

# Garbage Classification Packaging Design Research

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**Abstract.** The garbage sorting today has become all mankind will face the serious problem of common growing garbage makes environmental degradation, earth has overwhelmed, garbage problem directly affects the survival of mankind. We want to solve the problem of waste treatment as soon as possible, maximize the realization waste resource utilization, reduce the amount of garbage disposal, improve the quality of living environment, is currently the world one of the urgent problems of mutual interest. Garbage classification and treatment is of great significance, and to curb excessive packaging, advocating green packaging, and reduce the pollution caused by waste, can reduce the pressure of garbage disposal, an important source of ecological environment construction.

**Keywords:** Garbage classification; Packaging design; Environmental protection.

## 1. Introduction

In recent years, China's living garbage output growth of around 5%, by 2018, the national living garbage QingYunLiang reached 228 million tons, to become the world's rubbish most populous country. Over the years due to the improper disposal, affect human health, damage the ecological environment, social sustainable development. All countries in the world for well for "green" way out, for "rubbish" to find countermeasures. Germany, Japan, Australia, the United States, Singapore and other countries in garbage sorting through efforts have advanced road has obtained certain achievements. In the early 1960 s the United States has attention to the problem of "packaging" garbage classification and environmental protection, government adopts some compulsory recycling of packaging waste, "protect the beauty of the" ecological protection campaign. Germany in 1986 promulgated the garbage act designed to avoid and reduce waste, improve waste recycling. The Japanese government in 1992 to draft the energy conservation and promote recycling method, formally went into effect in June 1993.

Our country is also find ways to actively promote the garbage sorting. Our side will see the gate to put different colors of trash can, but still all kinds of garbage, free distribution of degradable garbage bags are also used to other rubbish. By 2014, in Beijing, hangzhou, guangzhou and other places, garbage sorting pilot has been 14 years but did not see obvious actual effect, the garbage is piled up at random or nowhere to pile up. The nation's enthusiasm is obvious on garbage sorting targets, results are not ideal. So some packaging reduction; Degradation type packaging or packaging color and garbage classification synchronization and other measures should also be, however. Shanghai packaging technology association held on the afternoon of June 11, 2019 "recycling garbage sorting packaging dewatering" round table meeting. The meeting to discuss the packaging source reduction, recycling problem at the end. How the product in under the premise of persisting the packaging function, attaches great importance to the green packaging, innovative design, strengthening the packing materials and packing materials, structure of the research design. Is advantageous to the garbage classification is of far-reaching significance of product packaging design, advocating garbage classification, packaging and burden, recycle, don't I stay, advocating environmental protection concept, save resources available, and build a civilized society.

Garbage classification and treatment is of great significance, and to curb excessive packaging, advocating green packaging, and reduce the pollution caused by waste, can reduce the pressure of garbage disposal, an important source of ecological environment construction. Able to lead a healthy life, design can change the old mode of life. Waste classification based on the problems in the process of policy implementation, we are currently facing difficulties, take the reverse thinking, avoid the old way of "mess before they treat" and tried to strangle spam problems in the bud, reduce

waste production or don't produce waste is go the way of ecological environmental protection of the king strategy. Will be from the perspective of product packaging design professional, with a fresh perspective on life garbage output larger 'advice on product packaging design, as far as possible to reduce the production of packaging waste, promote the effective implementation of the policy of garbage classification. In the packaging design can solve the problem of garbage classification:

## **2. Simplified Packaging, in the Form of Unified Material in Use**

Elegant, practical, simple is the development trend of packaging, especially to boycott the excessive packing. Therefore substitute delicate beauty, with simple instead of multifarious, simplify packing is simplified in the form of material, make through unified packaging materials packaging for garbage classification

## **3. Structure of Exquisite Packaging, Instead of a Single Material**

Consumers have aesthetic pursuit, have their own characteristics, blindly contracted packaging form can't satisfy the demand of the market. So to develop commodity attribute, structure compact, single, environmental protection material commodity packaging is more conducive to garbage classification.

## **4. Improve the Packing Material, and Promote the Development of Environmental Protection Material**

Packing is the most basic function is to protect goods, at the same time on the study of the contracted, packing material single can't ignore the protective function of packaging of goods, in the design process to sort out different attributes of commodity packaging protection requirements, puts forward the design requirements of the new material, promote packaging for garbage classification.

## **5. Packaging Design to Facilitate Disassembly Easy Classification**

Commodity packaging of the product safety into consumers' hands, necessary in order to select adhesive, rivets, solid coating etc. Solve the packing solid together a variety of materials, design to facilitate disassembly packing more conducive to garbage classification.

## **6. Packaging Design is Easy to Store More Promote Recycling**

Protect the packaging of goods must have certain space dimension, not easy to garbage collection and storage, even a single material is not easy to recycle. So structure to facilitate rapid expansion, flattening, dismantling of packaging design, in favor of the garbage sorting of the packaging.

## **7. Packaging Design "Guide Consciously" Commodity Packaging Garbage Classification**

Intuitive, clear and simple garbage sorting signal elements can promote people's initiative, complete garbage sorting behavior consciously. Using the design of visual elements and stressed that guide the consumer commodity packaging consciously garbage classification was carried out on the packaging.

The colors should be bright guide garbage sorting By using the principle of color marked, waste classification and the corresponding design, guide people to make judgments, complete garbage classification.

## **8. Packaging Design ICONS Promoting Garbage Sorting**

Packaging visual elements for commercial purpose. Specification of a set of concise, clear and prominent garbage sorting icon, and unified the ICONS on the packaging size and location of the proportion, can promote people consciously garbage classification.

## **9. Packaging Design Pattern Parsing Garbage Sorting**

Garbage classification is just beginning to implement, humanized guide and legislative requirements should be both, supplement each other. Design some strong cultural connotation in the packing design, in the form of osmosis can better promote packaging garbage sorting.

## **10. "Double Convenient" Commodity Packaging Design into the Garbage Sorting**

Basic function of packaging is to protect the goods, additional function is to increase added value, but under the new situation the packaging more environmental protection and facilitate the function of garbage classification. How to coordinate the relationship between the traditional and emerging, and "double" is the packaging design to a direction of thinking.

## **11. Conclusion**

2020 will be to build a well-off society in an all-round way, our party has the first goal in one hundred years of successful implementation. Do garbage classification source packaging design from the beginning. Go the way of environmental protection, international environment and domestic conditions are profound and complex changes. Packaging design to bold innovation, realize the packaging design to promote the development of garbage classification. As disposable goods, packaging products, energy and environment, caused great pressure to resources. Therefore, the packing should be to develop high quality, we must take the path of development of environmental protection. Lead design become green packaging. Comprehensive promotion in the field of packaging design is contracted, reduction, reuse, and easy to waste classification of packaging design, to the environmental friendly aspects on lead users and consumers. Environmentally friendly raw materials become green packaging conditions. By a single component homogeneous material, reduce packaging products regeneration difficulty; Using low gram weight, high strength, functional packaging materials, improve the recovery rate of packaging products; Application without solvent, water-based environmentally friendly composite technology such as glue, reduce the secondary pollution. Is the demand of sustainable development, green packaging form packing should be practical, avoid waste, so design can not only the pursuit of fashion and short-term effects, must starting from the demand of the Manchu people. The internal structure and function of mining natural form is also a scientific design method, can make use of bionic principle to take advantage of designed stress patterns and structural support of scientific and reasonable packing structure.

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