

The Story of Sustainable Design

By Adital Ela

So what exactly does “sustainable design” mean? What is this weird term which makes any sensible person frown whenever I answer the question “What do you do for a living?” This puzzled look, which appears on the faces of people from various professional backgrounds, is as common among designers, who lacking opportunity for a more thorough examination, are constantly exposed to a wide variety of design projects which are all titled “design for sustainability.” The term has recently become a buzzword and might instantly become devoid of meaning if we don’t take a minute to define its essence and aspirations.

Some Context

Sustainability is quite a new term which emerged in 1987 due to the Brundtland Commission Report (Our Common Future) that alerted the world to the urgency of making progress toward economic development without exhausting Earth’s natural resources or causing irreversible damage to the environment. The Commission defined **sustainable development** as development that can be maintained unaltered for a long period of time since it does not harm the base of resources it feeds on, and as a way of development which meets the needs of the present generation without compromising the ability of future generations to meet their own needs. The term **sustainable design** was derived directly from this term and the concept behind it is identical.

Following the Brundtland Commission Report, the **Earth Summit** - the United Nations world summit Conference – assembled in 1992 to discuss the disturbing symptoms of environmental deterioration. Representatives of 170 nations committed to the paradigm of sustainable development and signed **Agenda 21** – a blueprint for a comprehensive environmental policy which is implemented today both internationally and locally. In addition, the Agenda further determines environmental goals and development policies of countries and cities worldwide.

The last world summit dedicated to environmental issues was the **Bali Conference** held last December. It achieved an international agreement (referring to the UN scientists’ recommendations for reforms), according to which by 2050, all the world’s nations should reduce their greenhouse gas emissions by 50%.

The Bali Summit actually marked the beginning of negotiations for a new treaty to be signed at a convention in Copenhagen in 2009. This future treaty would force us all to re-examine the way we produce, consume and conduct ourselves in all aspects of life.

So What has Design Got to Do with It All?

Examining the world's population growth and rise in quality of life will bring us to the conclusion that if the whole world's population had shared the Western living standards, we would have needed at least five planets in order to satisfy our needs. Since we have, for now at least, only one planet –yet we are consuming its capital account rather than living off the interest - designers are called upon to explore, invent and develop new ways which would be five times more efficient for living and thriving on Earth. Throughout the first decade since the term Sustainability has first risen into consciousness, the majority of designers have been focusing on strategies of “green design” or **Ecodesign**, which aim at minimizing the environmental burdens of a product by using a set of considerations such as clever efficient structures, a conscious choice of materials, optimized production processes and concern for the product's afterlife.

The classical model of Sustainable Design is based on the triple bottom line: People, Planet, Profit, incorporating considerations of minimizing the product's environmental burdens with additional concerns for economic validity and balance as well as a set of social aspects. These aspects are based on values of ethical and social justice, such as equal distribution of resources and opportunities between people of different backgrounds and between us and the future generations, fair labor conditions and the promotion of equal opportunities.

To my understanding, the major role of Sustainable Design today is to scrutinize our life habits and offer revolutionary alternative solutions to meeting our needs in correspondence with nature's set of laws. The additional role of Design for Sustainability is to create motivation for individuals to examine their living standards in a manner that would enable the definition of new lifestyles which are more harmonized with the environment, while reinforcing the social-local fabric.

Common Trends in Sustainable Design

Cradle to Cradle – this term, coined by William McDonough and Michael Braungart, offers an alternative for the outdated “Cradle to Grave” paradigm by perceiving all products as part of the natural or technological food chain. According to the Cradle to Cradle concept, the design process must take into

account the product's maximal disintegration, transforming into a nutrient for either organic or industrial processes and thus gaining a new life.

Seeking ways to utilize renewable energy resources - tackling new ways for designing products which can be sustained by the renewable energy resources around us – sunlight, wind, water, kinetic energy and various biological, physical and chemical processes.

Designing products that represent a new concept of quality of life, thus encouraging people to adopt a way of living which complies with the natural environment.

Service rather than product – a designing approach acknowledging that we don't always need personal ownership over products we consume for limited use or periods of time. New business models enable leasing, lending and borrowing or joint ownership of products, saving not only money but also many resources.

Social projects designed to empower underdeveloped communities or create opportunities for enhancing community relations.

Sustainable Design – An Invite for Inspiration

Sustainable design is one of the most fascinating and stimulating fields in the design world today. The designers involved in it are challenged to think outside the box and be venturesome and innovative in their honest efforts to deal with everybody's quality of life.

In terms of the potential contribution of design to this course of development, today we are, undoubtedly, only at the tip of the iceberg and each and every one of the people active in this field has the ability to significantly influence the way our lives would look like at the age of disillusionment.

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