Proceedings of the 6th International Conference of the European Academy of Design, EAD06
University of the Arts Bremen, 29–31 March 2005, Bremen, Germany. ISBN 3897572907

Design for the Surreal World?
A New Model of Socially Responsible Design

Caroline L. Davey, *The University of Salford, UK*
Andrew B. Wootton, *The University of Salford, UK*
Angharad Thomas, *The University of Salford, UK*
Rachel Cooper, *The University of Salford, UK*
Mike Press, *The Robert Gordon University, UK*

Abstract

This article presents a new model for Socially Responsible Design (SRD) that takes into account the social and economic context governing design activity and influencing the design agenda. The new SRD Model focuses attention on the products, environments, services and systems that can alleviate real world problems and improve quality of life. It encourages designers to use their unique skills to address issues of crime, education, government, health, fair trade, ecology, social inclusion and economic policy. The SRD model is presented as a practical alternative to Corporate Social Responsibility (CSR)—a business management approach that focuses on corporate governance and reflects issues facing global corporations. It demands that businesses undertake actions that impact positively on society, and raises questions about the extent to which producers of harmful products can be considered socially responsible.

Key words – Social Responsibility, Socially Responsible Design, Corporate Social Responsibility, Design Against Crime,

Introduction

Companies have legal and social obligations arising from the context in which they operate. The Corporate Social Responsibility (CSR) movement aims to relate the ethical behaviour of a company towards society with its responsibilities towards *stakeholders*, not only shareholders. CSR commits companies to developing codes of conduct, mission statements and achieving continuous improvement in, for example, eco-efficiency. CSR encourages greater financial transparency and ethical investment, while endorsing a range of conventional management practices, including building partnerships, co-operating on technology and developing integrated approaches (Moir, 2001; Watts & Holme, 2001; WCED, 1987). Emphasis is also placed on the standardisation of business practice across global markets (Johnston, 2001). CSR and Socially Responsible Investing (SRI) have been incorporated into management approaches, such as the Business Excellence Model, and

Copyright © 2005 Caroline L. Davey & Andrew B. Wootton. All rights reserved.

companies are urged to measure their performance against the *"Triple Bottom Line"* of people, profit and planet (Hardjono and Marrewijk, 2001).

The term CSR is employed by the UK Design Council, with a section of its website dedicated to this subject (www.designcouncil.org.uk). However, Garfunkel (2003) appears to view design merely as a tool to support the communication and reporting activities that constitute an internal, company management-focused view of CSR. Indeed, the CSR literature tends to concentrate on corporate governance issues, such as internal business structure, management style, reporting methods and investment. Consequently, critics may view CSR simply as *"window dressing"* (Hardjono and Marrewijk, 2001). Unfortunately, such a management-centred approach to CSR ignores the potential for business to shape society through its design interventions—the products, environments, services or systems it creates. Clearly, such a shift in viewpoint would make CSR relevant to all businesses, not just the global players.

The omission of a design-centred approach within CSR is surprising, since design has a long history of addressing issues relating to social responsibility (Whiteley, 1993). The use of design to address social, environmental, economic and political issues may be termed '*Socially Responsible Design'* (SRD). SRD interventions, whether focused on the individual or wider society, move beyond economic considerations to embrace ethical, emotional and humanitarian values (Davey *et al,* 2002).

This paper presents a new model for Socially Responsible Design (SRD) that positions it within the wider context of CSR and by so doing, brings CSR into sharper focus. The SRD Model identifies eight core features of the modern experience upon which design impacts, thereby mapping the domain of SRD practice. It is based on a comprehensive review of the literature and the experiences of researchers working within the Design Policy Partnership—a multi-disciplinary teams of research working at the University of Salford, Robert Gordon University and Sheffield Hallam University. The model enables different design approaches to be located within an overall framework, without dictating the focus or approach, and makes clear the potential for SRD.

Building on the work of Whiteley (1993) in '*Design for Society*', this paper contributes to recent discussions about the future of CSR (Hardjono and van Marrewijk, 2001; Watts and Holme, 2001) and social responsibility in design (Attfield, 1999; Findeli, 2001; Klein, 2000; Lang Ho, 2003; Margolin and Margolin, 2002; Moir, 2001; Myerson, 1994; Manzini and Vezzoli, 2003; Relph-Knight, 2001; Sherwin, Bhamra and Evans, 1998; Shiers, 2000; Walker, 2000; Wilhide, 1999). It also reopens the debate about the extent to which the producers of harmful products can be considered socially responsible.

Background

Design has a long history of commitment to addressing social environmental issues. This includes: design movements of the 19th century that sought to improve working conditions for craftspeople; designers critical of consumerist society in the 1970s and 80s who proposed alternative solutions to real world issues; the market-led approaches that emerged in the 1980s and 90s, such as

Copyright © 2005 Caroline L. Davey & Andrew B. Wootton. All rights reserved.

ecodesign (Whiteley, 1993); and recent programmes, such as Design Against Crime funded by the UK Home Office, Design Council and Department of Trade and Industry (Cooper *et al*, 2002; Davey *et al,* 2002; Davey *et al,* 2003). These different approaches demonstrate the range of issues that have been impacted on by the design movement.

