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SERMONS IN STONES.  
ARGUMENT AND ARTEFACT FOR  
SUSTAINABILITY

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## ABSTRACT

The focus of the study is on the values, priorities and arguments needed to advance 'design for sustainability'. The discussion critiques conventions related to innovation and technology and offers a product design approach that emphasises minimal intervention, integrated thinking-and-doing, reinstating the familiar, localization and the particularities of place. These interdependent themes are discussed in terms of their relationship to design for sustainability and are clarified through the conceptualization, design, production and use of a simple functional object that is, essentially, a 'symbolic sustainable artefact'. Although it is fully functional, its practical usefulness in contemporary society would probably be seen as marginal. Its potential contribution is as a symbol of an alternative direction. It asks us to consider aspects of our humanity that are beyond instrumental approaches. It challenges sustainable initiatives that become so caught up in practical and environmental concerns that they fail to question the underlying values, priorities and social drivers which affect how we act in the world; those behaviours and norms that have created the very problems we are so urgently trying to tackle. The discussion is accompanied by a parallel series of photographs that document the relationship between argument, locale and the creation of the conceptual artefact. These photographs convey some of the qualitative differences between the place of much contemporary artefact acquisition, i.e. the shopping mall, and the particular locale that yielded the artefact created during this study; they are also useful in conveying the potential relationship that exist between place and the aesthetics of functional objects.

## RÉSUMÉ

Cette étude prend pour objet les valeurs, les priorités et les arguments pour faire progresser la « conception pour la durabilité ». Elle déploie une critique des conventions relatives à l'innovation et à la technologie et propose une approche de la conception de produits qui met l'accent sur une intervention minimale, une pensée et une pratique intégrées, qui rétablissent le familier, la localisation et les particularités du lieu. Ces thèmes interdépendants sont discutés en termes de leur relation avec la conception de la durabilité et sont précisées par la conceptualisation, la conception, la production et l'utilisation d'un simple objet fonctionnel qui est, essentiellement, un « artefact symbolique durable ». Bien qu'il soit pleinement fonctionnel, son utilité pratique dans la société contemporaine serait probablement considérée comme marginale. Sa contribution potentielle tient lieu de symbole d'une direction alternative. Il nous invite à réfléchir aux aspects de notre humanité qui échappent aux approches instrumentales. Il remet en question des initiatives durables qui sont tellement aux prises avec des préoccupations pratiques et environnementales qu'elles ne parviennent pas à remettre en question les valeurs sous-jacentes, les priorités et les impulsions sociales qui influent sur la façon dont nous agissons dans le monde ; c'est-à-dire les comportements et les normes qui ont créé les problèmes que nous cherchons si urgemment à résoudre. La discussion est accompagnée en parallèle d'une série de photographies qui documentent le rapport entre argument, contexte et création de l'artefact conceptuel. Ces photographies illustrent certaines des différences qualitatives entre le lieu d'acquisition de la plupart des artefacts contemporains, à savoir le centre commercial, et le lieu particulier qui a produit l'artefact créé au cours de cette étude. Ces photographies sont également utiles pour illustrer les relations qui peuvent exister entre le lieu et l'esthétique des objets fonctionnels.

## INTRODUCTION

And this our life exempt from public haunt  
Finds tongues in trees, books in the running brooks,  
Sermons in stones and good in every thing.

William Shakespeare

*As You Like It*, Act II, Scene I

Changes in our modes of living, away from our highly consumptive lifestyles and towards ways that are both preferred and less damaging, will require not only changes in our activities but also a shift in our attitudes, values and priorities. These issues are considered in terms of the need for, and qualities of, such a shift, and what they imply for our approaches to product design and production – which is illustrated here through the design and creation of a symbolic sustainable artefact.

The discussion begins with a consideration of the dominance of technology in contemporary society, its relationship to sustainability and some of the concerns it raises; this is a question of emphasis and balance. The links between technology, consumerism and growth are discussed, along with the promises of industrial capitalism and our notions of progress. An alternative perspective is proposed based on ‘being’ rather than ‘having’, which is rooted in long-standing philosophical and spiritual traditions. This places ‘sustainability’ firmly in the here and now – rather than viewing it as a goal to work towards in the distant future. The relationship between changing our activities in the world and ‘inner’ change in our attitudes and perspectives is related directly to sustainability and linked to the role of ‘the local’. These concepts are then translated into a set of considerations for the product designer and applied through the development, design and production of an illustrative functional artefact. The result is a sustainable object, and the issues it raises offer a basis for re-thinking many of our priorities and approaches to product design. Thus, the process of creating the object and the object itself both serve to inform the discussion and throw light on the relationship between functional objects and sustainability.

## TECHNO-UTOPIA

One of the most emblematic features of our current age is the prominence given to technological development. It commands enormous

efforts, resources and investments in our universities, in private corporations, and in government priorities. Advanced technology fills the homes, cars and even the pockets of most people living in the affluent countries and, increasingly, in the less-economically developed countries. It is seen as a major factor in wealth creation, jobs, security, competitiveness and progress, and has become virtually synonymous with the term ‘innovation’.

The development of technology is strongly linked to the potential for profit through the manufacture of consumer products – which in turn is linked to resource and energy use, waste and pollution and, all too often, social injustices. Hence, technological research and development are not neutral activities but are, in many ways, significant aspects of the ‘sustainability’ question; the term sustainability referring to the now familiar three-pronged relationship between social, environmental and economic issues; to which we might add issues of personal meaning.

