

## COMMUNICATING SUSTAINABILITY: NEW MESSAGES NEW TOOLS

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### ABSTRACT

Living on planet earth is a growing challenge, with new limits, boundaries and frailties. Governments and companies must be prepared to face real commitments, rather than new marketing strategies. But not all the responsibility lies with institutions, governance or legislation; also the individual (the consumer) plays a central role in this quest. The reason is very simple: businesses will adapt and be shaped by consumer demands, and a more proactive citizenship will stimulate governments to change and adapt their policies. Therefore designers, as citizens and professionals should also be responsible to make their contributions.

Until recently, “eco” and “sustainable”, have been subjects mainly for the industrial designers to research. However, gradually Graphic and Communication Designer, especially since the “First Things First Manifesto”, have become increasingly aware of their need to raise a conscience in fundamental issues like ethics, environmental and social responsibility. This paper is part of an ongoing PhD research, and in the paper here presented is the first part: the state of art and literature review. The complete PhD research is expected to bring relevant contribution to:

- Define Sustainable Communication Design
- Identify a code of ethics
- Classify tools, material and techniques that are more in favour with sustainability
- Add value to communication

**Keywords:** *communication design; design principles; sustainability*

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## 1. INTRODUCTION

The aim of this paper, is to present the state of art and literature review, of a PhD research that expects to identify a code of practice for Sustainable Communication Design. Starting from understanding what is Sustainable Development, we gradually move from industrial design to communication design, to understand all valuable contributions. However, the state of art would not be completed without analyzing the markets and the consumer, to whom Communication Designers mostly work for. Equally relevant are the efforts from some institutions, designers, and writers, among others, already engaged in working towards sustainability.

The first attempt to analyse what were the consequences of the economical development to the world, was done by The Ecologist, in 1972, in it's pioneering issue "Blueprint for Survival", where they stated the need to reject development<sup>1</sup>. This concept was highly criticized, because it was radical and problematic; "it is based on an assumption that frugality, self-restraint and the joy of minimalism is somehow an ideal human condition"<sup>1</sup>.

Later in 1983, under the chairmanship of Mrs Brundtland, The World Commission on Environmental and Development (WCED), was created. This commission task was about "identifying and promoting the cause of sustainable development"<sup>1</sup>, and the first definition of sustainable development was:

"For development to be sustainable, it must take account of social and ecological factors, as well as economic ones; of the living and non-living resource base; and of the long-term as well as the short term advantages and disadvantages of alternative action."<sup>1</sup>

Nowadays, it is estimated that there are 64 sustainable development definitions and many interpretations of the term "sustainability", and the number will continue to grow as the global debate on the topic widens. For some, it means maintaining the status quo. For others it is equated with notions of responsibility, conservation and stewardship. However for a growing number of people, sustainable development is a "triple bottom line"<sup>2</sup> activity, based in economic, social and environmental impacts.

It is undeniable that the first steps toward a sustainable development have already been done, but we still are quite far away from solving problems such as, climate change, extreme deforestations, social tensions, illegal immigration, just to mention a few. Nevertheless it is certain, that the planet could not sustain the burden of 10 billion people - expected in 2050 - approaching western standards of consumption. As Manzini<sup>3</sup> so well expressed, "today, 20% of the population is consuming 80% of available resources. If this situation changes and the other 80% succeed in following western standards of living, we face the prospect of an environmental disaster".

## 2. DESIGN FOR ENVIRONMENT TO DESIGN FOR SUSTAINABILITY

Already in 1971 Papanek<sup>4</sup>, in his book “Design for the real world”, challenged designers to act upon a social responsibility. He wrote that designers could propose from simple solutions, to products, or services to be used by the community and the society.

In 1971 the world faced the first energetic crisis, and 1974 the petroleum barrel was costing more then ever before. Gradually there was a rising environmental awareness, and it was facing the need to produce eco-solution that eco design emerged. In the early 90s TuDelf University and Philips designers’ created a method for Life-Cycle Assessment (LCA), which is the evaluation of the environmental impact cost product: during production, life and disposal, in what concerns resources, and energy<sup>5</sup>.