Triggered by social unrest in the 1960s, the ecological movement in the United States drew attention to environmental damage, high levels of pollution and the potential depletion of the world's resources. Fuelled by the oil crisis, this was initially a radical movement. Designers were urged to consider wider implications of their actions in terms of quality of life and the future of society. Increased consumer and business interest in green issues gave rise to 'green design' and ecodesign in the 1980s (Whiteley, 1993). While 'green design' largely deals with single environmental issues—typically recycling, energy efficiency or design for durability—ecodesign adopts a lifecycle approach. Consequently, environmental impact is considered across the product's life, from material extraction through to eventual disposal (Dewberry, 2000; Dewsberry and Goggin, 1996; Maxwell and van der Vorst, 2003). Ecodesign has now matured to embrace all environment-oriented design activities (Sherwin and Bhamra, 2000). In addition, 'sustainable design' is attempting to link environmental issues with the social and economic factors related to quality of life.

Ecodesign projects have developed environmentally friendly packaging, re-designed textile ranges, changed manufacturing processes and created the ecodesign 'Kitchen of the Future' as part of a competition organised by the Austrian Design Institute (Sherwin *et al,* 1998; Sherwin and Bhamra, 2000). To support the sustainability agenda, architects have developed "green buildings" that maximise use of natural daylight, enhance air quality, support water recycling, re-use existing buildings, exploit existing transport systems (Shiers, 2000), reduce emissions of greenhouse gasses, utilise renewable energy sources and introduce alternative technologies (Manzini and Vezzoli, 2003). Landscape architects have created planted spaces and incorporated greenery into design schemes, as a means of reducing environmental impact and humanising the environment (Gregory, 2003; Ong, 2003).

Design has also addressed a range of issues related to the financing, manufacture and trade of goods, both nationally and internationally. In "*Design for the real world,"* Papanek (1985) introduced the notion of design for the 'Third World', where basic tools for people struggling for survival were produced. Examples of responsible designs included geodesic domes, disaster shelters and muscle-powered vehicles for use in the developing world. Originating from Schumacher's seminal work *'Small is Beautiful'*, 'Appropriate Technologies' (AT) for the developing world was also introduced. Appropriate Technologies aimed to achieve low capital costs, use local labour and materials and create jobs, as well as be controlled by local people and be appropriate to their needs (Whiteley, 1993).

"Design for the Real World" proved difficult to implement as it depended on local knowledge and support. New approaches emerged, such as Socially Responsible Investing (SRI), which enabled consumers of financial products to

Copyright © 2005 Caroline L. Davey & Andrew B. Wootton. All rights reserved.

engage with global issues (Whiteley, 1993). SRI is a way for people to invest money, without compromising their morals, values or belief systems. Ethnical investors exclude companies that are involved in activities considered harmful, such as the arms trade, tobacco manufacture and goods tested on animals, and are offered a range of ethical investment options suited to their particular beliefs. Social investors invest in activities that actively promote a better society by, for example, promoting fair trade. SRI originated from the desire of investors to avoid supporting the Vietnam War, and came to the fore in the 1980s (Watts & Holme, 2001).

Papanek (1985; 1995) also introduced design for disabled people, design for older people and the design of hospitals and medical products and equipment (Whitelely, 1993). These issues are currently addressed under the umbrella of Universal Design. Universal Design, as it is known in the US, or Inclusive Design in the UK, aims to create products and environments that are usable by all people—without the need for adaptation or specialised design. One of the leading exponents of Inclusive Design in the UK—The Royal College of Art's Helen Hamlyn Research Centre—attracts support from the UK Design Council and leading industrialists.

Feminists in the 1970s and 80s pointed out that minorities and larger groups without sufficient purchasing power could not have their needs met or contribute to design policy. This was because architecture, products and technologies were largely produced by white, middle-class men from the Western World for consumers who could afford to buy. Feminists aimed to increase the representation of women within the design profession, and were involved in specific user-led and resident-led projects (Rothschild, 1999). In the UK, feminism failed to radically alter the design of products, environments and communications. In Germany and Austria, however, women's rights were integrated into the practices of local authorities and governments, resulting in the design of housing and public spaces to meet the needs of women and family-friendly policies (Stummvoll and Davey, 2003).

The SRD movement contained individuals who felt that problems stem from our capitalist or consumerist society and that radical action, rather than market-oriented, mainstream approaches, are needed to change society. In '*Design for the Real World'*, Papanek (1985) launched a damning attack on the design profession and its role in the creation of consumer society:

'There are professions more harmful than industrial design, but only a very few of them...Today, industrial design has put mass murder on a mass production basis.' (p.ix)

To Papanek, designers were the *"handmaiden's of capitalism"*. Designers were urged to abandon design for profit, and apply their skills to addressing societal problems. He advocated a problem-solving, compassionate and anti-consumerist approach.