Advanced technologies have brought enormous benefits to many areas of our lives – from medical research to communications, and some new technologies help reduce environmental impacts by offering more energy efficient solutions and less polluting products. However, it must also be acknowledged that the emphasis given to the development of consumer goods based on advanced technologies, and their consequent production and global distribution, is creating severe environmental problems together with many social injustices and inequities (e.g. Waste Online, 2008; Cafod, 2008). Therefore, if we are to seriously address the challenge of sustainability, it will be important to consider the emphasis placed today on the development and proliferation of such consumer goods; goods that quickly become discarded and replaced because of the speed of technological advance.

Furthermore, technological research and development tend to be well supported by government (i.e. taxpayers’) funds through research councils and regional development agencies (Guardian, 2007). When preferential support is given to science and technology over, say, the arts and humanities (in the UK by a factor of over twenty to one!), based on a rationale of creating competitive advantage, growth, jobs and wealth then, despite the benefits, there arises an imbalance in our priorities and our efforts – one in which instrumental value tends to be favoured over intrinsic value.

## UNSUSTAINABLE DEVELOPMENT

The relationships that exist between technological development, short-term government agendas, and the production of short-lived, hi-tech consumer goods, all serve to encourage consumerism and reinforce a fundamentally unsustainable system. It is irrational to think that we can reduce our environmental impacts and advance social and economic wellbeing, equity and justice, that is, conform to the principles of sustainability, through unbridled development of more and more increasingly sophisticated technologies. Within a free market, capitalist system, investment in R&D is only justified if it is likely to turn a profit in the future. This invariably means the commercialization of the technology through saleable products, often in the form of mass-produced consumer goods, which, in turn, intensifies environmental damage and is frequently associated with social exploitation. This route to economic prosperity and societal wellbeing is based on:

- the fallacious, increasingly precarious and damaging ideology of *continuous growth* - in production and consumption - and hence, too, in resource and habitat depletion, pollution, waste and human exploitation (see Korten, 2001, 43-56)),
- the misguided attempt to attain happiness through ever higher material standards of living, and
- aggressive competitiveness within a global economy.

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To continue to pursue such methods only maintains the same kind of thinking that has characterised the past century or more. This is not innovative thinking, it is just the same thinking applied to the continuous development and production of ever new, often trivial, consumer goods. At one time it may have been justified to produce any and every kind of product we could imagine as long as it created wealth and jobs. Today, however, the cumulative impacts and harmful effects are only too evident, making the continuation of such practices increasingly difficult to justify. However, the messages of marketing persistently tell us that we need, indeed deserve, these technological ‘marvels’, and the shrewd talent of the advertising industry is to even turn critique of consumerism into persuasive advertising copy. A recent collaboration between the U.K. department store Selfridges and American artist Barbara Kruger is one example (Douglas, 2006), where in-store banners boldly proclaim, “Buy me,

I’ll change your life” and “You want it, You buy it, You forget it” (Fig. 1). Similarly, the U.S. auto manufacturer Hummer, which has received criticism for its oversized vehicles aimed at the consumer market, launched a TV commercial that focused on a man buying vegetarian produce who is later seen at the wheel of a Hummer, accompanied by the line “Restore the Balance” (Hummer, 2006). By employing irony and humour, such examples demonstrate the infinite adaptability of industrial capitalism, which allows it to undermine virtually any form of critique (Miller, 2005, 2).



**Fig. 1** Marketing banner “Buy Me”, Selfridges department store, Trafford Centre, Manchester

Of course, a major objective of commercial corporations is to create and continually grow shareholder profit, and technology, linked to consumerism, has become a primary means for creating such profit. Governments usually support this, seeing it as positive for the economy. However, despite the plethora of ‘green’ rhetoric that emerges from corporations and governments alike, approaches based on continual growth in consumerism, resource use and energy use are clearly at odds with any serious understanding of the term ‘sustainability’.

## FLAWED PERFECTION

When manufacturing is combined with marketing the result is often a technocratic version of societal wellbeing. The implicit message is that some kind of future Utopia of sustainable perfection is actually attainable, where our environmental and social problems will be solved through the ingenious application of advanced, super-efficient, non-polluting technologies. Such a notion is clearly idealistic, patently false and flies in the face of both logic and the teachings of all the major philosophical and wisdom traditions down the ages. Yet, the unerring message of corporate commercialism is, in effect, that this product or that service will fulfil your dreams and make you happier.

These flawed notions are being taken ever further as corporate interests remorselessly create dissatisfaction and stimulate desire – from the gaudy trappings and superficial ‘splendours’ of the modern shopping mall (Figs. 2-4) to the increasingly exclusive and outlandish goods and services on offer. Both are meant to appeal to our vanities through their suggestions of elitism and status. At a recent conference of the Industrial Designers Society of America (IDSA, 2007) keynote presentations included a high performance electric sports car (Straubel and Hatt, 2007; Tesla, 2008) and the planned commercialisation of space tourism (Seymour, 2007; Virgin Galactic, 2007). While a high priced electric sports car may appear to address concerns about auto emissions, the problem is simply transferred from the exhaust pipe to the electricity generating station, which could be coal fired – creating carbon emissions; nuclear – creating a radioactive waste problem; or hydro – creating an environmental impact problem. Such exclusive products do little to seriously address environmental concerns but they do serve to stoke our desires and maintain our addiction-like behaviour towards consumption (de Graaf *et al*, 2001; Badke and Walker, 2008). They also bring with them their own problems. In this case, for example, no mention was made of the relatively short life or the disposal problems associated with thousands of batteries. The space tourism presentation concentrated on the ‘experience’ being offered – the excitement of acceleration, three or four minutes of weightlessness, the views of the earth and the stories to tell your grandchildren.

