

Botswana's Quest for Sustainability: Scope for Design Intervention

Khumomotse S.M. (Mr)

Faculty of Engineering and
Technology
University of Botswana
P/Bag 0061, Gaborone
Botswana
Khumosm@mopipi.ub.bw

M'Rithaa M.K (Mr)

Faculty of Engineering and
Technology
University of Botswana
P/Bag 0061, Gaborone
Botswana
m'rithaa@mopipi.ub.bw

Moalosi R. (Mr)

Faculty of Engineering and
Technology
University of Botswana
P/Bag 0061, Gaborone
Botswana
moalosi@mopipi.ub.bw

ABSTRACT

For the last three decades Industrial Designers have been blamed for designing for 'greed' and not for 'need'. The current mode of design practice is a reflection of the problems of Design, the Designers and the society. This paper looks at some of the paradoxes that Botswana has had to deal with in its quest for social sustainability through design intervention. The paper also outlines several contextual concepts and strategies that might address design needs of Botswana and how they impact on this burning issue. It stresses that design; designers and the society need redesign in pursuit of social sustainability.

Keywords

Social Design, Responsible Design, Botswana, Design for Need, Social Sustainability

INTRODUCTION

The just concluded United Nations' World Summit on Sustainable Development in South Africa brought into the open the glaring economic, political, and even philosophical differences that tend to define the distinction between the developed and the developing world.

The majority of the hapless citizens of the emerging economies reside in the southern hemisphere in which Botswana is found. This mass of humanity feels disenfranchised, marginalized, and ultimately, dehumanized. There is a growing feeling of despair; despondence and disillusionment as the political rhetoric of their leaders fall on increasingly skeptical and cynical ears. Politicians are subsequently losing their moral authority as people start looking elsewhere for inspiration and direction. The situation is

becoming desperate and urgently needs redress so as to arrest this worsening scenario.

All sectors of the society must mobilize the remnants of Africa's hope and goodwill, and embark on bold initiatives to reinvigorate and reawaken the continent's creative and innovative potential through the spirit of social responsibility. This is where design, among other fields of endeavor, comes in....

To date many designers have not realized that they are equally responsible to the society as they are to the environment. However, a number of articles on social design of late indicate that it is an imperative that designers must face and respond to. Industrial Designers in particular, have been blamed for being engulfed in fulfilling the 'wants' of the market while ignoring the real 'needs' of a greater portion of the global population. This paper looks at strategies that might be used to address design needs of Botswana. It tries to unveil how Industrial Design (an emerging profession), designers and the society need to be redesigned in pursuit of social sustainability.

BOTSWANA CONTEXT

This scenario is vividly visible in the landlocked country located in the heart of Southern Africa known as Botswana. With a population of only 1.6 million, 50% of whom live in the country side while urban and semi-urban areas account for the remaining portion, Botswana is flooded with consumer products, most of which are imported from the Republic of South Africa. Botswana's Gross National Product (GDP)/Capita was US\$3 24000 in 2001, which classifies it into the World Bank's upper middle-income category.

Unfortunately, this relatively wealthy African state is cocooned in Western values when it comes to design, the same problem that India is suffering from as observed by Ashoke Chatterjee of Indian National Institute of

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Design (Whiteley, 1995). Whereas these values might be relevant to the Western Society they seem not to be best for Botswana. The role of product conferring status on those who possess them is evident in every corner of the country. Botswana has moved from instrumental materialism, which used to be part of the culture many years ago to terminal materialism. People are acquiring products for the sake of owning them not that they really need them. Design has fragmented the society into social classes by conceiving products that etches deeper the dividing line between the affluent and the underdogs. Design does not seem to serve the society from, which it came even as noted by Paul Rand.

DESIGN CHALLENGES: NEGLECTED AREAS

Although it is a common trend for designers worldwide to claim that they are designing for the majority this cannot be true for Botswana and other developing countries. There are about eight areas that design has not addressed in Botswana some of which have been echoed by Victor Papanek in "Design for the Real World" and Nigel Whiteley in "Design for Society" and they are as follows:

Design for Rural Communities

The majority of Botswana live in rural areas, where most of the products, which are available at high prices in towns, are not suitable. Products are needed that will stand rural conditions like dust and the sharing lifestyle.