Margolin and Margolin (2002) present a *"Social Model"* of design that shows how product design may be used to satisfy human needs and improve the physical and social environment. The does not preclude designers from

Copyright © 2005 Caroline L. Davey & Andrew B. Wootton. All rights reserved.

producing products for sale, the *"Social Model"* and *"Market Model"* are simply two poles on a continuum. Margolin and Margolin do not pit designers against others, but recognise that they are likely to find allies in professions such as health, education, crime prevetention and social work.

A New Socially Responsible Design Model

This new SRD model was developed from the experience of researchers working within the Design Policy Partnership. The Design Policy Partnership developed an expertise in the field of design-led crime prevention through Design Against Crime. This project involved working not just with designers and crime prevention experts, but also with schoolteachers and lecturers to embed crime prevention within education. The development of collaborative projects to address issues of social responsibility (e.g. sustainability, socially responsible decision-making, health, financial exclusion, developing world issues, environmental quality, gender equality, economic vitality and social inclusion) provided further insight into SRD thinking and activities. Following a comprehensive analysis of the recent and more established literatures on SRD and CSR, the authors were able to present a new SRD model and position it within the existing CSR literature.

The model identifies eight core features of the modern experience upon which design impacts, and maps the domain of SRD as follows (see figure 1):

- *Government* – design can help to make the process of national, regional and local government more responsible or representative. This might involve helping to increase efficiency, enabling more people to vote or facilitating the participation of under-represented groups.
- *Economic policy* – design can contribute to national, regional and local economic policy by promoting sustainability and responsibility.
- *Fair Trade* – design can provide support for workers rights and reduce exploitation of poor economies, though interventions in relation to finance, investment, manufacture and trade. This might involve establishing supplier sourcing criteria or partnering in the supply chain.
- *Ecology* – design can help reduce pollution and minimise environmental impact, as well as use green technologies. This might involve developing "green buildings" that improve air/water quality, encouraging building reuse, introducing recycling or creating environmentally-friendly packaging.
- *Social inclusion* – design can reduce discrimination on the basis of gender, ethnicity, age, class, education, wealth, etc. and combat social exclusion by understanding people's particular needs. For example, ethnic minority housing that meets needs specific to family size and religion might be developed. Products that are easier for older people to use have been produced (e.g. Oxo 'Good Grips' range).
- *Health* – design for health promotes better service delivery and patient care, and develops methods of improving people's health within society at large. This might involve improving the quality of medical resource provision, developing devices that enable medicines to be administered outside of the healthcare system and helping produce equipment that

Copyright © 2005 Caroline L. Davey & Andrew B. Wootton. All rights reserved.

prevents injury for vulnerable groups (e.g. cooker monitor for older people).

- *Education* – design can improve the quality and efficiency of delivery. This might involve architects and interior designers designing schools to better facilitate learning or design professions providing support for school projects.
- *Crime* – design can be used to reduce the incidence of crime, alleviate fear of crime and minimise the impact of crime.

These issues relate to the wider domains of:

- Government, at a national, regional and local level
- Business and commerce at global, national, regional and local level
- Non-government organisations (NGOs) such as charities, pressure groups, etc.
- Health and education at a national, regional and local level.

The level and domain in which SRD is practiced will depend on the nature and aims of the organisation, and the context in which it is undertaken. Clearly this context changes over time, and more organisations may deal with issues at a global level due to the process of globalisation and the development of pan-national systems, such as the European Community.

Copyright © 2005 Caroline L. Davey & Andrew B. Wootton. All rights reserved.