Such thrill rides, whether in a sports car or a space craft, have little to do with fostering meaningful notions of contentment; instead they offer a false notion of happiness based on consumption. While

such aspirational products, available only to the few, may cultivate vanity, envy and discontent, the proliferation of less expensive products creates even broader problems. For example, the recent launch of the world’s cheapest car, by Indian automaker Tata, (2008) will help further transform India into a high consumption society.



Fig. 2 Main concourse ‘Palm Court’, Trafford Centre, Manchester



Fig. 3 Food court ‘Ocean Liner’, Trafford Centre, Manchester



Fig. 4 Grand marble and brass staircase, Trafford Centre, Manchester

These kinds of products and services exacerbate already severe environmental problems – directly through their contribution to cumulative effects and indirectly through the dissatisfaction and cravings they foster.

Philosopher Charles Taylor explains that a particular characteristic of the modern, secularised worldview is that ‘meaning’ is sought through self-realization, which is based in concepts of progress, reason, freedom etc. He says that unlike in previous times, where meaning was found in higher or transcendent understandings, in the modern world a sense of meaning in one’s life is based in the idea that individual efforts can contribute to human progress across time. Thus, human efforts related to advancement and material progress have become central to contemporary notions of ‘meaning’. Criticism of this relatively recent idea is rooted in the fear that our notions of progress yield only meaninglessness, either through an unexceptional sameness, a ‘levelling down’ of humanity or that the denial of the transcendent results in vacuousness – the threat of an empty life, inspiring “nothing but ennui, a cosmic yawn” (Taylor, 2007, 716-717).

Between the idea  
And the reality  
Between the motion  
And the act  
Falls the Shadow  
T. S. Eliot, *The Hollow Men*, 1925

## PROGRESS, MEANING AND UNSUSTAINABILITY

The above highlights some of the most fundamental problems associated with our contemporary efforts to address sustainability. Modernity, with its ideology of progress, sought to advance human happiness, meaning and fulfilment through industrialization and the consumption of material goods. Its rationalizations led to a severe attrition in traditional sources of meaning in most of the economically developed countries of the ‘west’ and, as Northcott has pointed out, the imposition of this ideology on developing nations, through institutions such as the World Bank, has led to environmental and social destruction on a massive scale (2007, 175-177). Joseph Ratzinger, Pope Benedict XVI and former academic, has expressed a similar view, “The aid offered by the West to developing countries has been purely technically and materially based ... It has thrust aside indigenous, religious, ethical, and social structures and filled the resulting vacuum with its technocratic mindset” (2007, 33). Moreover, it is important to recognise that there is no evidence to support the implicit assumption of modernism that technological and material advancement is accompanied by moral progress – the industrialized genocide of WWII and the consequent advance of technology for arms development belie any such claims (Armstrong, 2006, xi).

Challenges to the assumptions of the modern view gave rise to postmodernism. On the one hand, this holds the promise of a renewed sense of meaning, through its apparent tolerance of diverse forms of expression, including religious expression and the acknowledgement of meaning via the transcendent. On the other hand, it couches religion, along with other forms of expression, in relativism, thereby denying any claims to universal truth or authority (Beattie, 2007, 132-136) and rendering them banal and ineffectual; a factor that is not unrelated to the rise of fundamentalist reaction, both religious and secular (*Ibid*, 139).

The undermining of modern assumptions about progress and the relativism of postmodernity has contributed to the emergence of what Beattie calls the “voracious consumer” who constantly seeks “novel-

ty, innovation and change” (*Ibid*, 133), but who, in lacking a sense of overall meaning and purpose, is highly vulnerable to the persuasive messages of corporate marketing where meaning is always to be found in the *next* purchase.

## HAVING OR BEING

Neither modern notions of progress in general, nor technological progress in particular, can claim to have brought us closer to more sustainable ways of living; in fact, the evidence points in the opposite direction. Similarly, the multifarious and confused concerns of postmodernism mean that calls for more sustainable directions, for limiting the emissions associated with climate change, and for improvements in social equity and justice, emerge from the very same government and business leaders who simultaneously espouse the mantra of growth and free trade and who, to achieve these goals, effectively promote “voracious consumption”. There are inherent contradictions in such messages, and in the perplexities created we simply continue our frenzied stripping of the planet. In the affluent countries especially, human wellbeing has become synonymous with the accumulation of products, and as people increasingly associate their sense of identity with what they own, rather than who they are, “*having* takes precedence over *being*” (Northcott, 2007, 186). When this is accompanied by a sharp rise in ‘entertainment’ products, as has been the case in recent times, then acquisition is combined with ever greater opportunities for distraction and atomization – further eroding a reflective sense of self within a larger, meaningful social context.