Design for the Disabled

Most products and facilities were designed only for the normal people. Public transport is not suitable for the disabled, as there is no special provision for them and their life aids. Although, very few of the latest buildings have 'disability access' it is deplorable that it is often hidden at the back of the building. Some products are made for the right-handed people only and are hence unsuitable for the left-handed.

Design for the Elderly

The elderly have to battle with the young for seats in public transport because facility was designed without them in mind. They have to struggle to see microscopic calibrations of a thermometer if they want to know the temperature. Some of the products are too complicated to be used by the old.

Design of Survival Systems

The Kalahari Desert sand covers about 65% of Botswana's land. The temperatures in

Botswana operate between two extremes, that is to say it is extremely hot in summer and extremely cold in winter, though for a short while. There is a serious need for accommodation system that can cope with this harsh climate.

Trans-generational Products

Products that can be used by the young, the old and the disabled without need to adapt are in high demand. The principles of universal design need to be followed so that products and facilities do not segregate people according to their age and ability.

Design of Medical Equipment

The medical facilities, especially the spaces are so alienating that some people would rather die at home than to go to the hospital. Most medical equipment is over-designed, unwelcoming and anti-cultural. Rethinking about cultural spaces when designing these facilities would be a good initiative.

Design for Experimental Research

Research especially experimental is the backbone of any country that strives to progress economically. However, experimental research equipment is often not up to the required standard. There is need to design products that are suitable for conducting meaningful research.

Design of Breakthrough Concept

Most products that are used in Botswana are not compatible with the country's conditions. An example is the washing machine and dishwasher that wastes water when water is one of the most scarce resources. There is need to redesign these products with water conservation in mind.

Botswana is in a situation where, "*..... the manifested needs of humankind become the engines to drive design solutions*" (Gomes 1992). Despite, this fact designers still ignore the above needs and concentrate on the market demands which most of the time are not 'needs' but 'wants'. These eight priority areas for design indicate that if designers address them they will have designed for the majority. The previously neglected areas of design serve as an alternative agenda for the Botswana's emerging Industrial Design practice to be a meaningful job.

SOCIAL DESIGN STRATEGIES AND THEIR LIMITATIONS

Some of the areas that have been identified above overlap with the 'social design agenda'

proposed by Papanek in 1972 for both developed and developing countries. In the endeavour to address these need, designers, mostly in the developed world adopted various strategies, some of which succeeded while some failed. These strategies, as outlined in (Whiteley 1995), ranged from working for the public sector to joining consumer groups as product evaluators. Most of the strategies employed were those suggested by Victor Papanek in his lauded classic, "Design for the Real World". The strategies are discussed and their feasibility and limitation to Botswana's context.

Working for the Public Sector

The Design Forum in Finland was formed and concentrated on design for the disabled, industrial safety and working for the public sector. The idea of working for the public sector seems to succeed in the Scandinavian countries, because they have a mixed economy system. These countries combine capitalism with state provision, which provides a conducive environment for social design to flourish. However, in countries like Britain many social design initiatives could not survive because of the enterprise culture. The fact that industrial design is commensurate with competitive advantage in the market means that designers are lured into lucrative glamour of designing for the target market instead of the 'real world'.

There are three obstacles to this approach, which are: privatisation of government organs, government bureaucracy and lack of incentives. Currently the economic system running in the country is capitalist. "*Design without capitalism is like a car without an engine-it goes nowhere*" so said (Heller, 1992). It is hard for social design to survive within a capital based economy, which emphasises profit, often at the expense of social well-being. According to Mbendi Information for Africa (1999), "*Botswana Government is considering privatisation of major public enterprises*". Such a milieu implies that a designer in Botswana cannot adopt this strategy. Incentives for working for the government are not lucrative to convince market-led designers to work leave their luxurious jobs to work for the public or 'society' sector.