Taking into account that we need to consume fewer resources the model “Factor 4” was first proposed in 1995 by Weizsacker, Lovins, H, Lovins, A, as a model that would hold the key to sustainability. As the Wuppertel Institute<sup>6</sup> describes in their web page:

“Factor 4 plays an important role within applied sustainability research, especially within material flows and resource management. We regard Factor 4 as normative guideline for decision-making that points out ways of relieving environmental burdens. Factor 4 signalizes appreciable environmental relief, particularly in the field of resource productivity. To cite an example given by Amory Lovins: To improve a pipe system, straighten the pipe and enlarge its diameter. That will reduce the energy necessary to pump fluid through the system by more than half. Keep it simple and straight!”

However “Factor 4”, was soon proved not to be sufficient and the Factor 10 was recommended, meaning we need to reduce by 90% the use of natural resources, in a global scale, by 2050<sup>7</sup>. As it is explained buy The Global Development Research Centre<sup>7</sup>:

“Factor 10 states that over the next 30 to 50 years (one generation) a decrease in energy use and material flows by a factor of 10 and an increase in resource productivity/efficiency by a factor of 10 is required to achieve dematerialisation. That is, to attain sustainability and environmental protection we need to reduce resource turn over by 90% on a global scale, within the next 50 years.”<sup>7</sup>

The next step was to upgrade design from “eco” to sustainable. Ursula Tischner<sup>8</sup> provided a great contribution by asking designers to consider social and economic issues, while seeking a greater balance between countries, people, and wealth. In Tischner’s opinion Sustainable Design includes eco-design to meet Sustainable Development, controlling production and consumption:

Tischner<sup>8</sup> defined 4 basic principal for Eco-design and Sustainable Design, that challenges designers to think with a new paradigm of functions and services instead of physical products:

“1. Early Integration: start as early as possible

2. Life Cycle Thinking: cover the whole life cycle of the product
3. Functionality Thinking: think in functions and services – not in products first
4. Multi Criteria Approach and set the right priorities”<sup>8</sup>.

Ezio Manzini and Carlo Vezzoli<sup>9</sup> took Design for Sustainability a step further. They proposed an interconnected system of services instead of physical objects for a sustainable quotidian. Also, Ezio Manzini with François Jégou<sup>10</sup>, have been researching in sustainable lifestyle options. The concept is based on communities that engage themselves in finding sustainable solutions for their daily problems, like taking care of children, older people, cooking for the community, or lift sharing. By proposing this, Ezio Manzini<sup>11</sup>, wishes to empower people to find the necessary solutions by using the available resources at hand. When Manzini is proposing shared objects or services as an alternative, he is obviously looking for less production and less consumption of resources. He also researches with small communities, engaged in communicating, sharing common spaces, and interacting with each other on a daily bases. These social aspects are very interesting because they bring design practice to a different level.

### **3. GREEN MARKETS, GREEN CONSUMER AND CAMPAIGNS FIGHTING UNSUSTAINABLE PRACTICES**

The “green market” and marketing was a response to the growing “green consumers” and public opinion that in 1980, feeling more informed were also more demanding<sup>5</sup>. In 1988, John Elkington and Julia Hailes<sup>5</sup>, wrote “The Green Consumer Guide”. The books sold thousands of copies, and raised a new conscience. A better environmental legislation, a more informed public opinion, and more competitiveness in the public sector, were the responsible factors for making companies demand “greener” product to designers<sup>5</sup>.

However, from the 80’s until now, the “green market” did not grow as expected, and for that two reasons can be pointed out. For one side, companies without the necessary information, technology or tools, failed in delivering product that were real and committed green solution. And unfortunately, that also means that today we need to regain the consumers’ confident<sup>5</sup>. On the other side, people tend to say they would prefer to buy green, but at the moment of purchasing other reasons come first such as, price, brand, style, or quality<sup>13</sup>.