An emphasis on *having* rather than *being* and the dangers it holds for our welfare is echoed by theologians such as Williams who says, “There is something about Western modernity which really does eat away at the soul” (BBC News, 2007). Similarly, the philosopher De Botton has said, “Our minds are susceptible to the influence of external voices telling us what we require to be satisfied, voices that may drown out the faint sounds emitted by our souls and can distract us from the careful, arduous task of correctly tracing our priorities” (2004, 201). Hence, the cult of ‘progress’ and opportunities for distraction from reflection, self-knowing and the search for meaning have become key features of our contemporary age. Both are linked to acquisitive lifestyles and, thus, to un-sustainability.

Universities are not immune to the rhetoric of the times, indeed, as governments impose increasingly prescriptive measures on univer-

sity research budgets, they have little choice but to toe the line if they are to secure research funding. Two recent university marketing strategies proclaim, “*It’s not where you are, it’s where you’re going*” and “*It’s not where you are, it’s where you want to be*”. Such slogans parallel commercial agendas that foster dissatisfaction with the ‘now’ by emphasising the potential and allure of what’s coming ‘next’. These are unfortunate messages to be sending out to young people about to embark on their university careers – education is promoted as a means to some other end, rather than having merit as an end in and of itself. It is marketed solely as a ticket to a good job rather than for a love of learning. Such messages implicitly denigrate the value of the present, of living fully in the here and now. They also demonstrate how insidious the ideologies of our age have become – because if there is one institution in our society that should be examining, challenging and critiquing such assertions it is our universities. As Chesterton once put it, “It is always easy to let the age have its head; the difficult thing is to keep one’s own” (1908, 103)

## ANOTHER VOICE

Those who tell of a different way tend not to be politicians, business leaders, economists, or technologists, but poets, artists, philosophers, and those dedicated to more spiritual pursuits. This alternative path is represented in the Long Now project of artist and musician Brian Eno *et al* (Eno 2001; Long Now 2008); in the traditional religious understandings of the ‘eternal now’ spoken of by the Benedictine monk David Steindl-Rast (Steindl-Rast and Lebell, 1998, 7); it is alluded to in paintings such as *L’esperança del condemnat a mort 1-111* by Joan Miró (1974); and in the words of Longfellow when he writes:

Trust no future, howe’er pleasant!  
Let the dead past bury its dead!  
Act – act in the living present!  
From: *A Psalm of Life*  
(Herbert, ed., 1981, 188-189)

Emphasis is placed on living fully in the reality of the *present*, rather than constantly anticipating or yearning for the *next* thing.

This suggests a rather different way of understanding sustainability - not as some future way of living we must strive towards, but as something to address now - in our attitudes, thoughts and actions as individuals; in our *being* rather than our *having*. It challenges our assumptions,

our desires and our behaviours. Living fully in the ‘eternal’ present is not about momentary thrill rides or continual consumption. As such, it represents a significant change in priorities and values. Undoubtedly, without such an ‘internal’ change we will be unprepared and unwilling to make the necessary systemic changes that are required; changes that could steer us away from our current highly consumptive and destructive behaviours. Indeed, if our contemporary modes of living are environmentally unsustainable, then sooner or later we will have no choice but to change. However, without a shift in priorities and values such enforced change will be viewed as a continuous imposition of undesirable deprivations that inexorably impede our progress towards our still-desired but increasingly elusive lifestyles.

### SUSTAINABILITY: VALUES AND LOCALIZATION

Sustainability does not simply represent a problem ‘out there’ to be fixed – through new technologies or legislation or policy. Without a clear sense of inner purpose and meaning such ‘external’ activities can, and do, create a host of contradictions. External change has to be accompanied and steered by inner change. As Armstrong has said, “Unless there is some kind of spiritual revolution that can keep abreast of our technological genius, it is unlikely that we will save our planet. A purely rational education will not suffice” (Armstrong, 2006, xi).

Realistically, we cannot hope to reduce environmental degradation if we are not also prepared to reduce our levels of consumption. This is only likely to occur if we can develop other ways of finding fulfilment that also provide for economic confidence and security. For such change to occur, we need to consider what it means to prioritise *being* over *having*, and the effect this might have on our ways of living.

Such notions are anything but new. Emphasis on living fully in the present, or “being”, has always been a principal teaching of the world’s major philosophical and spiritual traditions. These traditions - from Lao Tsu to Thoreau and from Socrates to Gandhi – not only speak of inner development through selflessness and rejecting ego-centric desires, they also teach that concern for wealth, status and possessions hinders ‘inner’ growth (e.g. *Phaedo* by Plato, Tredennick and Tarrant., trans., 1954, 125). They are therefore completely consistent with contemporary sustainability concerns related to the damaging effects of consumerism. These teachings, however, could not be in starker contrast to today’s corporate messages (see Table 1).

Despite their wisdom and their relationship to inner development, the ‘narrow path’ of which these

teachings speak (e.g. Mascaró, 1965, 61) has always been sidelined in the everyday busyness and business of society; striving for worldly comforts, distractions and personal gain too often take precedence. In the past, the effects of such behaviours on the planet itself were relatively minor, even though they may have been socially or personally harmful. However, this is no longer the case. The drastic rise in urban populations over the last century, accompanied by massive growth in industrialization, mass marketing and mass consumerism, have contributed to environmental impacts that in recent times have become alarming in their implications<sup>13</sup>.