Tithing the time

Papanek suggested that market-driven designers who want to do the society some good should use about 10% of their time designing socially responsible products. This

idea as reported by Whiteley (1993) appealed to many young designers. However, the problem of who will be willing to manufacture the products which are meant to be cheap and sometimes for specific groups such as the partially blind becomes difficult to answer. There are not many designers in Botswana and hence this approach will not have a significant contribution to serving the population previously neglected by design. Nevertheless, such an approach from the design fraternity would be a commendable development.

Working as Product Evaluator

Working for consumer groups as product evaluator was another tactic suggested by socially conscious designers. Of course this would work effectively in countries where consumer movements are quite strong and well established. Consumer pressure groups in Botswana are still in their rudimentary stages. The influence they possess to date is not significant to change the society, the government and design. However, working as product evaluator might be a good starting point for the designer who has the interests of the society at heart to begin their campaign for socially benign products.

Setting up of Socially Responsible Design Centres

A few years after Papanek's publication, some designers took the challenge of designing products for part of the society previously neglected by industrial design. In the United States the American Center for Appropriate Technology was established in Butte, Montana in 1976, the Lucas Plan was published in Britain by the Unit for Development of Alternative Products (UDAP). The main aim of the plan was to design and produce socially valuable products as well as combating the unemployment problem. Countries like France, Germany and Sweden adopted the same strategy. In West Germany arose, Alternative Product Working Groups.

In Sweden the Ergonomic Design Gruppen was established and concentrated on designing products for the disabled. The Danish Design has produced many commercially successful socially useful products to mention but a few. Some of these organizations could not survive because of lack of funding, as they were dependent on donations from governments and non-governmental organizations. The cost of research and development for social products is very high as some of them are highly specialized, like, products for the disabled.

Therefore, most products went as far as the drawing board only (Whiteley 1995).

Transformation of the Society's Values

Some designers have claimed that design should be redesigned and there is nothing wrong with the society. Contrary to this some of the 'responsible design gurus' believed that both design and the society should be transformed. In trying to achieve this noble dream, the Architectural Radicals, Students and Educators (ARSE), proclaimed that, "*We shall build for the society by building a new society first*" (Whiteley, 1993). Victor Papanek stated that the society and designers alike have the responsibility of solving the problems that exist in the society. He stressed that if the society does not take the lead then designers must take the lead in transforming the society (Jones, 1976). Social reconstruction would be a viable avenue for social design to flourish.

Although some designers have tried to change the society's values, in the process they only managed to convert a few people, mostly from their profession. However, social systems are complex and fragile and hence the caution Whiteley raised needs to be considered. As Whiteley, states that by calling for radical reconstruction of the society might not work but rather a gradual transformation is suitable. An unconscious social change of the society is a preferred option for Botswana.

SOCIAL DESIGN STRATEGIES FOR BOTSWANA

REDESIGN DESIGN

In order for Industrial Design to serve the society it must expand its educational and professional boundaries as stated by Tharp (1999).

The Curriculum

Social responsibility should have been ignored throughout the school curriculum in general from primary to university level. Students are often taught that the reason for being in school is to get a good job and have a 'materially successful' life. Therefore, emphasis on social responsibility should supersede personal gratification in all subjects and levels of education. Education has become a passport to privilege, power and affluence. However, the revised Bachelor of Design (Design & Technology Education), and the envisaged Bachelor of Design (Industrial Design) programmes at the University of Botswana have included both social and environmental responsibility.

Special Promotions for Social Design

Socially responsible design exhibitions should be held throughout the country in conjunction alternative technology centers that already exist. During such events do-it-yourself projects drawings should be disseminated to the public at no cost or at most a low price. Another way of promoting the cause of social design is through the radio and television programs. Radio Botswana is accessible throughout the country and hence it will be a viable media for educating the public about the benefits of social design. Publishing an articles in one of the most widely read newspaper in both English and the local languages will be effective in getting more people to understand social design goals.