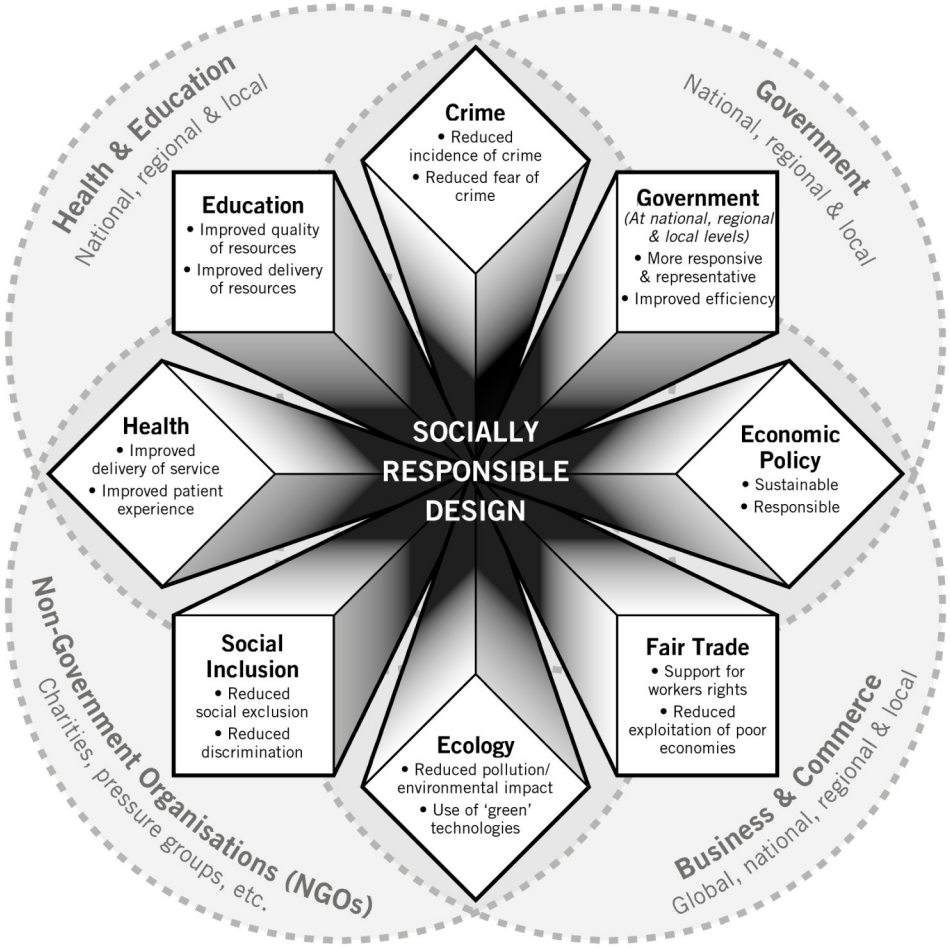

Figure 1: *The Eight tenets of Socially Responsible Design*

The new model enables different design approaches to be located within an overall framework, without dictating the focus or approach. However, the model makes clear the potential for SRD, and allows progress within the eight areas to be evaluated.

Crime is addressed within the new SRD Model, as crime and the fear of crime remain a significant negative factor impacting on people's quality of life. Cities all over the world face problems of insecurity and lack of safety, arising from urban violence, burglary, vandalism and other forms of crime (CEN, 2002). Dealing with the consequences of crime, and implementing measures to prevent future problems, places a huge burden on society—the total cost of crime in the UK is estimated at £60 billion per year (Brand and Price, 2000).

There is evidence that design can have a key role to play in reducing crime and improving feelings of safety (Davey, Cooper and Press, 2002). The design features that are now incorporated into today's cars, for example, have all contributed to a significant reduction in car crime—improved locks, smart

Copyright © 2005 Caroline L. Davey & Andrew B. Wootton. All rights reserved.

alarms, immobilisers and tracking systems. In the retail sector there is evidence that store layout and the design of display systems are among the many design features that can reduce both the opportunity and inclination for theft (Design Policy Partnership, 2001). In fashion, new technologies are enabling personal security and communication devices to be incorporated within innovative clothing designs (Davey *et al*, 2003).

Recognising the value of design in preventing crime, the UK Home Office, Design Council and Department of Trade & Industry, initiated the Design Against Crime programme. *Design Against Crime* is an international programme of research and policy initiatives that aims to increase our understanding of this issue, and embed crime prevention within design through education and professional practice. It is a research programme offering new ideas, approaches and models for design professionals, industry, educators at school and degree level, and national and regional government. This work is currently supported by the European Commission's AGIS (2003) programme and the Engineering and Physical Sciences Research Council (EPSRC) Sustainable Urban Environments programme.

Design Against Crime is considered part of SRD because it urges designers to use their particular skills—their ability to innovate, understand the user and anticipate the consequences of products and services—to address crime, fear of crime and related social issues. Professor Ken Pease (2001), a UK criminologist, believes that designers have a unique mix of skills to address these complex issues, observing that:

"Designers are trained to anticipate many things: the needs and desires of users, environmental impacts, ergonomics and so on. It is they who are best placed to anticipate the crime consequences of products and services, and to gain the upper hand in the technological race against crime." (p. 27)

Design-centred crime prevention solutions focus on the role of human behaviour, attitudes and emotions in preventing crime and feelings of insecurity. Consequently, such solutions must be tailored to their specific context and address crime problems in innovative, often subtle ways. The involvement of design professionals enables crime prevention to become more than the simple addition of security devices to existing designs—such as locks, alarms, fences or CCTV—and encourages a more empathetic and holistic approach. In the planning and design of products, services and environments, such an approach considers aesthetics and human sensory experience, addressing legitimate users as well as potential misusers; use as well as possible abuse (Town *et al,* 2003).

For example, a subtle solution to young people congregating and 'hanging out' around public amenities—a frequent cause of anxiety, especially for older people—has been the use of classical music played softly in problem areas. Unlike other solutions, such as fencing or the removal of public seating, this does not harm the visual aspect, nor inconvenience legitimate users. Importantly, such approaches also do not provoke confrontation that could escalate the problem. Another, perhaps more proactive approach, is the design and construction of a 'youth shelter' in an location acceptable to residents and

Copyright © 2005 Caroline L. Davey & Andrew B. Wootton. All rights reserved.

young people, providing them with a place they can gather safely, and to which some sense of ownership can be engendered—encouraging responsibility (Town *et al*, 2003).

