systematic study of all contexts into the study of work motivation. In an environmental context, a proposed biophilic experience would include lessons learnt from in-company cognitive and behavioural approaches. Implications for the biophilic experience would include offering valent, fair and transparent intrinsic and extrinsic rewards (taking account of workers' whole self-concepts: needs, values, beliefs, expectancies and their individual, organisational and societal cultural antecedents), based on achievement of individual and collective performance goals or skills levels attained during the biophilic experience. These goals would be participatively and realistically set, in the context of self-efficacy measures, such as top-management commitment and requisite resources towards the biophilic experience (Jones, 2000b; Jones, 2000c).

An example of the importance of taking an integrative approach into a biophilic experience is provided by Kals et al (1999), who point out that the sharing of experiences with significant others may function as an amplifier of the impact of stays in nature. For example, a favourite song may bring joy when it is experienced by a couple, but the same song may bring heartache and sorrow when they have split. The communication of feelings and the transference of positive social emotions to the natural environment both may contribute to the emergence of an emotional affinity. Similarly, Langeheine and Lehmann (1986) argue that biophilic experiences can lead to willingness and behaviours to protect nature especially when the effects are reinforced by group norms to treat objects and values carefully. Furthermore, security feelings mediated by significant others may prevent negative associations. Curiosity and cognitive interest may also be stimulated by the questions, hints and information communicated by significant others (Silbereisen, Eyferth & Rudinger, 1986).

In order to ensure high levels of self-efficacy, workers need to initially be given the resources, such as top management support, the time and the social space to reflect on the meaning of a biophilic experience. In order to achieve this, it is argued that the biophilic experience needs to take place outside of the workplace. This provides an opportunity for the biophilic experience, to be perceived in a potentially new way, not embedded within current organisational cultural assumptions. For example, as the organisational culture in 'for-profit' enterprises is governed by the assumption of instrumental rationality, any new aesthetic workplace experience, no matter how participatively designed, implemented and reviewed, may be perceived as just another form of managerial control over workers. Therefore, an 'out of work', biophilic experience may be perceived as offering personal advantages to workers beyond work advantages of increasing their effectiveness in realising the organisation's sustainability goals.

Conclusions

This paper argues for a three dimensional, pluralist transformational change strategy, which embraces different behavioural, cognitive and sensual approaches. This strategy embraces the holistic conception of workers, particularly with respect to developing an emotional as well as a cognitive motivational competence and thereby begin to foster spontaneous behaviour towards sustainability. Moving away from the old notions of the cultural change movement, it endeavours to develop such an emotional competence by drawing on emerging organisation theories, such as organisational aesthetics. These organisational theories are then adapted to the sustainability challenge, by combining relevant theories from other natural and social science disciplines, such as socio-biology.

Organisational aesthetics appears to offer much promise, drawing from its potential to activate positive mood states (Sandelands & Boudens, 2000). As George & Brief (1992) argue positive mood states, such as employee well-being, are important mediating factors in fostering spontaneous behaviour. Therefore, it is argued that aesthetic factors indirectly influence spontaneous behaviour through their direct effect on positive mood (George & Brief, 1992). Finally, it is proposed that certain environmental aesthetic experiences

could play an important role in fostering spontaneous behaviour towards sustainability. Moreover, it is argued that biophilic, aesthetic experiences, could prove particularly pervasive by capitalising upon what is hypthesised as our biological based attraction or emotional affinity for certain aspects of the natural environment, such as water or savanna-like settings (Wilson, 1984; Kellert, 1997; Ulrich, 1993).

Moreover, as Tassinary (Ulrich, 1993) argues, as certain natural settings have been found to elicit positive emotional states, exposure to such environments may facilitate spontaneous behaviour, such as creative problem solving, via their ability to alter one's emotional state. It is argued that the sensual arousal of these biophilic experiences could be maximised by offering a naturalistic out of work experience which stimulates all five senses. Furthermore, the cognitive meaning of the biophilic experience could be maximised by integrating cognitive and behavioural approaches into the design. This would mean that a biophilic experience would need to be participatively planned, set, resourced to enhance self-efficacy and rewarded for, with equitable and transparent intrinsic and extrinsic rewards, which maintain and enhance workers' self-concepts.