For the discrepancy between what the consumer says they would do, and what they actually do, three reasons may be pointed out. The first one concerns people, they simply may not say the true in surveys; simple by stating an intention that in the end may not be carried out<sup>13</sup>. Second concerns the market, consumer may want to buy green options and may not find then available<sup>14</sup>. Finally the third reason may be illiteracy; people may not understand what green (and all the related words) really mean, and marketing may take advantage from that confusion<sup>15</sup>. Reinforcing this idea, it is evident that words such as “organic”, “natural”, “eco”, “green”, applied almost to anything, and because they are not legislated, it is difficult for the consumer to know the real differences if they exist.

This point, illiteracy or deceiving labels, is one aspect that communication designer's should be concerned about. It may be illiteracy or simply miss leading information but this is where designers should have the responsibility to draw a line, in what and how they are whiling to communicate.

Over the last years, not only the consumers were confused or realized that companies were, making false “green” promises or having unsustainable practices in their production; also NGO, journalists, some designers and artists.

When the 2000 version of the “First Things First Manifesto was published in a few magazines, one of them was “Adbusters”. This magazine together with some NGO have made some aggressive advertising against companies such as Nike or Camel cigarettes, or social problems such as alcoholism, or anorexia related to an “ideal of beauty” “sold” by fashion.

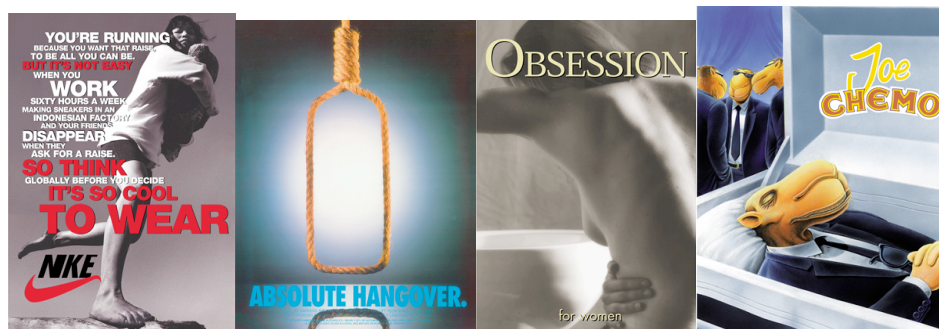


Figure 1: “Spoof Ads” from Adbusters<sup>16</sup>

O'Rourke<sup>13</sup> has made an interesting research on some of this campaigns such as Nike, Computer TakeBake or Staples Inc. and she argues that, when facing a discrediting campaign (or the perspective of a campaign) companies, will change their unsustainable practices, either social or environmental. The downside to this approach is, if we attack all the unsustainable companies in the same way, after a while it will lose impact. In the end we would be fighting advertisements with advertisements.

Another interesting communication project is the magazine “colours”, which was a concept from the photographer Oliviero Toscani, and the editor in chief Tibor Kalman<sup>17</sup>. Together they made some of the known advertisements protesting: AIDS, racism, refugees, or violence. The controversy always attached to these campaigns has much to do with the fact that they use human suffering, polemic, death, as a way to sell clothes, so in the end it can be perceived as being cynical.

#### 4. SUSTAINABLE COMMUNICATION DESIGNERS

Parallel actions were emerging among graphic and communication designers. Already in 1964, twenty-two Graphic and Communication designers signed the first version on the “First Things First Manifesto”. The second, and latest version led by Max Bruinsma<sup>12</sup> in 2000, essentially claimed that Graphic Designers should be able to work independently and regardless the marketing and the advertising and pursuit more valuable causes. It was signed by thirty-three professionals and stated:

“We, the undersigned, are graphic designers, art directors and visual communicators who have been raised in a world in which the techniques and apparatus of advertising have persistently been presented to us as the most lucrative, effective and desirable use of our talents. Many design teachers and mentors promote this belief; the market rewards it; a tide of books and publications reinforces it.” ....

“There are pursuits more worthy of our problem-solving skills. Unprecedented environmental, social and cultural crises demand our attention. Many cultural interventions, social marketing campaigns, books, magazines, exhibitions, educational tools, television programs, films, charitable causes and other information design projects urgently require our expertise and help.” ...

