

SUSTAINABILITY, DESIGN AND CONSUMERISM IN THE DEVELOPING WORLD

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ABSTRACT

The research collected and presented in this paper is based on the author's first-hand observations of the lifestyles of people living in and around the Dodoma region of Tanzania. The research was conducted using a number of creative research methods including still photographic surveys, video diaries, and indigenous physical artefact collection [1].

This paper examines the contrasting attitudes of different cultures, especially the cultural differences that exist between Western-European and Tanzanian models of consumption. In the global village, which grows smaller every day, there are places and countries where people have no notion of "the brand". In the Tanzanian market place there are no Harvey Nichols or Conran shops, soap powder is soap powder, buckets are buckets, soap comes in long, unbranded bars (fig. 1). Products, in this context, are bought purely on physiological need.

A Dodoma consumer might correctly ask, where is the material value in a brand?



Figure 1. Unbranded items including a close up of bags of washing powder (right), on a Market Stall in Dodoma

1 INTRODUCTION

This investigation into design in the developing world started with the use of solar cookers for sterilising water and cooking. At The Sunseed Trust, a desert technology research centre in southern Spain, researchers have been developing solar cookers using simple technology that was appropriate for self-assembly in rural areas of Tanzania. Designs varied in type: glass boxes with a reflective back; concave dishes that focussed heat onto one spot, and more crude, but surprisingly effective versions using cardboard and tin foil, called *cookits* (Fig. 2).



Figure 2. The Cookit (left) and Concave Reflector Cooker (right) with Pastor Fuataeli S.Muusi, Lutheran Church of Tanzania

In Tanzania only a small percentage of the population have an electricity supply to their homes. In urban areas cooking methods vary, but charcoal or kerosene stoves are common. In rural areas, the main method of cooking is on the traditional *3 stone fire* (fig. 3), using wood collected from the surrounding countryside. However, the problem with wood is that trees are not being replanted, and as the population grows, firewood is increasingly becoming scarce; women can spend over four hours a day collecting enough firewood for cooking, let alone sterilising water [2].



Figure 3. Three stone fire, Chonde village

The visit to Tanzania was originally to see if there was any way in which a more highly developed means of solar cooking could be employed (possibly with the support of international aid), but these plans were laid to rest soon after arrival. The charity *Sunseed Tanzania*, had already turned their attention away from Solar cookers, and were implementing the use of wood burning Lorena ovens, which, coupled with the use of heat retention methods could reduce the wood normally needed by up to 65%.

Solar cookers were being used in some parts of the country, and it is widely known that they have been very successful in other parts of Africa, India, South America and China [3-5]. However, there were two main factors hindering their popularity in the villages around Dodoma: firstly, there had been some considerable difficulty in persuading people to part from their traditional cooking methods, which always took place inside on a wood fire; and secondly there was cost. The concave reflector cookers (fig. 2) cost approximately £40, and were way beyond the earnings of rural Tanzanians. Even the simplest *cookits*, made from an old cardboard box and tin foil were considered beyond the means of some. The bottom line was that firewood lying around on the ground, although scarce, was also free, and open fires are simply quicker.

Cardboard packaging, on the other hand, and much to my surprise, was a local commodity, a raw material that could be sold and not mere refuse as is often the case in the UK. Indeed, many forms of packaging and refuse were routinely used as raw material for other products, which is where the attention of this study began to focus.

2 **BRANDING AND PACKAGING**

However, there is not an abundance of waste packaging. A colleague who had worked as a packaging designer in an Eastern block country in the early 1980s found that in a non-competitive market place his work was straightforward. For example, washing powder came in oblong card boxes that had only “*Washing Powder*” written on them.

In many of the market stalls in Dodoma, washing powder came in bags (see Fig. 1) with the price handwritten, stacked on a table alongside unpackaged old fashioned bars of soap (half a metre long), buckets and sufurias. While there are BP petrol stations (branding architecture [6]), also selling kerosene, and Fanta and Coca-cola bottles (filled and refilled in a local bottling plant) in cafes, evidence of any branding in the market was scarce, apart from the occasional slogans on Western clothing, and the second hand branding found on the kerosene lamps made from old drink cans (fig. 4).



Figure 4. Kerosene lamps (and a filling funnel) fabricated from discard food and drinks cans. These are used to light the many homes in Tanzania that have no electricity

The intricate and skilled manufacture of these items is a delight, but the reason for their abundance (they hang in their hundreds from the stalls) only becomes clear when reminded that only a tenth of the population have electricity in their homes.

The lamps are a vital and cheap means of lighting. They are manufactured by the roadside or in doorways by men using soldering irons, heated with kerosene primus burners, or in charcoal fires (see fig. 5). The speed and skill with which these items are made is astonishing, especially given the limited resources they have. And the fact that they use reclaimed materials adds to the charm - but we should not be misled into believing that this is through some drive towards sustainability.



Figure 5. Local makers at the roadside use soldering irons to make kerosene lamps. One method uses a primus heater (left), the other a charcoal fire.

The cans are used because they are a ready, cheap and convenient material close to hand. If the raw materials were cheaper, or simply there was no further use for this used packaging it would be dumped along the roadside and in streams along with the plastic bags and bottles (see fig. 6) for which there is much less potential for reuse.