Unfortunately, crime prevention is often not considered until after a crime has occurred, rather than during the design stage of the product, service or environment's development. This inevitably results in crime prevention solutions being 'bolted on' rather than embedded within the design. Studies of new product development have shown that making any changes after a design is finalised is highly expensive (Gause and Weinberg, 1989). The incorporation of design against crime thinking at the design stage is much more cost-effective than solving problems when they arise in use. It also prevents environments being degraded by the addition of unsightly crime preventative measures, such as razor wire. While such measures may reduce vulnerability to actual crime, they invariably increase the fear of crime as well (Town et al, 2003).

Designers must consider the potential for their designs to be misused or abused. They therefore need to think not only about the *user*, but also about the potential *abuser* or *misuser*. To achieve this, designers must incorporate 'attack testing' into the design process and learn to *think thief*—to anticipate potential offenders' actions, and understand their tools, knowledge and skills (Ekblom & Tilley, 2000). The designer's aim is to out-think the thief and develop design solutions that 'short-circuit' potential offending behaviour. However, this must be achieved without reducing the design's value to legitimate users, increasing fear of crime, creating social problems, or causing the seriousness of the crime to escalate (Town *et al,* 2003).

Design Against Crime case studies reveal that designers respond effectively to briefs, where addressing crime is seen as a method of providing competitive advantage for the client, protecting brand image or reducing costs arising from retail theft. They also have a role to play in creating better environments and regenerating deprived areas (Davey et al, 2003; Davey, Cooper and Press, 2002). Independent evaluations confirm the value of design-centred crime prevention approaches. In relation to *Secured by Design* (SBD), a study commissioned by the Home Office reported that on both new build and refurbished SBD housing estates, the incidence of recorded crime was considerably lower than on the non-SBD counterparts (Armitage, 2000).

An evaluation of the cost-effectiveness of 12 design-led crime prevention initiatives, found that 8 had a desirable cost-benefit analysis. For these 8 studies, the economic return for every economic unit invested (national currency) ranged from a low of 1.31 monetary units to a high of 5.04. The initiatives to improve surveillance, target harden premises, etc. had tangible benefits that could be measured in monetary terms, such as fewer repairs, savings in insurance claims and fewer vacant buildings. There were also intangible benefits that were not measured, such as improved employment opportunities and increased attractiveness and value of an area (Welsh and Farrington, 1999).

Copyright © 2005 Caroline L. Davey & Andrew B. Wootton. All rights reserved.

Conclusion and discussion

This paper suggests that CSR focuses attention on corporate governance, through its emphasis on codes of conduct, mission statements, achieving continuous improvement and greater financial transparency (Moir, 2001; Johnson, 2001; Watts & Holme, 2001). SRD, in contrast, considers the potential for business to change society through its products, buildings, communications and services (Davey *et al*, 2002; Davey *et al*, 2003).

A rigorous review of the literature on SRD identified established design approaches covering all aspects of design, such as ecodesign and sustainable design (Dewberry, 2000; Manzini and Vezzolli, 2003; Maxwell and Vorst, 2003; Sherwin and Bhamra, 2000; Shiers, 2000; Whiteley, 1993), design for the real world (Papanek, 1985; 1995; Whiteley, 1993), Universal Design (Whiteley, 1993) and feminist design (Rothschild, 1999; Stommvoll and Davey, 2003; Whiteley, 1993). Contemporary approaches include Design Against Crime. It is proposed that designers posses unique 'design thinking' skills which can be utilized to address issues of crime, education, government, health, fair trade, ecology, social inclusion and economic policy. These issues relate to government, business, non-government organisations and health and education, and are presented in the new SRD Model.

By drawing on design's historical roots, the SRD model builds of design's commitment to social responsibility, which predates the activities of designers from the 1970s and 80s, and includes: design movements of the 19th century that sought to improve working conditions for craftspeople; individuals such as William Morris (1878) who believed that design was a vital and potent source for improving the human condition; and government initiatives where design is used to enhance quality of life (Wilhide, 1999). It also links with more recent authors who highlight the role of design in improving the human condition, not simply the biological and physical environment (Findeli, 2001).

While recognising the contribution of social unrest and campaigning organisations to the development of SRD (Whiteley, 1993), the new SRD model may be used to highlight the commercial benefits associated with social responsibility (Edington, 2002). The value of all aspects of design in addressing social issues was illustrated by a new branch of SRD called '*Design Against Crime'* (Davey, Cooper and Press, 2002; Davey *et al,* 2002; Davey *et al*, 2003). Through fashion, building, product, interior, graphic and service design, both actual crime and fear of crime can be addressed in a cost-effective manner (Brand and Price, 2000; Welsh and Farrington, 1999). Innovative solutions to crime potentially reduce crime, alleviate fear of crime and promote social inclusion (Town *et al*, 2003). Like the "Social Model" presented by Margolin and Margolin (2002), the new SRD model acknowledges that allies may be found in areas such as health, education, social work and crime prevention.

