



Trashmagination Podcast #73 – 5 Favorite TED Talks about Creative Reuse

Welcome to Trashmagination, a podcast about reimagining trash. I'm Carla Brown.

In today's episode, I'll share my five favorite TED Talks about creative reuse. TED stands for Technology, Entertainment and Design. The first TED Talks were hosted in 1984. If you go to the TED Talks website and search for creative reuse or recycling, you will not find that many talks, which I think is quite surprising. The few that exist have been emailed to me many times by my friends.

The one I receive most often is called "Turning trash into toys for learning" by Arvind Gupta in 2010 [https://www.ted.com/talks/arvind_gupta_turning_trash_into_toys_for_learning]. It has been viewed more than one and a half million times. I am not surprised that people love to hear about making toys from trash. Out of my 72 podcast episodes so far, the most popular are all about toys. Those episodes talked about how to creatively reuse stuffed toys, how to make dollhouse furniture and how to make musical instruments from trash. It's like people are most comfortable with the idea of creative reuse when it's related to children and playing. This is actually something I have struggled with because many of the things I make are too difficult to be made by a small child and yet people think only small children would want to make or own something made from trash.

Arvind would be a far better resource on this topic of fun project ideas for kids that involve trash. He started designing toys in the 1970s as part of a movement to improve how science was taught in village schools in India. In his talk, he demonstrates science lessons with his toys. In the first lesson, he shows how to teach math concepts using pieces of inner tube and matchsticks. He goes from simple concepts like a triangle all the way to how you could build a model of the molecular structure of methane from trash. Arvind says that it's important for teachers and students to make things from simple objects so they can "get a thrill of what science is all about."

One of my favorite quotes from his presentation is when he's talking about how tetrapaks cannot be recycled because they are aluminum and plastic fused together, but he cuts and folds them into little cubes to teach concepts. He says, "something which is trash, which is choking all the seabirds, you could just recycle into [something] very joyous."

I think Arvind's talk is popular not only because he makes intriguing items from trash but because he is so excited to show you all the properties of those materials. He puts a straw in his mouth and plays a funny honking sound, then cuts off bits of the straw so the sound gets higher and higher. (10:00)

If you would like to make toys like he describes, his website shows how to make many designs [<http://www.arvindguptatoys.com/toys.html>] and there is a hashtag of #arvindguptatoys where people share their creations.

The next TED Talk on creative reuse that I recommend is by Dan Phillips and it is called "Creative Houses from Reclaimed Stuff" [https://www.ted.com/talks/dan_phillips_creative_houses_from_reclaimed_stuff], also given in 2010 and viewed by more than a million people. Dan builds the most unbelievable houses from trash in Texas. When you look at the photos of the houses he has built, you don't instantly know they were made from trash until he points out the details. He is rescuing building materials in many cases, although he also makes decorations from items as unusual as hickory nuts and chicken egg shells.

Dan gives his opinions on why so many building supplies get thrown away. He says it is because our brains like to see patterns, and we like for things to look the same from one context to the other. So when a window breaks or there is some imperfection in whatever material we are using, we say it is trash. When he builds homes, he takes delight in the imperfect and finds ways to make them work together. If a piece of wood isn't perfect, he uses his skills to make it work rather than bringing it to the dumpster.

So perhaps one of the most important skills we can learn when it comes to creative reuse is to be okay with things not looking the same. Dan encourages us to have more open-mindedness about what is the acceptable pattern of things. He says "Repetition creates pattern. If I have 100 of these, 100 of those, it makes no difference what these and those are. If I can repeat anything, I have the possibility of a pattern."

I love what Dan is saying here. I think that's why so much creative reuse art is about using trash items over and over again in a pattern. We have to emphasize the pattern part of the art so people can get over the idea that we are using an unexpected material.

