

Touch, Collect, Display, Order, Measure, Map, Inflate and Build with Waste! Pablo Rey Mazón

At the beginning of the century, we started working with trash because it was an accessible and affordable resource. There were plenty of materials and objects available at zero cost in the streets and containers of Madrid. (We learned later that this is not always the case in many places in the world). Basurama was born there.

Basurama (basura = trash, -orama = wide view of, ama = love)

Basurama is a nonprofit organization based in Spain that experiments with different approaches to waste. It has developed a series of projects to use waste as a resource to raise awareness of waste production. These projects take shape in different ways, such as workshops, public art interventions, maps or data visualizations, and work with a wide range of stakeholders, ranging from neighborhood communities and local artists to municipal governments.



Trash Safari. Madrid, Spain, 2005.

We deal with trash every day, we produce it at every step: it's in our pockets, on the streets. Despite its ubiquity, it's difficult to define it. What is waste? As Kevin Lynch in "Wasting Away" points out, "waste is what is unwanted or unused for human purpose"; but it also could be defined as "things [that are] in the wrong place."

This idea of waste is a very broad and ambiguous concept (garbage, trash, litter, junk, dirt, residues, scrap). An old chair out on the sidewalk is perceived as waste; this same chair might be useful and enable us when in our living room. Therefore, waste may be something that we build in our minds, a way of mentally tagging objects: "trash" or "not trash."

It is "the B side of society," a mirror where we can look to understand our consumerist and capitalist society. (Movimento Nacional dos Catadores de Materiais Recicláveis). We want to get rid of our waste as soon as possible. The concept of waste is usually seen as something bad, dirty, even evil, is commonly applied to objects and materials, but also to spaces and people.

Garbage collectors from the formal and informal sectors "are not respected because they handle the waste we fear and despise."

Detritivore Design Mathew Lippincott

The average North American generates roughly 1 million pounds of waste per year. Some designers seek to end this waste through creating fully recyclable, zero waste products that have a "Cradle to Cradle" plan for their materials. This production ignores existing waste that cannot be easily recycled but still has significant value. Recycled materials are easy to provide ethical satisfaction of efficiency and concern, without the difficulty of changing design practices to accept the limitations and dimensions of found objects. We should put more effort into designing around the persistent functionality of objects whose primary purpose has failed, and do so at the systems level.

CAD programs allow designers to make simple customization templates that can be fed directly into automated production systems to create shoes in custom colors or bikes with a custom fit." Several proponents of parametric design have gone further to create systems of interchangeable components and centralized databases of components' CAD files."

Detritivore design is similarly software-dependent, but instead of programming in pre-production parameters for mass customization, it uses software to enable the mass incorporation of discarded objects with a certain set of interoperable features. Software becomes a strategy for normalizing the usefulness of hardware from varied sources, rather than varying the look and feel of hardware from the same source.

Public Lab's detritivore strategies are the same as those found in the larger DIY movement. Our methods for identification and integration of found objects, are often manual, ad hoc, and limited, built on top of systems for creating fresh new objects, not using broken old ones. In a case study of our spectrometer are seeds of a more

Detritivore design is an extension of parametric design, whereby the plans for an object can be re-sized and shaped prior to manufacturing. A parametric design is most commonly a CAD file with several rescalable features usually used for making customized stuff. Proprietary and open source

With over 200 billion CDs and over 1 billion DVD players in the world, it's unlikely that we'll ever run out of hardware.

(again Kevin Lynch). They deal with our dirt. This misconception is a typical one: if someone deals with trash, he/she becomes trash. On the contrary, waste pickers show us with their work how garbage can be treated, reduced and saved, closing the open-ended loop that industrialized countries are not able to close. Recycling is, for the most part, the reason-excess-mechanism to produce and consume more. We do support recycling, but as the less-bad option in a world where overproduction and waste production is the rule.

At Basurama, we want to promote the understanding of waste in all its different scales (from diapers to buildings) and formats (ideas, ads, oil on a beach) in which trash takes shape. It is "the B side of society," a mirror where we can look to understand our consumerist and capitalist society. The concept of trash, as we know it today, had to be invented and developed not that long ago! We want to show that trash is an opportunity, something to play and to work with, or something that should have been produced differently (designed for durability or for disassembly, for example).