Teachings of Philosophers and Spiritual Leaders down the Centuries	Corporate Messages in the 21 <sup>st</sup> Century
<p>“ There is no greater sin than desire, No greater curse than discontent” Lao Tsu, ca.500 BC, China<sup>3</sup></p>	<p>“ [The photos] never show the entire car but still arouse desire for something new.” Mercedes-Benz, 21<sup>st</sup> century, Europe<sup>8</sup></p>
<p>“ ...those who buy something [should live] as if it were not theirs to keep; those who use things of this world, as if not engrossed in them.” St Paul, 1<sup>st</sup> century, Europe<sup>4</sup></p>	<p>“ Its yellow, white and Everose gold are timeless symbols of prestige and luxury” Rolex Ad, 21<sup>st</sup> century, Europe<sup>9</sup></p>
<p>“ Our inventions are wont to be pretty toys, which distract us from serious things.” Thoreau, 19th century, USA<sup>5</sup></p>	<p>“ With an anodised aluminium and polished stainless steel enclosure and a choice of six colours, iPod nano is dressed to impress.” Apple, 21<sup>st</sup> century, USA<sup>10</sup></p>
<p>“ ...present-day industrial society everywhere shows this evil characteristic of incessantly stimulating greed, envy, and avarice.” Schumacher, 20<sup>th</sup> century England<sup>6</sup></p>	<p>Google's profits were up 17% to \$1.21bn (£608m) for the three months to the end of December. Some analysts had been hoping for stronger profit growth and its shares fell sharply in after hours trading. BBC News, Feb. 1<sup>st</sup> 2008<sup>11</sup></p>
<p>“ Civilization, in the real sense of the term, consists not in the multiplication, but in the deliberate and voluntary reduction of wants.” Gandhi, 20<sup>th</sup> century, India<sup>7</sup></p>	<p>“ Glacéau smartwater the water with all the answers.” Bottled Water Ad, 21<sup>st</sup> century, USA<sup>12</sup></p>

Table 1; Traditional Teachings and Marketing Messages

“...because the financier’s sun  
is not Blake’s sun, there is a  
word missing from the dawn chorus.”  
R. S. Thomas (2003, 233)

Thus, the teachings of the traditional wisdoms represent many essential considerations for sustainability: focussing on the present, rather than being preoccupied with the future and the ‘next thing’; reducing acquisitiveness and consumerism, rather than constantly desiring more; being concerned for the welfare of others, rather than the self-oriented focus that is encouraged by corporate marketing. Furthermore, giving greater importance to *localization*, which is also a significant element of sustainability, ties-in well with these traditions.

Firstly, ‘the local’ addresses that which is proximate. Consequently, people become more directly aware of the impacts of their activities on their environment, and there are obviously individual and communal benefits in looking after one’s own local environment – to ensure an attractive and healthy place to live and work.

Secondly, through direct encounter at the local level we are less inclined to objectify other people. When we fail to see and treat other people fully as people, but think of them merely as ‘users’, ‘consumers’ or ‘labour’, then we help create ‘the other’. When this happens it represents a failure to empathize. Globalization would seem to exacerbate this tendency because of physical distance or differences in language, class, ethnicity, religion or skin colour. We may hear about exploitative labour practices ‘over there’, in countries such as China or India that manufacture goods for the affluent western nations, but the physical separation also distances us mentally and can lead to objectification and the acceptance of practices and conditions that are inequitable, unjust and that we would not be prepared to tolerate ourselves. While certainly not impossible, it is more difficult to objectify people with whom we have direct contact - our neighbours and colleagues, and the people we encounter in our everyday lives. Therefore, in addition to efforts that seek to reduce human exploitation in developing countries, a shift towards greater localization in manufacturing would encourage direct encounters and therefore practices that conform to the sustainable principles of social equity and justice.

Thirdly, focussing on local practices, activities and solutions can rein in our tendency to consider sustainability as something to be

worked towards - as something to be achieved *in the future*, where there will no longer be inequity and injustice or environmental degradation; this is Utopian and counterproductive. We are obliged to act in the present, to challenge our destructive norms and to develop practices that lead away from environmentally and socially damaging conventions. Irrespective of some future condition, each one of us, in our activities in the present, should be contributing constructively within our own sphere of impact – and with the understanding that the notion of ‘the local’ may vary considerably from one individual to another, depending on one’s role and contribution.

A shift towards greater localization would, for the reasons outlined above, mean that the price of consumer goods would better reflect their true costs. The people making the goods would be receiving a living wage and working in decent conditions, and it would be in everyone’s interest to ensure that environmental standards were upheld. Thus, it seems that a shift towards localization would encourage those attitudes and behaviours spoken of in the world’s great wisdom and spiritual traditions and, in the process, would better address many social and environmental principles,

## ARTEFACT: A SYMBOLIC SUSTAINABLE OBJECT

The potential difference these concepts might make in the field of product design becomes clearer if they are made more directly relevant to the design process. Therefore, this present study includes the creation of a functional object. The design and production processes and the artefact itself serve to embody and exemplify the principles being explored; the aim being to effectively encapsulate the *general* concepts and ideas discussed above within the design and creation of a *specific*, tangible object.

The practice of design is itself a form of inquiry that connects ‘thinking’ and ‘doing’ within an iterative, mutually informing process. Therefore, the creation of a physical artefact, which emerges from and contributes to the ideas, can bring an important design-centred element to our understanding of the issues.

