# An analysis of the responsibilities of environmental designers based on sustainable development

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**Abstract:** As a newly emerging developing country, China's rapid economic growth has propelled the urbanization process, necessitating continuous adaptation of the entire societal environment. However, without robust legal and regulatory constraints and without rational comprehensive planning and technical guidance, the most significant risk posed is the severe destruction of natural resources and the living environment. The design works created by environmental art designers permeate every corner of our lives, and as a result, these designers bear a greater societal responsibility.

**Keywords:** environmental art designer, designer's responsibility, people-oriented, professional ethics

## 1. Introduction

Good environmental art is not about extravagance; attention must be paid to maintaining a sense of proportion. Respect for the natural landscape is essential, and the design should be subtle and unobtrusive. The democratization of design advocated by modern design under industrial civilization calls for a shift in the designer's stance—from serving only the elite to designing for the benefit of the masses. Therefore, as environmental designers, it is crucial to approach design as a creative act centered around creation, guided by the principles of environmental protection and sustainable development, ultimately benefiting humanity. In the context of globalization, it is imperative to inherit the essence of traditional Chinese art. Despite many designers claiming to prioritize "the national is global," their design manifestations often superficially combine modern elements with traditional symbols. They fail to genuinely interpret and understand Chinese culture, reflecting on what it means to be a Chinese designer. Consequently, as we confront the advent of the intangible era, the responsibility of adapting materialistic practices to inherit the essence of traditional Chinese art in a globalized context falls squarely on the shoulders of contemporary environmental designers.

## 2. Social responsibility of designers

A broad environmental consciousness constitutes the steadfast responsibility of every designer. Focusing on the balance between humanity and natural ecological systems, contemporary designers urgently need to ponder how to establish a coordinated development mechanism among individuals, society, and the environment through design activities. If designers consistently integrate ecological and sustainable development into their designs, they can contribute significantly to environmental protection, energy conservation, and ecological preservation. The primary purpose of design is to serve human survival and life, striving to enhance the quality of human life. This is primarily reflected in the following aspects:

### 2.1. Clarifying one's social responsibility

Design creation is a purposeful social activity, not a form of "self-expression" for designers. As the creative agents in design, designers should explicitly recognize their social responsibilities and consciously employ design to meet the daily needs of the people.

The scope of design has undergone essential differences compared to the pre-Industrial Revolution era. All industries must adapt to the social and cultural context and the production and living needs of the new era. By formulating new strategies, establishing new systems, and developing new design forms and technologies, they respond to the rapidly changing social and commercial demands. Therefore, modern design is no longer an isolated "utopia" of a few intellectuals or an "anchor" that anchors the tastes of the upper class; instead, it has transformed into a "lubricant" that reconciles the contradiction between art and technology. It serves as a "prescription" to address the complexities of social production and living [3].

### 2.2. Designing for the benefit of humanity

As the primary agents of design creation, designers should focus on improving people's living conditions and the environment. "Designing for the benefit of humanity" is not only a societal expectation of designers but also where their noble social responsibility lies. Only by achieving this goal can a

designer's work be meaningful and contribute to realizing their own value. The purpose of design is to meet the needs of the majority, rather than serving a small fraction of people, especially those who are often overlooked and should rightfully receive the attention of designers. Take, for example, Kéré's return to the Gando village in Burkina Faso. Applying his lifetime of knowledge in conjunction with local realities, he embarked on designing and constructing functional, durable public facilities such as schools, hospitals, and office buildings. Engaging in a collaborative effort with the villagers to build their community, he not only imparted architectural expertise and techniques but also improved the villagers' livelihood capabilities. In the process, he taught them to fish, not just handed them fish, enhancing the villagers' livelihood skills and contributing to the cultivation of a cadre of skilled workers for the nation's rejuvenation efforts [4].

### 2.3. Designers must uphold correct values and a sense of responsibility

The professional ethics of designers form the foundation for fulfilling social responsibilities. Design theory proposes principles such as "moderate design," "healthy design," and "aesthetic design." Before embarking on each design, designers must make accurate ethical judgments regarding the tasks they face. This involves comprehensively balancing the pros and cons of design activities on society [5].

Especially under the influence of the planned obsolescence paradigm, which has opened the "Pandora's Box," it is even more crucial to guide the public through design towards adopting environmentally friendly lifestyles. For instance, promoting a healthy model of "shared economy" where "public use" replaces private ownership, aligning commercial and public welfare values side by side, can bring sustainable improvements to the economic and environmental conservation efforts in society.

### 2.4. Designers should closely connect their design practices with the well-being of society

On one hand, designers should not only cater to the market and design for the market but also direct their attention towards society, focusing on the real living conditions of people and their genuine needs. They should leverage their knowledge and abilities to engage in practical design that benefits the nation and its people.

On the other hand, design should lead to the formation of a larger-scale division of labor and cooperation system in human society. Harnessing collective wisdom to improve people's lives, as acknowledged in "Sapiens: A Brief History of Humankind," human society is not governed by the "dark forest law" of a "zero-sum game" but rather by a cooperative division of labor where each individual contributes according to their abilities. This social design, particularly through the artistic creation of space, aims to mobilize forces from all walks of life to harness "collective intelligence into a directed social force," jointly addressing the living predicaments of the urban youth.

Professor Han Tao candidly admitted that the power of designers is limited, and the real world is full of "friction." Nevertheless, designers should still strive to do their best, undertake what they can, and contribute to improving the societal and natural environment in which we live.

For instance, in light of Japan's recent release of nuclear-contaminated water significantly enhancing "background radiation" on Earth, leading to a substantial increase in cancer risks and subsequently affecting the life expectancy of the entire human race, the design of health management systems has become a pressing concern. Through design methodologies, incorporating disciplines such as "food science, exercise science, clinical medicine, and rehabilitation therapy," a comprehensive health

management and monitoring system can be established. This not only enhances the physical fitness of the nation, reducing the risk of cancer, but also involves the collection of multi-dimensional data through wearable devices, visualized on apps, for early prevention of potential diseases. Just as Steve Jobs introduced the "smartphone" as a "new organ outside the body" for humanity in the 21st century, Elon Musk's "brain-machine interface" is poised to further expand the limits of human capabilities, serving as a technological means to drive the implementation and popularization of the aforementioned "health management system" built upon Jobs' foundation.

## 3. Conclusion

In conclusion, the mission of contemporary design today has evolved from merely satisfying societal needs to "shouldering social responsibilities." This entails not only reasonably meeting the daily needs of the public in terms of clothing, food, shelter, and transportation but also guiding towards an active and healthy lifestyle that fosters harmonious coexistence and mutual benefit between humans and the myriad living beings of nature. As an environmental art designer, one should approach their work with a sense of responsibility to both the creations and society. By showcasing societal trends, promoting environmental conservation, establishing a positive corporate image, and respecting intellectual property, designers can cultivate a favorable design culture, thereby contributing to a positive design ethos.

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