Although the “First Things First Manifesto” was a call for action, involvement and engagement to graphic or communication designers, it had less impact than the desired one. Apart from some individual designers and initiatives with a more acute perception of the state of the world, it is fairly reasonable to say that most communication designers (including graphic and visual) feel that they work for the client, under their directives and briefing, as a direct response of the market.

Apart from some green marketing activities, NGO campaigns to fight unsustainable practices, some random communication actions more or less connected to marketing and advertising, there are only a few graphic designers working while conveying a message of ethics and sustainability. Also academic research in Sustainable Communication Design is hard to find. So far we have come across with Aaris Sherin, a professor in St. John University, in New York, teaching Graphic Design, and especially interested in Sustainable Graphic Design. She is also the author of the book “SustainAble - A Handbook of Materials and Applications for Graphic Designers and Their Clients”; and Eric Benson, from University of Illinois, a researcher in Sustainable Graphic Design.

In matters of Sustainable Graphic Design, one of the most relevant contributions is being given by American Institute of Graphic Arts<sup>2</sup> with their Sustainable Centre, where designers can look for information on resources, technical advice and information on material, such as paper. Using data from the United States, we can understand the relevance of Communication Designer working towards Sustainability:

“Americans receive over 65 billion pieces of unsolicited mail each year, equal to 230 appeals, catalogues and advertisements for every person in the country. According to the not-for-profit organization Environmental Defence, 17 billion catalogues were produced in 2001 using mostly 100 percent virgin fibre paper. That is 64 catalogues for every person in America.”<sup>2</sup>

Paper is a sensitive issue nowadays, not so much because of the number of trees that are cut down (they are a renewable source), but more to do with the transformation process of wood into paper<sup>2</sup>. For Communication Designers paper is one support, but they use many other supports that also need to be researched.

However this environmental concerns should not be seen just an altruistic duty from designer, they much rather are a recent but increasing demand from companies. To give an

example “Sustainable Reports” that has increased 100% in one year alone, comparing 2002 with 2003<sup>2</sup>. For designers the knowledge about sustainability can be an empowering situation:

“This increased attention to environmental responsibility can be an opportunity for designers to be seen as critical advisors to corporations on how to reduce their negative impacts without compromising the imperative for product differentiation and promotion through design and printing.”<sup>2</sup>

What AIGA is pointing out, is the need for designers to have a proactive attitude, showing to clients that they are informed, and able to advise them. What gives designer more responsibility, but also new market opportunities, and more control over his work.

The Designers Accord is proposing another relevant approach. They define themselves as “a global coalition of designers, educators, and corporate leaders, working together to create positive environmental and social impact. The Designers Accord<sup>18</sup> is made up of over 170,000 members of the creative community, representing 100 countries, and each design discipline. Adopters of the Designers Accord commit to five guidelines that provide collective and individual ways to take action. Becoming a member of the Designers Accord provides access to a community of peers that shares methodologies, resources, and experiences around environmental and social issues in design.”<sup>18</sup>

The Designers Accord, represent an important step. For designers to adopt the accord they must take some steps, which are quite open and easy to follow, so they work more as a motivation to start. If on the other hand, these guidelines, were too restrictive it would be more discouraging. It is also reasonable to expect that most of the 170 000 member are probably just using the accord as a way to promote their image, or as a light commitment.

Specifically committed to Sustainable Communication Design, is the Society of Graphic Designer of Canada<sup>19</sup>, that last April, during the annual general meeting, has proposed the first definition for Sustainable Communication Design:

“Sustainable communication design is the application of sustainability principles to communication design practice. Practitioners consider the full life cycle of products and services, and commit to strategies, processes and materials that value environmental, cultural, social and economic responsibility.”<sup>19</sup>

The Sustainable Communication Design definition was also supported with a statement of values and principles to guide the GDC’s members in their design practice<sup>19</sup>. The statement has three parts; the first one is assuming responsibility in this interconnect world. The second is about the in-house changes that can be done. And the third part is a set of guidelines for the design practice and client advising.

Two tools especially design for Graphic and Communication Designer interested in Sustainability are: a widget and a calculator, and are both very interesting examples. The first is design to work as a Mackintosh (and universal platforms) widget, with three buttons (see figure 2) for “paper”, “print” and “more infor”, each providing basic information on its subject<sup>14</sup>.