A number of design objectives can be identified from the foregoing discussion,

- The functional benefit of the object should be consistent with or contribute towards the shift in values that have been described, including a shift from *having* to *being* and an emphasis on the present. It should contribute positively towards a reorientation

in priorities – away from those that maintain a socially harmful and environmentally damaging production system, that tend to concentrate economic gains, and which encourage dissatisfaction, consumption and waste, and towards those that are in accord with the ethical and sustainable principles of socio-economic equity and justice and environmental responsibility.

- The object should be capable of being produced wholly or partly at the local level by making use of the materials and skills readily available within a place, and with a minimum use of energy resources.
- The environmental impact of the object during its creation, use and post-use should be negligible. Its concept as a thing, its materiality, its process of production, its function, its use and its disposal should all be entirely consistent with the ethos of sustainability.

Thus, the goal is not simply to achieve an object that *aims towards* sustainability by reducing its impacts compared with other similar objects but which, itself, still has a negative effect. Instead, the goal is to produce something that actually is *a sustainable object* in its very conception as a thing. This means it must be sustainable not only in its mode of creation, its function, its aesthetic and in its eventual disposal, but also in the way that its presence and use contribute to positively developing and reinforcing an attitude of sustainability.

Several other factors were considered in the development of this illustrative object:

- The place that was to yield the object had to be proximate to where I, as the designer, was living and working – i.e. it had to be local to the designer.
- The determination of what the functional object was to be, and its specific definition, would be a result of combining a familiarity and consideration of place with the factors related to purpose, materials and skills discussed above.
- An emphasis on the fitness or aptness of the object to ‘purpose-and-place’ overrode other factors that might be important in a contemporary design practice. Commercial viability was not a factor; the purpose of the project being to further academic inquiry and to be illustrative.
- Novelty and originality were not considered to be important and were not sought after when deciding on the type of object

to be created or when designing its form. Unusual as this may seem, modern consumerism is so strongly associated with and promoted by novelty and so called innovation, that an attempt was made to eliminate such factors from this design project. There are precedents for such an approach. For example, in the creation of the icons of Eastern Orthodoxy the subject of the icon is painted (or ‘written’, as is conventionally said) by reference to previous depictions, and composition and style are determined by tradition rather than through individual expression (Proud, 2000, 8; Achemastou-potmaianou, (ed.) 1987, 38-39).

Bearing in mind these priorities and considerations, the rural area immediately adjacent to my place of work was visited (Fig. 5). It is a place of high moors and deep fertile valleys. The main occupation is farming, and the predominant sight is dry stone walls enclosing pastures filled with different varieties of sheep. Streams and rivers cut through the moor land, with gravel beds and ancient stepping stones, and stone farmhouses and barns stand out on the horizon (Figs. 6-9). Research about the area revealed a small cottage industry of rare-breed sheep rearing, together with the spinning and weaving of their wool.



Fig. 5 Countryside adjacent to author's place of work



**Fig. 6** Dry stone walls

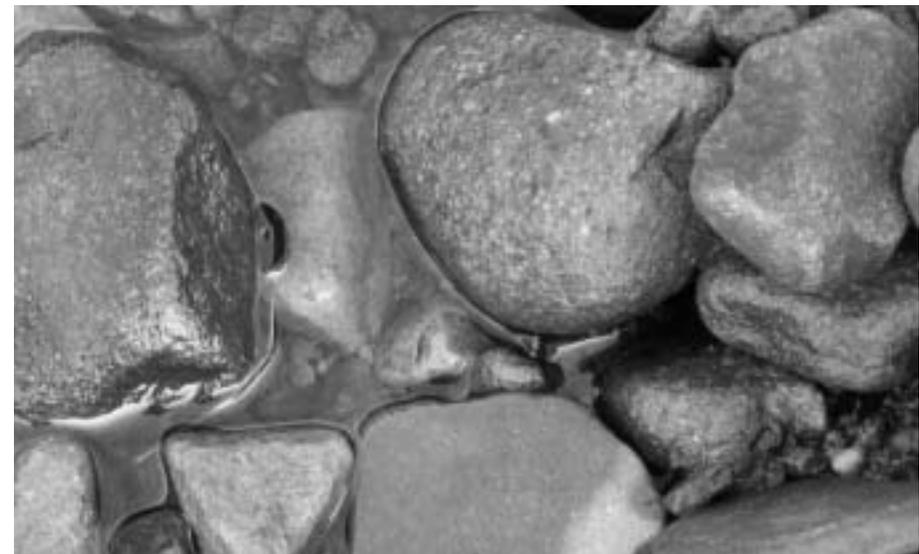
Reflecting on these experiences and findings, and referring to a previous study that looked at objects used as aids for inner development and contemplation, (such as the Buddhist prayer wheel, prayer beads and the Jewish prayer shawl) (Walker, 2006, 39-51) I was reminded of references to an ancient type of tallying device used for keeping track of meditative sayings or prayers (Schaff, 1886, 367; Schaff, 1889, Ch.32; St Paul, 2000, 24). The ‘device’, used since the 3<sup>rd</sup> century, consists of a simple pile of stones. To keep track of the spiritual exercises, each time a saying or mantra is completed, a stone is moved from the pile, to form another adjacent pile. Combining such a device with the local cottage industry of weaving would enable a simple, illustrative, functional object to be produced that would fulfil all the priorities set out for the project.