The Design Policy Partnership believes that commercial motives are an important driver of SRD. This is illustrated in relation to the Design Against Crime project (Davey, Cooper and Press, 2002; Davey *et al,* 2002; Davey *et al*, 2003). The commercial advantage of SRD is a key factors in the 21st

Copyright © 2005 Caroline L. Davey & Andrew B. Wootton. All rights reserved.

Century. Jones (2000) argues that less tangible factors influence customers' buying decisions—including aspirational issues of lifestyle and social status, and political and environmental concerns. These 'softer' factors are often embodied in a company's brand and its perceived brand image. To be competitive, businesses must understand and leverage such *emotional logic*. As markets mature and became increasingly sophisticated it appears that in the new millennium, emotional logic will become increasingly important.

Added to this, the value of traditional differentiation strategies appears to be shrinking. As technological developments become ever easier to copy, so their advantages become more transient. The difficulties faced by competing companies straining to differentiate one another's products and services seem set to increase. As Jones (2000) points out, once you've achieved high quality in your products and excellence in your customer services, where do you go next? As a counterpoint to the imperative of emotional logic, Jones suggests an *"emotional magnet"*.

"That magnet has to be more than quality, more than service: those are assumed… Organisations need to propose… something that people can react to, something they can choose to reject or to join... At the heart of this emotional world, people are looking for a big idea." (pp18)

In our 'post consumption age', society is demonstrating its growing concern for its core wellbeing through its increasing interest in social issues—the environment, health, education and crime. Consequently, organisations must examine their own role in society and the benefits they can gain from addressing social responsibility as a 'big idea' (Jones, 2000). The impact of social and political pressures on businesses has been highlighted in the design press:

"Ethics and social responsibility are currently high on the international agenda, with companies looking to address the issues and communicate their stance." (Relph-Knight, 2001, pp 4)

To help organisations identify and address issues of social responsibility, a more graphic representation of the model has been used with design professionals (Davey *et al,* 2002), clients and student designers. The new model enables different design approaches to be located within an overall framework, without dictating the focus or approach. However, the model makes clear the potential for SRD, and allows progress within the eight areas to be evaluated.

In recognising the commercial value of SRD, current approaches are similar to CSR, which emphasises the importance of addressing the 'Triple Bottom Line' (Hardjono and Marrewijk, 2001). However, SRD presents a challenge to CSR, in that it demands action on the part of businesses. It is not about 'window dressing.' It also raises questions about the extent to which companies that produce harmful products can be considered socially responsible.

Copyright © 2005 Caroline L. Davey & Andrew B. Wootton. All rights reserved.

References

Armitage, R., (2001) "An Evaluation of Secured by Design Housing Within West Yorkshire", *Home Office Briefing Note 7/00*.

Attfield, J, R. (1999) *'Utility reassessed. The role of ethics in the practice of design'.* Manchester University Press: Manchester and New York.

Brand, S. and Price, R. (2000) "The Economic and Social Costs of Crime". *Home Office Research Study* 217, Economics and Resource Analysis Research, Development and Statistics Directorate. Home Office: London.

CEN (2003). *"A European Standard for the Reduction of Crime and Fear of Crime by Urban Planning and Building Design: ENV 14383-2"*, Comite Europeen de Normalisation.

Cooper, R., Davey, C.L. and Press, M. (2002) "Design Against Crime: Methods and Issues that Link Product Innovation to Social Policy", *International Journal of New Product Development & Innovation Management*, Dec/Jan, Vol 3 (no.4), pp329-342.

Davey, C.L. Cooper, R. and Press, M. (2002) "Design Against Crime Case Studies", University of Salford and Sheffield Hallam University.

Davey, C.L., Cooper, R., Press, M., Wootton, A.B. and Olson, E. (2002) "Design Against Crime: Design Leadership in the Development of Emotional Values", 11th International Conference, Design Management Institute, Boston, United States, 10th-12th June

Davey, C.L., Wootton, A.B. Cooper, R., Heeley, J., Press, M., and Kim.S. (2003) "Socially Responsible Design: Targeting Crime with Fashion Design". *International Journal of New Product Development & Innovation Management*, March/April, Vol.5 (no.1), pp45-56.

Design Policy Partnership (2001) '*Off the shelf: design and retail crime'.* University of Salford and Sheffield Hallam University.

Dewberry, E. (2000) "Lessons from Ecodesign", in S Learmount, M. Press and R. Cooper, "*Design Against Crime"*, Report for the Design Council, Home Office and Department of Trade and Industry, Chapter 9, pp127-146.

Dewberry, E. and Goggin, P. (1996) "Spaceship Ecodesign?" *Co-design,* Vol.5, Iss. 6, pp12-17.