The other tool is the Mohawk Environmental Calculator<sup>20</sup> (see figure 3), also very relevant. It estimates the environmental cost from the paper that the designer is about to choose. The calculation is made in two steps, measures the amount of resources spent for that particular quality and quantity of paper, but also that the footprint can amortize, by choosing a windmill powered energy, or by offsetting the carbon emissions.



Figure 2: Widget for Sustainable Graphic Design, paper “button”<sup>14</sup>

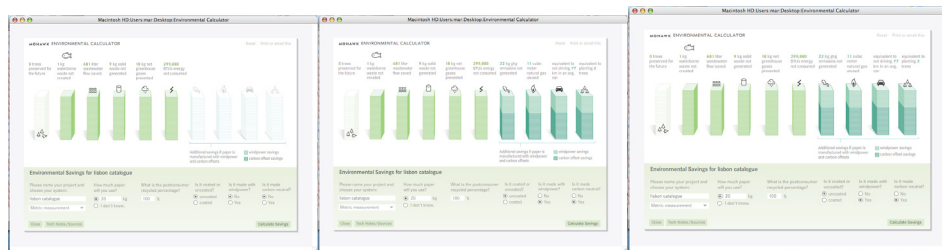


Figure 3: Mohawk Environmental Calculator, choosing the paper, windmill energy and offsetting carbon emissions<sup>20</sup>

Although these examples are important and relevant they demonstrate that the paradigm is still the same models as conventional communication, graphic design or advertising. They think how to use eco supports, or less pollution printing, or going carbon free, however there is much more to be done. Brian Dougherty<sup>21</sup>, is the book “Green Graphic Design” author, and a communication designer partner in the studio “Celery Design Collaborative”, says that based on his eleven years of experience “the message designers make, the brand we built, and the causes we promote can have impacts far beyond the paper we print on.”, and adds “In addition to seeking our better material and manufacturing techniques, designers can craft and deliver messages that have a positive impact on the world.”<sup>21</sup>

The researcher and author of this paper, has been working for more then a decade as a practitioner. From those ten, the last eight have been for environmental clients. Working with eco-supports, reusing supports, recycling, cutting down in material, made to last longer, design techniques to avoid aggressive finishing during the printing stage, using material that absorb carbon instead of emitting, among many others. The PhD research, from where this state of art and literature review is part, is solid grounded in this professional experience, in the firm conviction that there is much more that can be done, and in the evidence of a growing interest for designers and companies about sustainability.



## 5. CONCLUSION

Looking in perspective the growing need to have a sustainable pattern is evident, not random actions but committed, serious and effective ones. The reason is simple, for one hand the world and the market demands it. On the other hand, there is sufficient evidence to believe that in future consumer will tend to punish companies with unsustainable practices, by not buying from them. The consumer may not know the real difference from all the eco labels, but in general it is fairly reasonable to say that the consumer today is more: aware, conscious and informed on green issues.

A theoretical framework has emerged from a critical review of the work of academics such as: Brezet, Faud-luke, O'Rourke, Ottman, Papanek, Tishener, among many others. Next step will be interviewing academics like Ezio Manzini, from the Politecnico de Milano and Aaris Sherin from St. Johns University in New York. Collecting and analysing the many existing studies about "green" consumption and consumer. Also emerging fields such as: ethical consumption, sustainable behaviour, ethical marketing, fair trade are expected to bring a new perspective into what are the consumer needs. At this stage, the PhD research is presumed that will use a data analysis, prominently qualitative. Assuming the research succeeds, validation is expected to emerge from reaching consensus through a group of experts, using a Delphi Methodology, in a web platform especially design for the PhD research.

Designers in general, but Communication Designers specifically, for what concerns the final PhD research, need to face three challenges. First, being aware and responsible. Secondly, meet the raising market and consumer expectations. And finally, contribute to convey sustainable messages. Within this perspective, the PhD research, from where this state of art and literature review is part, aims to define the concept of Sustainable Communication Design and how it can be applied into the design practice.

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