Revisiting the area, small stones were collected from a stream bed. These were later cleaned and dried and piled in a manner suitable for use as a tallying device. Moving the stones one by one into a second pile prescribed a comfortable ‘use’ area, which was then defined in terms of specific dimensions. The local weaver was visited and a piece of woven cloth was commissioned, which was to be made from the wool she had spun from the rare breed Teeswater sheep that she rears (Figs. 10, 11). Several weeks later, the cloth,

woven on a small hand loom, was ready (Fig. 12). The stones were then placed on the cloth to form the simple ‘tallying device’, and the artefact was complete (Figs. 13-15).



**Fig. 7** Sheep pasture



**Fig. 8** River stones



**Fig. 9** Stone Barn

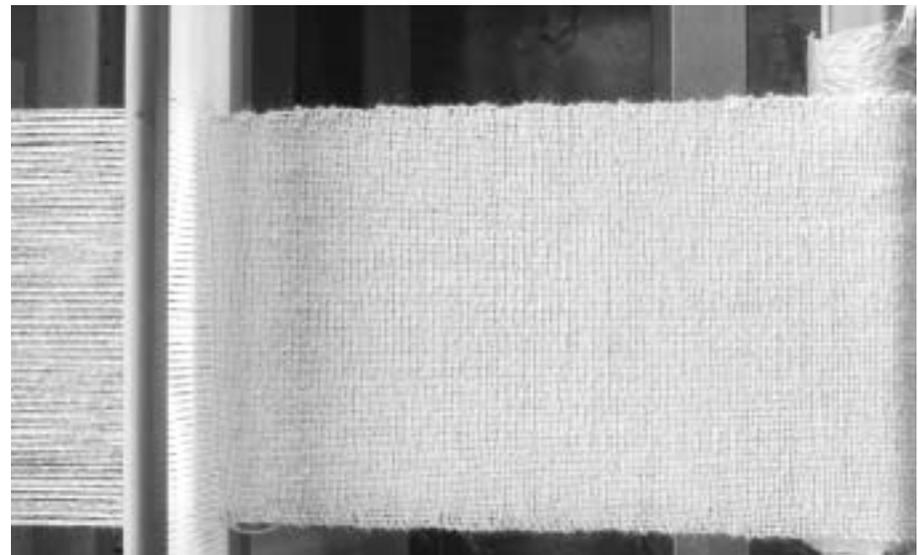


**Fig. 11** Teeswater rare breed sheep

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**Fig. 10** Wool from Teeswater sheep



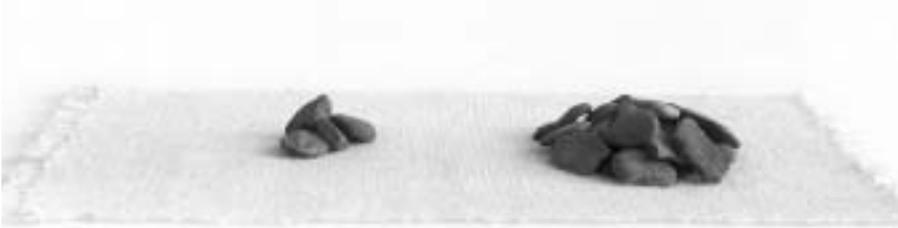
**Fig. 12** Woven cloth on hand loom



**Fig. 13** Sustainable artefact: a 'tallying device' – 33 river stones on a woven cloth



**Fig. 15** Sustainable artefact, detail 2



**Fig. 14** Sustainable artefact, detail 1

### A SYMBOLIC ARTEFACT

Clearly this object is very simple and its significance as a useful tool for a contemporary audience is marginal to say the least. However, as an artefact it fulfils all the objectives described earlier.

In terms of its function, these types of devices are used in conjunction with meditative practice – which in turn is related to a shift in priorities. Such practices have been carried out in many cultures all over the world for thousands of years. They can be based in religious tradition or they can be entirely secular. Frequently they centre on the repetition of a passage of scripture, a short phrase or even series of meaningless syllables (LeShan, 1974, 67). These practices can lead to greater attentiveness, and freedom from compulsions and cravings (Easwaran, 1978, 11) that are the kinds of behaviours associated with consumerism. Therefore, this type of object is related to the shift in priorities that seem to be needed to counter our susceptibilities to the messages of modern marketing, impulse buying etc. Hence, the conceptual nature of the artefact is consistent with sustainable principles.

In terms of its definition as a thing, its materials, and the manner by which it was produced – these are all intimately related and responsive to locale and the particulars of place. While its actual usefulness

may be marginal, its relevance lies more in what it represents, in terms of its concept, its process of creation, and its materiality. It signifies a sort of sustainable ideal because, by conceiving it as an object that is related to a shift in priorities and by intentionally keeping it very simple and local:

- its use is associated with the development of values that are in accord with sustainability,
- it offers an opportunity to employ local people and locally available skills and resources,
- it takes little to create in terms of materials and energy,
- its use produces no adverse waste, and
- at the end of its useful life it can be easily re-absorbed back into the natural environment with no detrimental long-term effects.

In this sense it is symbolic. Even though this degree of sustainability may be unattainable in the creation of most other objects, it provides an example of what a fully sustainable functional object can be.

