

UNDERSTANDING THE ESSENCE OF ENVIRONMENTALLY SOUND PRODUCTS: SOME INSIGHTS INTO ECOLUXURY DESIGN.

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The study presents a conceptual framework for sustainable goods relative to their environmental aspects. The fundamental theoretical perspective chosen for the present project views the phenomenon of sustainable development and environmentally sound design in the light of Karl Popper's thinking. The thinking has led us to distinguish two paradigms of environmentally sound design, which define the phenomenon of sustainability on the level of form and content. In between the two main approaches of Finnish hunting pursuits there is now emerging a new form of outdoor-culture. In the new culture, the traditions of trekking in the wilderness are melding with the modern and post-modern conceptions of technological thinking. From the perspective of sustainable design this fusion will create new sensible contexts for health-promoting activities such as skiing and Nordic walking. The data indicates that sustainable design is a far more multilayered phenomenon than products made of re-usable materials and decisions not to consume conspicuously.

INTRODUCTION

In recent discussion, sustainable development has been associated with the ethics of an alternative and "green" logic of consumption. Such an attitude could easily be seen as opposite to that of quarterly economics and principles of effectiveness. Beside the mainstream conception of sustainability it is possible to see the breakthrough of high design products, which are value-added, but whose production does not require enormous investments. Sustainable development requires focused products that not only reduce impacts, but contribute positively to the environment (Beard & Hartmann 1997, 237). The competitiveness of such products depends merely on the designers' and producers' uncompromising attitudes. Creative innovation strategies can flourish when resources are scarce and people "learn to generate more with less" (ibid., 238), and to utilize materials without exceeding their rate of regeneration. With this approach it is possible to design and produce ethically high-oriented products and create successful *brands* that carry the idea of *environmentally sound design*¹. Within the vision of the research projects referred to in this paper, the green industrial revolution needs to take into account both old and new ethics of consumption. This will also become fundamental to the long-term success of sustainable business. In our understanding, environmentally sound products and

¹ Design for environment is also known by numerous other names, such as ecodesign, green design, sustainable design, environmental conscious design, life cycle design and clean design (Lagerstedt 2003, 24).

design are a mixture of sustainable as well as pleasurable, or even luxurious properties of products. The real and true green economy will arise in the future from well-aware sectors of society, which include the market groups and classes of society that neither desire nor have to accept *anything designed, produced or marketed unethically*².

THE RESEARCH CONTEXT

The present study is associated with two research projects. The first is *Emergence of Luxury*, an ongoing project that will receive support from the Academy of Finland until the end of 2007 (grant no. 205608). The second project where study is associated is *Sustainable Innovative Materials in High Tech Applications* funded by the Academy of Finland through a *Sustainable Products and Productions* -research programme. This ongoing project has started at the beginning of 2007 and will also receive support from the Academy of Finland until the end of 2010 (grant no. 117845). The linkage between the projects is the vision that ecodesign will act as a driver in sustainable economic development, which will arise through environmentally- and ethically-aware consumer groups. The first project mentioned will provide empirical material that will allow us to better illustrate and examine the essence of emerging economic trends, and then later on focus more carefully on developing tools and solutions relevant to the *Sustainable Product and Production* -research programme launched by the Academy of Finland.

THEORETICAL FRAMEWORK

The paper will approach the phenomenon of *sustainable development* by conceptualising the essence of design and production processes from the perspectives of natural sciences and humanistic research. The fundamental theoretical perspective chosen for the present project views the phenomenon of sustainable development and environmentally sound design in the light of Karl Popper's thinking. In his theory of three worlds, Popper distinguishes natural objects as part of world 1, subjective awareness as an aspect of world 2, and cultural products and social situations as manifestations of world 3 (Popper & Eccles 1977). Crucial to Popper's theory are what he terms the *emergent* features of organisms, that is, the features that produce innovation but which cannot be

predicted on the basis of lower-level features or laws (Niiniluoto 1990). As Popovic (2002) has pointed out, Popper's theory of three worlds could be applied to explain the relationships between designers, artefact (interface) users and the contextual environment of their interactions. The contextual environment of an artefact would include *the artefact's physical environment* (world 1), *the social environment* (world 2) and *the knowledge environment* (world 3). On this theoretical basis, sustainable development could be seen as environmentally sound products –objects of world 1– and designers', producers' or end-users' experiences of sustainable products and productions – objects of world 2 – and as a culturally shared understanding or knowledge on sustainability – objects of world 3. The ontology should be seen as a linkage between the different scientific disciplines when endeavouring to integrate "scientific, technological and artistic approaches to ecodesign" (Beard & Hartmann 1997, 237). This framework is illustrated in Table 1.

