

**Manifesto de Resíduos***The waste manifesto***Victor Margolin, D.Sc**

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**Resumo**

Margolin apresenta um manifesto bem informado e historicamente fundamentado sobre a natureza do lixo. O "Manifesto de Resíduos" de Margolin descreve a economia do desperdício e faz uma chamada à luta. O objetivo de uma economia sustentável dos resíduos é reutilizar os resíduos tanto quanto possível, até ao ponto de reduzir o excedente de resíduos a zero. O autor sugere algumas estratégias para se criar uma economia global sustentável dos resíduos. Ele adverte também que há urgência na adoção de medidas para evitar o nível de desastre ambiental que nós vemos agora no mundo das finanças.

**Palavras-chave:** Design, resíduos, sustentabilidade, economia

**Abstract**

*Margolin offers us an informed and historically grounded manifesto on the nature of garbage. Deemed The Waste Manifesto, Margolin describes the economics of waste, and offers a call to arms. The aim of a sustainable waste economy is to reuse as much waste as possible, even to the point of reducing waste surplus to zero. The author suggests some tasks toward creating a global sustainable waste economy. Margolin warns that purposeful action are urgent to avert the level of environmental disaster that we now see in the world of finance.*

**Keywords:** Design, waste, sustainability, economy

Waste is part of life. Human and animal bodies produce natural waste, whereas societies produce synthetic waste. While we cannot control the level of natural waste as its production is an organic part of biological survival, we can drastically reduce the production of synthetic waste. Natural and synthetic waste come in two varieties – reusable and non-reusable. The aim of a sustainable waste economy is to reuse as much waste as possible, even to the point of reducing waste surplus to zero.

To accomplish this, we would need to create a flow-through society in which all waste – natural and synthetic – is reused. The opposite of a flow-through society is a cul-de-sac society in which waste flows into dead end spaces where it cannot be reused. Nonreusable waste is the equivalent of fat in the human body; in excess it produces social obesity. Because the waste economy is so complicated and so little is known about it, we can best approach the subject initially through metaphors that will help us to envision the consequences of an unsustainable waste economy.

Obesity is a useful metaphor because of its connotations: excessive and sluggish. The image of a cul-de-sac society is also helpful because it brings to mind dead ends and useless collections. “Trash” and “garbage” are two terms that we apply to cul-de-sac waste. Both have negative connotations and prevent us from imagining the transformation of waste into new forms. Conversely, the image of a flow-through society helps us imagine a place of movement and transformation where waste is constantly converted into new, usable forms. Such a society results from an efficient waste economy.

The consequences of an unsustainable waste economy are not only obesity, but also toxicity. Dumping chemicals into public waterways, burying metals in landfills, and improperly sealing and storing toxic refuse from nuclear reactors all pollute the water we drink and the air we breathe. Such actions also poison the food we eat as we have seen with mercury contaminated fish. Likewise, excessive carbon dioxide through motor vehicle exhausts has contributed to global warming.

To offset these dangerous consequences of obesity and toxicity, we need to construct a sustainable waste economy. This is a daunting task but it is essential to the long-term survival of human life. Such an economy would counteract the following destructive tendencies:

- The conversion of large spaces into landfills, which in reality are garbage cemeteries.

- The high cost of disposing of non-reusable waste.

- The reduction of otherwise reusable waste that could be converted to commoditized products.

- The toxicity of improperly disposed of waste materials.

- The medical costs of treating the impact of toxicity on human health.

- The politics of landfill locations and nonreusable waste disposal.

- The potential of reaching limits for disposing of nonreusable waste; limits of space, limits of money, and limits of political tolerance.

The simple recognition of an unsustainable waste economy's consequences forces the conclusion that the disposal of nonreusable waste cannot continue forever. When limits are reached, the consequences of continuing with unsustainable waste-disposal practices will be widely evident and politically charged.