In addition, the creation of this object demonstrates the ability of the design process itself to contribute to knowledge. It exemplifies well how the experiential process of ‘designing’ can inform our understanding of the relationship between the conceptual notion of an object, its design and production, the nature of the resulting artefact and the priorities of sustainability. In this case, the consideration of aptness to place comes to the fore, which expands and deepens our understanding of ‘the local’ in the context of manufactured functional objects. It is not simply a case of doing things locally for instrumental benefits - to create local jobs, reduce transportation etc. The difference is also qualitative, aesthetic and cultural. The functional object is no longer an alien artefact that is imposed upon a place. Instead, it is an artefact *of* place, which emerges from a gentle rearrangement of the elements within the local environment – like the art works of Andy Goldsworthy or Richard Long, or the vernacular architecture of traditional cultures such as the adobe houses of the American Southwest, the reed houses of the Marsh Arabs, or the stone cottages of rural England. These vernacular forms, like this ‘tallying’ object, are not concerned with novelty, individual expression or ‘making a splash’. They are quiet, familiar forms based on traditions that are centuries old and processes that have been contributed to by many over time. The resulting artefacts are both refined and

apposite and, in many important aspects, they ‘work’ effectively within their social and natural environments.

Thus, ‘the local’ is a critical element of design for sustainability and the nature of sustainable objects. It contributes to important extrinsic factors, such as reducing environmental impacts, and providing work and economic benefit through local employment. However, it also contributes to the intrinsic qualitative and aesthetic aspects of objects, and to the qualitative and aesthetic aspects of the culture in which the objects are produced. These intrinsic factors, so easily forgotten when discussions focus on environmental performance indicators and targets, are vitally important if we are to shift our values and priorities and develop a new kind cultural relationship with and attitude to material ‘goods’.

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## NOTES

- 1 For example, in the UK research in the arts and humanities has an annual research council budget of ca. £75M compared to £1556M for research in engineering, science and technology, not including medical science (£500M for the Engineering and Physical Sciences Research Council, £336M for the Biotechnology and Biological Sciences Research Council, £220M for the Natural Environment Research Council, and £500M for the Science and Technology Facilities Council) (RCUK, 2008).
- 2 University of Cumbria (2007) *“It’s not where you are, it’s where you’re going”* banner displayed on the Lancaster campus of University of Cumbria, September 2007. University of Liverpool (2007) *“It’s not where you are, it’s where you want to be”*, advertisement in the FT Magazine of the London Financial Times, October 13/14. 2007, p.43.
- 3 Feng, G. F and English, J. (trans.) (1989) *Tao Te Ching*, by Lao Tsu, Vintage Books, Random House, New York, Chapter 46, p.48
- 4 1 Corinthians, 7:30-31, The Holy Bible, New International Version, New Testament, Zondervan Publ. House, Grand Rapids Michigan, 1973, p.226
- 5 Thoreau, H. D. (1854) *Walden*, in *Walden and Civil Disobedience*, Penguin Books, New York, 1983, p.95
- 6 Schumacher, E. F. (1979) *Good Work*, Abacus, London, p.27
- 7 Iyer, R. (1993) *The Essential Writing of Gandhi*, Oxford University Press, Delhi, p.378
- 8 Mercedes Benz TV, Weekly Show 29.02.08, promotional film for the CLC car “Key Visual Shooting part 2”, at: [http://www.mercedes-benz.tv/index.html?csref=mbcom\\_ws\\_mbtv0107\\_uk\\_en](http://www.mercedes-benz.tv/index.html?csref=mbcom_ws_mbtv0107_uk_en); accessed January 31, 2008.
- 9 Rolex Watches Website, information about the GMT-Master II watch, at: <http://www.rolex.com/en/#/en/xml/collection/extraordinary-watches/gmt-master/features/gold>; accessed January 31, 2008
- 10 Apple Store Website, information about the iPod nano, at: [http://store.apple.com/1-800-MYAPPLE/WebObjects/AppleStore.woa/wa/RSLID?nnmm=browse&mco=3587D037&node=home/shop\\_ipod/family/ipod\\_nano](http://store.apple.com/1-800-MYAPPLE/WebObjects/AppleStore.woa/wa/RSLID?nnmm=browse&mco=3587D037&node=home/shop_ipod/family/ipod_nano); accessed January 31, 2008
- 11 *Google profits Disappoint Market*, BBC News Online, February 1<sup>st</sup> 2008 at: <http://news.bbc.co.uk/1/hi/business/7221170.stm>, accessed February 1<sup>st</sup> 2008.
- 12 Print advertisement for Glacéau smartwater in Vanity Fair Magazine, New York, July 2007, p.85
- 13 For example, the Intergovernmental Panel on Climate Change, which shared the 2007 Nobel Peace Prize with Al Gore, says that in a little over a decade up to 250 million people living in Africa will “be exposed to increased water stress”, and “Agricultural production, including access to food, in many African coun-

tries is projected to be severely compromised,” with crop yields in some countries down by 50%, (*Intergovernmental Panel on Climate Change Fourth Annual Report – Climate Change 2007: Synthesis Report, AR4*, Table SPM.2 Examples of some projected regional impacts, p.10. Available at: <http://www.ipcc.ch/>, accessed February 1, 2008.

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## FIGURES

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  2. Main concourse 'Palm Court', Trafford Centre, Manchester
  3. Food court 'Ocean Liner', Trafford Centre, Manchester
  4. Grand marble and brass staircase, Trafford Centre, Manchester
  5. Countryside adjacent to author's place of work
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