Table 1. Constructing the essence of environmentally sound products in light of Popperian world-view (cp. Uotila et al.2006).

	World 1	World 2	World 3
World 1	Environmentally sound products and services.		
World 2		Subjects' experiences of sustainable products and services.	
World 3			Culturally shared understanding on sustainable products.

RESEARCH DESIGN AND METHODS

Data collection in the Finnish context was conducted in the *Emergence of Luxury* –research project through group interviews during fall 2004 and spring 2005. The focus was to concentrate qualitatively on the target groups' experiences of luxury and high-quality design products since very little research has been done in this area. The interviews were semi-structured and focused on the individuals' relationships to their sport as well as their opinions and preferences regarding designer products and high-standard services in both their sport

² see: European Roundtable on Sustainable Consumption and Production (Bilbao, Spain – May 14th, 2004).

and in other aspects of their personal lives. The interviewees consisted of men and women who regularly engage in golf, yachting and hunting. The final sample of informants consisted of 18 golfers, 15 sailors, and 16 hunters (see also Uotila et al. 2005). The decision to interview individuals representing of different sport and leisure activities was an attempt to avoid findings that might be specific to a single activity group.

The interviews were conducted using the focus group method, which has been found to be fruitful in research designs concerned with user experience (Kuniavsky 2003). According to Kuniavsky, at its best the focus group method can be expected to yield knowledge of what the participants think about a given subject, how they think about it, what they value most about it and why. The main purpose of focus group discussions is not for the participants to produce a single meaning but to share experiences from which multiple meanings can be extracted (Finn et al. 2000).

The hunting-case presented in this paper illustrates more clearly the two opposite aspects of the status value people tend to seek from luxury-sports and leisure: possessing material i.e. the best possible equipment and technology or possessing leisure-time as 'non-productive consumption of time' as Thorsten Veblen (1998 [1899], 43) has put it. This paper focuses on the analysis of the hunting as an outdoor pursuit in which there exists a divide between the continuation of traditions, sustainable and natural practices of game husbandry, and its urbanization and commercialisation. The purpose of this inquiry is to explore whether there is any logic to using activities that take place natural environment as a test bed for mapping environmentally sound values.

According to the definitions of old and new luxury (Danziger 2005, 17), to attain and possess old luxury products requires a certain amount of wealth. Instead, the new luxury is easier to obtain even in the lower salary grade, as long as there is knowledge, time and the Internet. The democratization of luxury means democratization of the opportunity to share information and create high-quality new products and services by oneself (see Hippel 2005, 123). And as sustainable is becoming a synonym of smart and intelligent, ecodesign can be interpreted as design with a more intelligent interrelationship to nature (Karlsson and Luttrupp 2006).

INITIAL FINDINGS ON ENVIRONMENTALLY SOUND PRODUCTS IN THE LIGHT OF POPPERIAN THINKING

Interviewees interested in field sports were asked to provide a very comprehensive description of their leisure activity; for example when and how they became interested in hunting, and what kind of outfit and equipment they use, or would like to have in the future. In addition, they were asked to tell their most unforgettable stories related to these activities. Some of the interviewees preferred to describe hunting as a 'way of life' rather than as a hobby, and in these groups it would have been possible to carry on talking about hunting as an immaterial pleasure and more or less exclude the products and other materialistic manifestation outside the interview. Products were seen to hold instrumental value, in terms facilitating the gaining of new experiences, 'a real and authentic connection with the nature'.

An initial analysis of interviews revealed three distinct themes: data that deals with the product itself, branded traditional or modern high-tech hunting equipment; data that deals with experiences, experience of surviving in the wild; and data that provides insights into the context of ecoluxury, where grounds for the idea of "consumption that makes sense" (Carbonaro 2006) can be traced.