Figure 6. Rubbish dumped in a stream behind Dodoma market (left) and at the side entrance (right)

2.1 Understanding the Brand

In our consumer society, there are many reference sources that talk about the “*sociology of consumption*” [7] and branding, including Naomi Klein’s 2000 book, *No Logo* [8]. Klein and other writers, such as Daniel Miller [9] have talked at length about how the brand is not a physical entity, but representative of aspirations, expectations, and beliefs that make a product distinctive.

There are those who might shake their heads in disbelief, but as consumers we are generally aware of the fact that some people will spend £39.99 for a corkscrew made by Alessi, when one can be found in PoundStretcher for £1.99. Although the Alessi corkscrew is arguably a more delightful item of superior manufacture, much of the additional price is for the *brand* value.

The material value of a brand was something I had much difficulty explaining in Tanzania. Take for example, a bucket. This is an important item in a country where water is often collected from a well or stand pipe. To a rural Tanzanian, a bucket was a bucket. The bucket would continue to be used until it no longer held water, and could not be repaired – even then, the raw material of the *ex*-bucket would be used to make something else: a knife handle, for example (fig. 7).



Figure 7. The knife handle is made from the plastic of an old bucket; the blade from a car panel

In the UK a bucket (manufactured in the Far East) can be bought from a DIY chain store for about £1. Alessi don’t make buckets, but it occurred to me that if they did, they might retail at about £40 in Harvey Nichols. When this notion was put to a group of Tanzanian schoolteachers, it was met with guffawing disbelief. “*Why?*” one man asked, “*Why would someone spend forty, when they can buy the same thing for one pound? This is madness.*”

2.2 Throw Away Cultures

The teachers had difficulty accepting our throw away culture. The same man explained that he has six radios: only one works, but he has kept the other five. Although broken, they represent the money he has spent – they are still his accumulated material assets. He went on to describe a trip he had made to England, a few years before:

“I stayed there [in the UK] for four days. I saw nothing strange except for the big buildings, but when we went in the village, on the way to their [the hosts] home I saw a skip. After passing two or three streets, I saw radios, sofa sets; I saw videos, so many things. They were outside. I just looked surprised. I asked, ‘won’t they get stolen?’ and they said, ‘No they have thrown those things away.’ Then I was very sorry. I said, ‘Throwing away? Why?’ ‘Because they have new things.’ Ah, it didn’t enter my head.”

It was explained that, in the UK, where many electrical goods are manufactured cheaply on the other side of the world in countries with low cost labour, the cost of getting a radio repaired would be more than the radio was worth. This the teachers easily understood, but that people would discard a perfectly good working radio or other electronic devices (or anything useful) the minute a more up to date one hit the shops was ludicrous. They were particularly shocked at the amount of computer hardware dumped, simply on the grounds that it could not run new software.

Labour costs are low, and radios (a very important medium for communication: news is on the radio, weather forecasts, and even funerals are announced so those relatives in neighbouring towns will attend) might be repaired several times in their lifetime. When expired, any remaining working parts are transplanted, like human organs, so that other radios may continue to work. The man gave another example of this.

“... this watch, if it is damaged, to repair in England is more expensive than buying a new one. So it is better to buy a new one than repairing this. And if you have replaced it, then this is nothing so you can throw it away. That is their principal. But here it is very different: it is very basic, very less money to repair. But to buy a new thing is still difficult. I can repair for £5, but to buy a new thing is £20 or £30, so I spend the £5.”

3. CONCLUSION

While the kerosene lamps provide a charming example of recycling, the idea of these odorous and sooty items being the soul source of lighting in a UK home would not be well received. We should be striving to improve living conditions in Tanzania, ensuring that 100% of homes have clean and safe power sources, while implementing recycling methods for the drinks cans that will no longer be needed to make kerosene lamps.

Despite the widespread use of old packaging (or rubbish) as a raw material, we have already seen how litter in Dodoma is dropped and dumped in a manner that would not be acceptable in Western capital cities (fig. 6), and besides, most of this litter can be reprocessed to into new materials, as it already is in many industrialised countries.

In the UK we still have more to learn. It is known that recycling is not merely a matter of finding new uses for our rubbish. In a large western economy, the recycling and re-use of our waste has financial costs, and needs careful management, and more importantly a cultural shift in our general attitude (and urgency) towards this issue, for which there seems to be little awareness in Tanzania.

Victor Papanek and other academics have for many years been telling us to reduce our material consumption in order to preserve our resources and reduce waste. It has been ten years since Papanek stated, *“Consumers are also implicated in this ecological crisis. In our greedy rush for more and more material goods in the West, we have seriously neglected our links with nature and our responsibility to the environment...”* [10], yet some design courses in the UK still teach sustainability only in terms of recycling.

While we strive to improve the living conditions in the developing world, the poor should be careful of the trappings of branding and over consumption. As countries such as India move elevate themselves from the developing world status to a serious industrialised economy, the rural population are already regarded as *“a large untapped marketing potential”* [11]. The absence of branding in Dodoma Market is very refreshing. However, it is both ironic and predictable at the same time that in the UK, those most susceptible to the trappings of branding and the superficial social status it confers, are often from the most impoverished socio-economic groups. What separates us from most Tanzanians is they consume goods through *necessity*. There is no material value attached to their utility goods and we have already seen how the notion of buying new items to replace old ones that still work is for them, difficult to grasp. The Tanzanian Teacher finished our conversation with this:

“Maybe that is one of the reasons which makes a difference between us: you throwing things, we maintaining.”

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