The first task toward creating a global sustainable waste economy is adopting some terms that make sense and can be used with a shared understanding of their meaning. First is the term “waste.” Waste itself is not inherently negative, given that it is a necessary consequence of biological and social activity. Garbage and trash are its negative descriptions, but waste can have benefits. In the most positive sense, reusable waste can play an important commodity function in a sustainable waste economy. Disposing of waste, managing it, and transforming it into new products would provide large numbers of jobs. In a flow-through society, these costs are returned as waste is transformed into new materials. In a cul-de-sac society, waste-disposal costs become a drain on municipal, state, and national budgets. But the transformation of waste provides a great challenge for inventors, designers, and social managers. In recent years, new uses have arisen for materials that would otherwise have become garbage or trash. The slow development of can be attributed largely to a lack of will and complacency about the future availability of resources.

Manufacturers have found new ways to reuse waste materials to create new products such as recycled paper and parts for automobiles. The costs of manufacturing with recycled materials may be currently high but can surely be reduced, as this becomes a mainstream activity.

When we consider the need for an efficient and sustainable waste economy, perhaps the largest obstacle to building such an economy is public ignorance of how it might work. There is almost no public information on where waste goes. We deposit human and social waste in various types of receptacles and then continue obliviously about our business. Now that we are in the midst of a severe financial crisis, the destructive aspects of the global financial system are being exposed and regulation has become a social demand. The earlier relaxation of regulations was due in part to the public's ignorance of what was at stake. Bankers created unsustainable commodities while the public remained in the dark. Only when the system crashed did we begin to see the negative implications of what had been done.

While the waste economy is not yet on the edge of crashing as a whole, parts of it have already collapsed, particularly through unsustainable levels of pollution in our air, land, and water. The accumulation of trash and garbage is also approaching unsustainable levels, where there will no longer be space to bury any more of it, nor will poor countries wish to take it, even if they are paid well to do so.

To explain to the public how the waste economy works will require a massive education effort, one that politicians would be well advised to support. We must first identify the many kinds of natural and synthetic waste, and then clarify how it is currently handled. Finally, we must understand how a sustainable waste economy would work. Bits and pieces of this knowledge are already public and have prompted the involvement of activists. Communities have rallied to protest chemical dumping in public waterways, heavy polluting of coal-fired factories, and the inefficient disposal of nuclear waste. As consumers, however, some of us put up with excessive packaging, insufficient opportunities to recycle, and the manufacture of products that add more toxicity to our land, water, and air.

There are also social groups who advocate less consumption and urge the design of products that can last longer. All these efforts are worthwhile but can be strengthened and expanded as we better understand how the waste economy works in a flow-through society and how dysfunctional it is in a cul-de-sac culture.

As a social product, the waste economy calls for a comprehensive design approach. Just as economists are trained to think about the financial economy as a system, we need trained experts who can think about the waste economy in a similar fashion. Designers are essential to enabling the transformation from an unsustainable to a sustainable waste economy. We not only need new products that can last longer, be disassembled, be reconverted, and can function without toxic components but we also have to find ways to package products with materials that can be more easily recycled or reused. And finally, we need new systems to generate economic value through collecting natural and human waste and transforming them into new products. A few far-sighted people have begun to work in these areas but they mostly lack the ability to join their own efforts to those of others in a systemic way.

At stake in attempting to create a sustainable waste economy is the issue of whether or not we can avert dysfunctional social obesity, something that can paralyze us logistically, physically, and economically.

The current financial crisis has shown us that capable minds are available to consider better alternatives to the failed economic system that caused such havoc. Until we understand that there is a systemic waste economy that is also malfunctioning and nearing critical limits, we are not in a position to imagine large-scale interventions. We need to learn more about how waste economies function, clarify for the public the mechanisms of the current system, and assess which can contribute to a new sustainable waste economy and which are the equivalent of toxic financial assets. We also need purposeful action to avert the level of environmental disaster that we now see in the world of finance.