In the context of hunting and trekking, the construction of a Popperian view of sustainable development would proceed as follows: the first world would consist of necessary hunting equipment, clothing and paraphernalia - including transportation and navigation devices. The second world comprising experiences would include two diverging approaches: experienced hunters who maintain the traditional hunting methods and skills, as contrasting with technology-oriented hunters, who's preference it is to proceed efficiently in nature with the aid of technical gadgets. The third world, made up of cultural artefacts, is visible in the new forms of environmentally sound hunting and trekking culture, in which the sensibilities of old traditions and new hunting methods are to a certain degree combined.

Although the results to be presented are still tentative, the following examples may elucidate further analysis by illustrating the essential properties of environmentally sound luxury, specifically in field sports.

ENVIRONMENTALLY SOUND PRODUCTS AND SERVICES

The analysis based on the data collected in the *Emergence of Luxury* –research project indicates that Finnish people are not very design consciousness (Uotila et. al. 2005; Uotila & Koskennurmi-Sivonen 2006), especially in relation to products associated with outdoor leisure activities, which are expected to have plenty of functional qualities. The clothing, weapons or other hunting equipment mentioned as top-rated products was mostly based on their capacity of technology. Generally speaking, the development of technology and materials has led to the advancement of products, increased performance of equipment, thus enabling more enjoyable engagement in the sport. Our interviewees were aware of all kinds of technological hunting equipment that is available. However, the technological solutions such as Gore-tex –materials used in sports clothing, or the more powerful weapons, didn't provide all the desired qualities for making trips into the wilderness particularly pleasurable not to mention luxurious.

The basic principle behind this outdoor activity is that "there is no point in taking anything unnecessary into the wild, you are there on your own with your bare feet, and what you take with you, you'll have to carry by yourself". For this reason, the values behind hunting are closer to the idea of sustainable consumption than might be the case in other sports, such as in golf. A product which one of our interviewees viewed as a personal luxury item was handmade woolly socks. In addition, many other pieces of hunting equipment contain the same characteristic of authenticity, practicality and durability, values which can be seen as the principal of designing environmentally sound products that stand up to the ravages of time and which are valued also among other user-groups (Uotila & Koskennurmi-Sivonen 2006, 215)

"I brought this one, which is very dear to me. [--] This is from a Lappish blacksmith; he is the champion of Finland, it's called the Kullervo knife. He has won the national knife making contests, the championship of Finland, well-earned and, [--] this is a top sample of skills and fine craftsmanship. Here the traditions of designing have been respected, as well as the functionality and purpose of its use. I mean, this is both beautiful, it has a fine form, and it is a knife at its best, considering that it can also be sharpened. It is made of carbon steel and has been through heat treatment so

that it is optimal; it is not too hard and not too soft. With this, one can with a single stone sharpening, even alone, skin and handle a moose. I have experience of that." (a hunter)

When compared the data of hunters in the Northern Finland with the data gathered from the golfers and sailors from the Southern Finland, it can be stated that there is only few luxury-labelled products mentioned in line hunting. Why do these enthusiasts prefer to use the more simple tools and instruments instead of the latest technology available? The most interesting question for designing point of view is, if there is any kind of technology that this user-group would be willing to use.

SUBJECTS' EXPERIENCES OF SUSTAINABLE PRODUCTS AND SERVICES

During the interviews distinguished two diverging groups we labelled the 'rubber boots faction' and the 'Gore-tex faction'. The first group promotes and symbolizes the traditional hunting culture, which lays its trusts in the old tools and ways of hunting. For the technology-oriented hunting culture, new and better equipment support greater comfort and effectiveness, in particular with regard to saving time. Both groups brought to attention deficiencies of various hunting aids, in numerous contexts. The performance expectations of hunters concerning clothing, vehicles, navigation devices, cameras and weapons were not seen to be fulfilled by the latest technology and products.

Technology-oriented enthusiasts, the 'Gore-tex' faction, trust in the power of technology against the forces of nature. Travelling in nature as well as hunting and trekking skills are replaced by the use of technical devices. The maximization of comfort is also an important criterion among technologically-oriented hunters. Individuals of the other faction, which promotes hunting as a way of life, typically get involved in their interest with minimal equipment, and get by through their own skills and initiative. They require less pleasure-giving equipment, or simply don't trust or need to rely on them. According to their own view of their pursuit, and the positions of status associated with it, importance is placed on goals of self development, getting through demanding situations and the telling of tales about their adventures: *"The worse equipment you can hunt with, the greater hunter you are, [--] in reality the sport has little to do with equipment."* (a hunter)