Pioneer the Project from the University

The University of Botswana is well placed to initiate a social design project as it has special funds for developing projects that are for the common good of the society. Members of the Design Department at the University could initiate the project in conjunction with a certain community in the rural areas and direct the project until it is handed to the community with a designer coordinating it. Projects that have been pioneered by the University of Botswana have a high rate of success such as the Okavango Research Project, which deals with research on the renowned Okavango Delta's potentials to benefit the society.

Re-define the Industrial Design Philosophy

Industrial Design is synonymous with designing products for mass production for a target market. This implies that many designers consider design as a competitive weapon for corporations. It is used as a tool for product differentiation and hence fragmenting the society further because products in the consumerist society confer status to people. The words of Enzo Manzini when he stated that industrial design from onset has been one of the driving forces behind the unstoppable quest for novelty in commerce seem to be applicable in this regard. Redefinition of Industrial Design to make it synonymous with creating products for the 'real world' is long overdue.

Learning from other Social Design Initiatives

The mistakes of other social design initiatives worldwide could serve as a stepping-stone for Botswana. Those in the frontline of advocating for social design initiatives in Botswana must conduct a study of social design projects, which failed like the Lucas Plan, the Scheffield Centre for Product Development and

Technological Resources (*SCEPTRE*) in the UK. It is no use to learn about what made those initiatives to fail without learning how those that are still surviving have managed to sail against the tides of the enterprise culture. It will be worth contacting the London Innovation Limited, Design and Manufacture for Disability (*DEMAND*) and the Danish Design which to date has produced many commercially successful socially responsible products like *Lego*® toys which are some of the most amazing breakthrough concepts in design (Whiteley 1995). The successful projects will not be just transplanted from overseas and be implemented the way they are in Botswana, but their relevance and feasibility within Botswana's culture will be assessed.

REDESIGN DESIGNERS

A total re-education of practicing designers is inevitable if design has to benefit the society. Strategies may range from workshop, short course conducted from of charge at appropriate times. If the practicing designers are converted then the battle of winning graduating young designers to the cause of 'social design' is half worn.

REDESIGN THE SOCIETY

The society also needs to be redesigned in order to create an enabling environment for responsible design to succeed.

Use the Influence of Traditional Leaders

Traditional leaders command more respect than politicians. This culture means that for any community project to succeed it must have the blessing for the chief. If the chief (traditional leader) understands the project and is involved from the beginning then the job is half done. Chiefs have the ability to influence the society to change their behaviour and way of life more than the radio, television and education programs combined together. To that effect chiefs could be used to encourage their subjects to become more caring about the neglected members of the society. They could be instrumental in 'dematerialising' the society and hence promoting use-value instead of exchange-value and hence promoting sharing of products.

Work With Village Development Committees

Every village in Botswana has a Village Development Committee (VDC) composed of members of the village elected by the community, to coordinate village projects especially infrastructure. These committed members of the community usually work for no pay in accordance with the spirit of self-reliance, which is very much alive in Botswana

especially in rural communities. Self-reliance is one of the four principles (democracy, development, self reliance and unity) upon which the nation is built. It was just recently that VDC members are being paid sitting allowance by the government for the meetings they hold. Because they work hand in hand with the chief in developing the village for the benefit of the society at large, many VDC projects have succeeded and hence there is hope for 'social design'. Towns have of late been adopting the same system for the wards in the suburbs, but without much success as the villages because the spirit of self-reliance and social responsibility is scare in cities. Furthermore, awards should be given to designers who design products that benefit the society. The question of where these prizes will come from is easy to answer because rural communities and chiefs normally donate livestock for community projects.

Small Scale Production

Many projects in developing countries fail because they are centralized from the central government and exclude the communities, who are supposed to benefit from such projects. If the scale of 'social design' projects is too big it might lead to a situation where nothing is attainable. Establishing 'social design' production centers in rural areas will be solving the problem of the society, which needs certain products, and combating the 'social inequity' of unemployment as termed by Dorsa (1999). This might prove to be difficult because 'white color' jobs are highly esteemed as compared to 'blue color' jobs like design and manufacturing. This attitude will have to be overcome first especially among the youth if such a noble dream has to succeed. Products produced must be of high quality otherwise they will not breakthrough the 'Cargo Mentality' of Batswana, who believe that products that are imported are more valuable than those manufactured locally. This attitude, according to Christou (1998), has affected a country like Greece where the Greeks distrust Greek products in favour for Italian imports.