Edington, G. (2002) "Responsibility Pays.*" Chartered Surveyor Monthly*, Vol. 2 (February), p. 24.

Ekblom, P. and Tilley, N., (2000) "Going Equipped", *British Journal of Criminology*, Vol. 40, pp. 376-398

Copyright © 2005 Caroline L. Davey & Andrew B. Wootton. All rights reserved.

Findeli, A. (2001) "Rethinking Design Education for the 21st Century: Theoretical, Methodological, and Ethical Discussion," *Design Issues*, Vol. 17, No. 1, pp. 5-17.

Garfunkel, A. (2003) "About: Corporate Social Responsibility" in www.designcouncil.org.uk.

Gause, D.C. and Weinberg, G. (1989) *"Exploring Requirements: Quality Before Design."* New York, NY: Dorset House Publishing.

Gregory, R. (2003) "Greening the European City," *The Architectural Review,* Vol. 213, (May), Iss. 1275, pp24-25.

Hardjono, T.W. and van Marrewijk, M. (2001) "The Social Dimensions of Business Excellence," *Corporate Environmental Strategy*, Vol. 8, No. 3, pp223-233.

Johnston, D.J. (2001) "Keynote Address" in "*Corporate Social Responsibility: Partners for Progress"*, OECD: Paris, France, pp.7-11.

Jones, R. (2000) "*The Big Idea*," Harper Collins Business: London.
Klein, N. (2000) *"No Logo."* Flamingo: London.

Lang Ho, C. (2003) "Eco-fraud. "Green Buildings" might not be all they're made out to be," *Architecture*, Vol. 92, Iss. 7, (July), pp31-32.

Mackenzie, D. (2000) "Clean Emissions; Consumers and the Government are being more Interested in Environmental Reports," *Design Week*, 19th May 2000, p20.

Manzini, E. and Vezzoli, C. (2003) "A Strategic Design Approach to Develop Sustainable Product Service Systems: Examples, Taken from the 'Environmentally Friendly Innovation' Italian Prize", *Journal of Cleaner Production*, Vol.11, Iss.8, (December), pp851-857.

Margolin, V. and Margolin, S. (2002) "A "Social Model" of Design: Issues of Practice and Research," *Design Issues*, Vol. 18, pp. 24-30.

Maxwell, D. and van der Vorst, R. (2003) "Developing Sustainable Products and Services," *Journal of Cleaner Production*, Vol. 11, Iss. 8, (December), pp833-895.

Moir, L. (2001) "What Do We Mean by Corporate Social Responsibility?" *Corporate Governance,* Vol.1, Iss. 2, pp16-22.

Myerson, J.R (1993) "Design Renaissance". Selected papers from the International Design Congress, Glasgow, Scotland, Open Eye Publishing: Horsham

Copyright © 2005 Caroline L. Davey & Andrew B. Wootton. All rights reserved.

Ong, B.L. (2003) "Green Plot Ratio: An Ecological Measure for Architecture and Urban Planning", *Landscape and Urban Planning*, Vol.63, Iss. 4 (15.05.03), pp197-211.

Papanek, V. (1985) "*Design for the Real World.* Human Ecology and Social Change". Second edition. Thames and Hudson: London

Papanek, V. (1995) *"The Green Imperative. Ecology and Ethics in Design and Architecture."* Thames and Hudson: London.

Pease, K (2001*) "Cracking Crime Through Design*," London: Design Council.

Relph-Knight, L. (2001) "Design Puts People and the Environment First," *Design Week*, Vol. 16, Iss. 35 (30th August), p4.

Rothschild, J, (1999) *"Design and feminism. Re-envisioning Spaces, Places and Everyday Things".* New Brunswick, NJ: Rutgers University Press.

Sherwin, C. and Bhamra, T.A. (2000) "Innovative Eco-design: An Exploratory Study," *The Design Journal*, Vol.3, Iss.3, pp. 45-56.

Sherwin, C., Bhamra, T.A. and Evans, S. (1998) ''The Eco-kitchen' Project – Using Ecodesign to Innovate." *The Journal of Sustainable Product Design*, Vol.7, pp. 51-57.

Shiers, D. E. (2000) "Green Developments, Environmentally Responsible Buildings in the UK Commercial Property Sector," *Property Management*, Vol. 18, No.5, pp. 352-365.

Stummvoll, G. and Davey, C.L. (2003) *"Environmental Crime Prevention in Vienna: A Feminist Approach,"* Design Against Crime Case Study funded by the European Commission's Hippokrates (2002) programme project 'A European Resource Directory for the Design of Secure Urban Environments,' The University of Salford.

Town, S., Davey, C.L. and Wootton, A.B. (2002*) "Secure Urban Environments by Design: Guidance for the design of residential areas".* The University of Salford.