CULTURALLY SHARED UNDERSTANDING OF SUSTAINABLE PRODUCTS

In between the two main approaches of Finnish hunting pursuits there is now emerging a new form of outdoor-culture. In the new culture, the traditions of trekking in the wilderness are melding with the modern and post-modern conceptions of technological thinking. From the perspective of sustainable design this fusion creates sensible contexts for health-promoting activities, such as skiing, Nordic walking or Nordic running. One way of seeing this new culturally shared understanding of sustainability is based on research data gathered from hunters, and is summarized in the following excerpt taken from an interview:

“it is not just a pure pursuit for its own sake, it is in fact useful, as nature provides meat, fish and various natural produce, you can always find something there, so you never go out without a basket or rucksack. It’s especially good in my opinion, precisely that perspective, that in addition you get exercise and health benefits, and besides the hunting it’s good for the nation’s health... Its surprising how strong this tradition still is in Lapland, and we should make sure that we don’t become estranged from nature, so that we don’t even know how to find healthy food. People often speak about pursuits and an incorrect image is also provided by the media, in that I’m not concerned with game or catching food, that I just walk around looking at the scenery, but it is still an integral part of being in the wilderness, to return with some catch, and its quite correct to do so and so it should be [--]” (a hunter)

Our data suggests that the descriptions of the environmentally sound experience often bypass the product level and concentrate on the immaterial level of sustainability. Yet products can be seen to have a role in those descriptions of sustainability as well: the material world becomes instrumental when the depictions of sustainability focus on the activity. Product centred depictions of sustainability are still not focused solely on product features, as the earlier excerpts from our data demonstrate. Concluding these tentative findings we could at this point name a few elements contributing to environmentally sound experience through a product perspective: goals, product features, values, and socially and culturally constructed meanings. Although these categories are still evolving through our ongoing research, it can be noted already at this point of the study that sustainability cannot be “designed” into products only

through eco-materials that traditionally are seen as renewable, re-usable and recyclable. The similar features are recognizable in luxury products. When designing luxury-products there is few materials that can be used as classical signs of luxury, like leather, hard wood and gold. Still, nothing indicates so far that the product related environmentally sound experiences could not be at least anticipated in the product development process through careful user research.

Ecoluxury as a linkage with the two phenomena, luxury and sustainability, appears at the first glance somewhat contrived experiment. Yet, the starting point is the same for both i.e. we can’t stop people from consuming. And because everything moves so fast, and we cannot stop it, we have to create some islands of slowness (Chapman 2006). In this paper, based on the case of Finnish hunting pursuits, we have proposed an existing example of island of slowness where end-users are empowered by the natural surroundings. This group of enthusiasts, also called Pro-Ams, has found their own distinctive definition of self-fulfilment (Leadbeater and Miller 2004). This is a kind of culture worth of studying when searching new ways of promoting development of sustainable kinds of desire (Karlsson and Luttrupp 2006).

CONCLUSIONS

We have focused on one particular way to outline the phenomenon of environmentally sound design in the spirit of Karl Popper. Our thinking has led us to distinguish two paradigms of environmentally sound design, which define the phenomenon of sustainability on the level of *form* and *content*. The data indicates that sustainable design is a far more multilayered phenomenon than products made of re-usable materials, eco-brands or personal decisions not to consume conspicuously.

The preliminary study shows that the concept of ecoluxury represented in our data is on the one hand something very abstract which can be traced back to the traditional ways of living, such as game husbandry, and on the other hand very modern and high-technology oriented solutions created for dealing with the wilderness. From the technological point of view, ecoluxury means having environmentally sound products and experiences in a more pleasurable way, more readily.

The results of our study seem to question the traditional methods of marketing and branding for environmentally sound products. The images of sustainability cannot be

achieved through factors such as logos, advertising campaigns or display. Instead, meanings linked with sustainability emerged in the purchase situation, alongside personal values represented or reflected by the product, as well as through personal use.

The research questions and approaches of further studies will indeed differ from those seen in traditional research in marketing and design. Even basic research in development projects and production processes has characteristically been pragmatic and made direct use of empirical material, and to a great extent, data on the end-user. Furthermore, we need a deeper understanding of the kind of deep emotional platform on which products and services will acquire their added value in the future.

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