Pressurize the Government

Form a Social Design Pressure Group

In his stunning article titled "The haves and have-not" Stefano Marzano, a senior partner at Philips Corporate Design urges designers to become political. Marzano (1993) believes that designers should form pressure groups and lobby as united front on ecology and social responsibility. In what seems to a response to the above, designer educators at Pratt Institute

called for changes in social and political policies (Tetlow, 1993). This approach might work in Botswana especially if various stakeholders are well represented.

Coming up with an equation that might be adopted to make design social has unraveled the paradox. Relying on re-designing one side and ignoring the other is uncalled for. To that effect Potter (1980:48) rightly observed that, “.....no designer should fool himself that given a better society it would be magically easy to design well”. As designers, “... we need to re-invent what we do. We can take responsibility for the environmental and social effects of our work”, the words of Michael Wolf as cited by Whiteley (1993) are applicable to Botswana’s situation.

THE WAY FORWARD

Victor Papanek’s (1977) seminal work *Design for the Real World: Human Ecology and Social Change* provoked debate in the way designers related to (potential) consumers, and to the environment. (Herbert) Marshall McLuhan’s concept of the *Global Village* helped us to view the world as one large interconnected community. It also helped us appreciate the positive aspects of globalisation. Alexander Manu later postulated the *Humane Village* concept exhorting us all towards a more compassionate and tolerant coexistence between technology and humanity. Papanek (1995) picked up his earlier philosophical debate in his subsequent work *The Green Imperative: Ecology and Ethics in Design and Architecture* with greater emphasis on sustainable design and environmental sensibility. The process continues as the design profession finds itself at a moral and philosophical crossroads once again seeking new direction and inspiration as it tackles the complex issues of social sustainability in the *techno-culture* of the 21st century.

There is unequivocal agreement on the urgent need to reduce the pervasive abject poverty on the one hand, and the blatant culture of waste on the other. This polarity defines the world in which we live and was dramatically brought to the fore in the recently concluded “*World Summit on Sustainable Development*” in Johannesburg, South Africa. Designers must develop the distinct sensitivity and sensibility that enable people to empathise with those members of our human family that require urgent intervention and respite. Africans have always had traditional forms of collective responsibility for self-reliance and mutual assistance such as in Niger (Toure, 1993), and

known as *Mbizi* and *Boipelogo* (in Botswana), and the *Harambee* spirit (in Kenya). The concept of oneness (*Ujamaa* in Tanzania), and humaneness (*Ubuntu* in South Africa) also compliment these noble ideals. We need to reinvigorate these practices and infuse them with fresh energy and impetus on account of their tried and tested status.

The world abounds with ‘honest’ designs and vernacular solutions that have proved themselves in their various contexts of use. These include the famous *igloos* (of the *Inuit* people of North America and Greenland), and the *manyattas* (of the *Maasai* people of East Africa) which are developed from materials that are readily available, environmentally sound, and most importantly, sustainable. The challenge to contemporary designers (design professionals and design educators) is to offer philosophically sound and culturally sensitive solutions to such pressing social challenges. The best of the solutions generated will of necessity respect the people for whom the designs are intended, and will empower them and improve their quality of life by incorporating their input and goodwill throughout the entire process. As Perry King (1999) boldly predicts,

“The new designer will be concerned with connections, realizing that today’s actions are a product of our yesterdays and will influence our tomorrows... The new designer will concentrate on content...”

By responding to the call of social design, it is plausible that global equilibrium (as mentioned by a renowned design theorist Victor Margolin) will be reached. Once the designers and the society realizes that they are equally responsible to the welfare of their fellow man, then design would have re-established itself as a friend to mankind, a challenge that William Stumpf identified ten years ago (a sentiment shared by Jeremy Myerson). Otherwise, as George Nelson once remarked, Industrial Design will become the only profession to turn into a myth, before it reaches maturity.

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