Finally, if biophilic experiences do prove to be so effective in activating transformational change, this has implications for the design of the increasingly popular environmental adventure-based experiential learning exercises, like 'Planet Kullen'. These implications focus on the importance of aesthetic factors to be accounted for alongside the usual ecologistic-scientific factors. Other implications exist around the design of demonstration and educational centres. Over the past decade there has been a proliferation of these centres, such as the Eden Project, Earth Centre, Gaia Project, Centre of the Earth, Centre for Alternative Technology, which primarily aim to not only foster environmental and sustainability awareness but action as well. As part of their societal change agenda, these centres are starting to provide corporate venues for sustainability experiences. These projects are distinctive as they provide a multi-sensory naturalistic, interactive experience. However, these projects have been primarily designed from a technocratic, eco-efficiency perspective, which at best assume that long-term behavioural change is dependent on tapping cognitive and behavioural motivational bases. In other words, the design has invariably ignored the possible negative and positive emotional consequences of certain sensual experiences. This is evident in the lack of action arising from the historical focus on environmental information provision, around global environmental threats, such as global warming, ozone layer depletion etc.. Moreover, if positive mood states represent significant mediating factors in levering transformational change, it would appear that these experiences, still in their formative stage, may require design and organisational refinement to prove effective. Possible empirical research could compare the effectiveness of different educational centres, categorised by their different aesthetic qualities, in terms of the emotional as well as the cognitive and behavioural impact.

Other wider implications are around the importance of integrating biophilic experiences into the workplace with the purpose of sustaining the transformational change process i.e. sustaining an emotional competence to continually respond with the appropriate spontaneous behaviours to resolve the inherent conflicts in the sustainability discourse.

It is envisaged that future empirical research could explore how office design can incorporate the characteristics of the biophilic, aesthetic experience in order to sustain corporate transformational change towards sustainability. Given the amount of time that people spend at various physical structures in which organisations operate, questions regarding the impact of these structures are noticeably missing from organisational discourse (Bitner, 1992; Davis, 1984). Indeed, organisations are becoming more interested and invest in more resources, in layout design, particularly designs associated with sustainability. But scholarly research is still lacking about such expenditures. How should they be channelled? What is their overall impact, not only in physical but in cognitive, behavioural and emotional terms as well? Usually, working environment research has focused on the ergonomic and health implications on workers (Gibson, 1979; Canter, 1997; Davis, 1984; Ornstein, 1986, 1989, 1992; Trice and Beyer, 1984, Knez, 1995; Evans et al, 1996). Similarly, eco-efficient working environment research has focused on technical issues such as waste and energy reduction. In contrast, this research recognises that 'green buildings', if designed from a biophilic and aesthetic rationale, may represent an important lever of transformational change.

Future research could attempt to measure the effectiveness of 'best-practice' eco-efficient corporate buildings and offices, in emotional and behavioural terms. Therefore, this research moves beyond the usual technocratic measures of building performance, such as defined by the Building Research Establishment. For comparative purposes, the proposed research could attempt to measure the effectiveness of offices, which appear to integrate biophilic characteristics into their design. More specifically, by adopting a longitudinal, qualitative, ethnographic methodology, 'eco-efficient' offices can be compared and contrasted with more biophilic orientated offices, around the extent to which they maintain individual, group and organisational positive mood states and spontaneous behaviour towards sustainability. Furthermore, such a study aims to take a systemic, organisational perspective, which recognises the interrelationship between office design and other sustainability initiatives, such as around environmental management systems and unitarist cultural strategies. Moreover, the differentiating feature of this research would be to assess the contribution made by biophilic, aesthetic factors in maintaining the transformational change towards sustainability. The long-term objective would be to develop an integrative, dynamic model of organisational change towards sustainability.

Moreover, by advocating a three dimensional change focus, which accounts for workers' emotional, cognitive and behavioural motivational bases, this paper has implications for the whole discipline of corporate environmental management in its acceptance of emerging organisational theories, such as organisational aesthetics along with theories from the natural and social sciences. It is argued that without this type of multi-disciplinary focus, the field will lack any grounded understanding of workers' phenomenal, fragmented, lived experience.

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