Our goal is to make people think of waste as a resource for reuse that also helps us understand society. (Through workshops, videos, data (waste) visualizations, or public interventions we encourage people to touch, display, collect, measure, weigh, map, inflate and build with it.

We've organized a bunch of trash safaris (a kind of dumpster diving) to look for all kinds of materials for our workshops and projects. The hunt usually takes place by night and in the city. The experience of searching and scrapping in public and meeting other waste pickers is as important as getting good materials and objects.

Collect it. There are national and international statistics about the amount of waste generated per capita, but how about collecting how much you generate during one or two days, carrying it along with you and analyzing it? We've done this exercise in many workshops. It's a great way to learn that waste doesn't disappear when we stop seeing it inside the bin, to recognize that we only directly deal with a small amount of all the waste we really produce. Also to realize that we are what we throw away.

Display it. Waste production processes are usually hidden to the public eye. Official garbage collection is usually done by night collecting bins that are opaque. Members of Basurama have worked to confront the amount of waste we produce in direct way. During a large music festival, for instance, we organized a giant, transparent public bin to better illustrate the waste generated each day of the festival. Like a geological cross-section diagram, different "cras" (layers) could be appreciated: plastics cups during the night, newspapers during the day.

Order it. Garbage is a mixture of colors and shapes hardly distinguishable. When walking on a dumpsite, it's difficult to see individual objects—we just see trash. If we order waste by color, shape or material, new patterns and objects emerge and garbage is no longer perceived as garbage. (See second hand clothes reordered on cover).

Measure it. It is not just that we generate it, we literally buy it waste. Almost everything we buy is waste. To calculate how much of it we purchase, we did an experiment to measure the Waste Packaging Index of different products (WPI). We weighed the product and the packaging to get the ratio (WPI = Packaging / Gross Weight). Maybe

Self-made amusement park. RUS Lima. Peru. 2010.

Giant trash bin for music festival. Eros lo que tiras (you are what you throw away). Benicàssim, Spain 2007.

We have prepared a short list of actions to encourage people to do things with waste, apart from the popular "8-extended rule: reduce, reuse, recycle & repair."

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This equation is so too limiting, though—we've considered finding ways to include other data such as how volume, price, footprint or where materials will end up. We still like the simplicity of the WPI, even though it underestimates the harm of light weight foam and plastics.

Map it. We've researched, visited, and mapped waste infrastructure in the Boston area, and potentially reusable junk in the Ruhr region of Germany. We've also organized conferences on bus tours to bring people to landfills and other abandoned or forgotten places. We believe it's important to see the trash and corresponding infrastructure with your own eyes. If you cannot go we can bring you evidence and photos of those places. In the 600km.org project we photographed and mapped urban metabolism during the real estate bubble in Spain by showing on a map the location of landfills (car tire cemeteries, junkyards), empty toll highways, and recently urbanized areas.

Mapping provides an expensive visual example of the amount and types of waste around us. Even the act of mapping in itself can create a physical awareness to the subject. Sometimes, just the act of mapping brings attention to the things that are mapped (like having a poster on the wall is the moment when the poster has more visibility) and it creates a community while having fun doing it (Public Lab community knows about this).

Inflate it. Basurama has recently developed a series of projects to build giant inflatables with plastic bags and plastic leftovers from packaging. Just a small fan is needed to inflate these new ideas. It's a way of reusing Ant Farm ideas with reused plastic.

Build with it. The best way to show that materials found in garbage are still fine is to build with them. Together with community-based organizations and the general public, we've used discarded materials—pallets, cardboard, car tires, PET plastic bottles—to build installations and playgrounds in public space. Reusing materials and abandoned spaces is the best way to show multiple scales of waste and the possibilities and affordability of reusing them.

Industrialized waste makes possible the systematization of certain reusing methods. Our colleagues at Superuse Studio in the Netherlands have developed a tool to create a public database of leftovers ready to be upcycled (harvestmap.org) and another one with multiple reuse examples (superuse.org).

Gathering together to map something is powerful: "the landfill and incinerator plant are here," "our waste is burned here," "what are the impacts, what can we do together?" In that sense, I've turned into a "landfill cartographer" and I've drawn several landfills in OpenStreetMap over the years. They are the type of facilities that don't usually show up in Google Maps.

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