Walker, R. (2000) "How the Other Half Lives: Product Design, Sustainability and the Human Spirit". *Design Issues*, Vol 16, No. 1 (Spring), pp. 52 - 58

Watts, P. & Holme, L. (2001) *"Corporate Social Responsibility*, *Meeting Changing Expectations*," World Business Council for Sustainable Development (WBCSD), United States.

WCED (1987) *"Our Common Future*," World Commission on Environment and Development, Oxford University Press: Oxford.

Copyright © 2005 Caroline L. Davey & Andrew B. Wootton. All rights reserved.

Welsh, B. C. and Farrington, D. P. (1999) "Value for Money? A Review of Costs and Benefits of Situational Crime Prevention." *The British Journal of Criminology*, Vol. 39, No. 3, pp. 345-368.

Whiteley, N. (1993) "*Design for Society*." Reaktion Books: London.

Biographical details

Dr Caroline Davey is Reader in Design, Innovation & Society and Project Director of Design Against Crime at The University of Salford. A qualified organisational psychologist, Dr Davey has led a number of major UK and European funded projects. Current projects include: *Socially Responsible Design (SRD)*; *Design Against Crime (£150k)*, funded the European Commission's AGIS (2003) programme; and *VivaCity2020* (£3.0m), funded by the Engineering and Physical Sciences Research Council (EPSRC). Dr Davey has organised workshops and given presentations across Europe, and published in refereed journals. She has also produced practical guidance material on equality, community finance and Design Against Crime.
E: c.davey@salford.ac.uk

Andrew Wootton is Research Fellow and Design Director of Design Against Crime at the University of Salford. Andrew is an industrial designer, and has been researching design and innovation at Salford since 1995. In this time, he has delivered a number of research projects. Currently, Andrew's research work includes: *Socially Responsible Design (SRD)*; *Design Against Crime* (£150k) funded European Commission's AGIS (2003) programme; and *VivaCity2020* (£3.0m), funded by the Engineering and Physical Sciences Research Council (EPSRC). Andrew has organised workshops and presented internationally on design, published in refereed journals and produced professional guidelines on Requirements Capture and Design Against Crime. Andrew also runs the design consultancy *DesignThinking* (www.designthinking.co.uk), and is involved in a number of product and furniture design ventures.
E: a.b.wootton@designthinking.co.uk

Angharad Thomas is a Senior Lecturer in the School of Art and Design at The University of Salford. A Geography graduate, with a Masters in Textile Design, she has research interests in Design and Gender, and Design and Economic Development. She has published work on women and craft production of textiles and studied the design and production of textiles by producer groups in Zimbabwe, resulting in an exhibition and publications. She is a founder member of The Cardiff Group, a multidisciplinary group working on Design and Development, the convener of the Development Studies Association Design and Development group and associate director of the ESF funded Gender and the Cultural Industries project at Salford. Areas of interest

Copyright © 2005 Caroline L. Davey & Andrew B. Wootton. All rights reserved.

include: Design and its Role in Economic Development; and Teaching and Learning in Design Education.
E: a.thomas1@salford.ac.uk

Rachel Cooper is Professor of Design Management and Director of the Adelphi Research Institute at the University of Salford. Professor Cooper undertakes international research into design and innovation across industry sectors. Work includes: *Socially Responsible Design (SRD)*, *Design Against Crime (2002)* funded by UK Design Council & Home Office; research into design in the built environment; and cross-sector comparisons. Professor Cooper leads the UK consortium *VivaCity2020* (£3.0m), funded by the Engineering and Physical Sciences Research Council (EPSRC). *Vivacity2020* aims to research and develop design decision-making tools and resources to support sustainable and urban design decision-making.
E: r.cooper@salford.ac.uk

Mike Press is Professor of Design Research and Head of Gray's School of Art at The Robert Gordon University. With research interests that span design and the applied arts, Professor Press has directed research projects for the British Design Council and the Crafts Council. He has published and broadcast internationally, and is co-author with Professor Cooper of 'The Design Agenda' and 'The Design Experience', both standard texts in design management.
E: m.press@rgu.ac.uk

For further information, please contact:

Dr Caroline Davey
Design & Innovation Research Group
The University of Salford
Centenary Building
Peru Street
Salford M3 6EQ
United Kingdom
T: +44 (0)161 2953577
F: +44 (0)161 2956174
E: c.davey@salford.ac.uk

www.sociallyresponsibledesign.org
www.designagainstcrime.org.uk
www.vivacity2020.org

Davey, C.L., Wootton, A.B., Thomas, A., Cooper, R. and Press, M. (2005) "Design for the Surreal World?: A New Model of Socially Responsible Design." Refereed conference proceedings for the European Academy of Design, 29th to 31st March, Bremen, Germany.
The research and preparation of this paper was funded by the European Commission AGIS programme and the VivaCity2020 project, which is part of the EPSRC's Sustainable Urban Environments programme. This document reflects the views of the authors, and not the sponsors of the research.

Copyright © 2005 Caroline L. Davey & Andrew B. Wootton. All rights reserved.