The next TED Talk I recommend is by Suzanne Tick and her TED Talk was called "Weaving trash into treasure" in 2016 [<https://www.youtube.com/watch?v=LpoVsgySoeE>]. Of course I was so excited to find this TED Talk because she is a weaver like me and she weaves with trash like me. We even share a name (Susanne is my middle name although I spell it differently.) The way she talks about weaving on the loom is exactly how I feel. She says, "The process of weaving the loom allowed me to relax and forgive myself and forgive others."

Her dad was a scrap metal dealer by profession and so she grew up in a creative reuse household. Her dad even used to provide a warehouse for local creative reuse artists. In her talk, Suzanne shares examples of her many very unusual weaving projects, such as a weaving she made with 3,500 metal dry cleaner hangers for the Gates Foundation which now hangs between the offices of Bill and Melinda Gates.

To make this weaving, Suzanne needed help to gather enough hangers. Creative reuse projects are often collaborative. You need help collecting enough materials. Like Dan Phillips said in the previous talk, the human brain needs patterns to recognize value. Creative reuse artists are often asked to make art installations that are enormous. But it's not easy to gather thousands of items that most people throw away without a thought. So many of my creative reuse project ideas have been put to the side because I just can't get enough of the same material in a large enough quantity.

Suzanne's dry cleaner hanger weaving project started as a small weaving inside her holiday cards for friends and family, and one person then hired her to make the huge sculpture. I think this is another great point about creative reuse. It is important to make a little prototype and put it out there. You never know who will get excited about it, and then support your project or connect you with the right people so you get to build your entire vision. Or your small vision might exponentially grow with the unexpected input of an enthusiastic person.

Another thing I admire about Suzanne's work is that she creatively reuses materials that are very difficult to reuse. In addition to dry cleaning hangers, she wove her divorce papers after shredding them. She wove Mylar balloons that washed up on the beach. She wove a piece for a synagogue from the Mylar balloons, and here's something she said about that: "People go to worship and pray sometimes because they feel like trash and disposed, and what we really want to feel is picked up and repurposed and transformed into something beautiful, and connected to something."

This goes to the heart of why I do creative reuse. I think it's about a lot more than reducing trash. It is about being mindful about what is around us, and sending a message that we value each other.

The next TED Talk I recommend is by Jamie Furniss called "The World's Best Recyclers are Not Environmentalists" from 2011 [https://www.youtube.com/watch?v=m5b56eQ_fJk]. Jamie went to Pearson College in British Columbia which I also attended, although I attended about 15 years before Jamie. Pearson College is a school with about 200 students per year, all on scholarship and it was created based on the idea that if you get a bunch of young people together from many cultures, they might go out into the world and become a force for change. After attending Pearson College, Jamie studied international development and became an expert on the garbage collectors in Cairo, Egypt.

In his TED Talk, he talks about how our waste management system in the West creates an illusion of cleanliness. When we put our trash on the curb, it disappears and if we can't see our trash, that means everything is good. But that waste still exists. In other cultures, trash and recycling is processed in a more visible way, and this can lead to more innovative creative reuse.

This week I learned about a concept called Jevons Paradox, which says that when technology improves how efficiently we use a resource, sometimes that means we use it more, not less. Efficiency does not always lead to conservation of resources. So for example, when our trash is efficiently taken away, we might produce more trash.

In Cairo, at first glance, there is nothing efficient about how waste is processed. Jamie shows photos of people processing it in great big piles. But in Egypt, the recycling rate is 80%. In comparison, many Western countries recycle only about 25% of waste.

In Egypt, there are two garbage collection systems. The first is a system like ours with trucks and landfills which has only existed for a decade or two, built based on advice from Europeans. But before that system came, there was a community of people who processed trash called the Zabbaleen. They process about 15,000 tons per day. They sort through trash, separate items based on material and then sell it to factories to be reused. As Jamie says, "This is a business of resource extraction, not waste disposal." That is how they had such a high recycling rate.

Some women micro-entrepreneurs in this community creatively reuse trash to make items. They weave plastic into bags, make paper and sew patchwork [<https://www.forbes.com/sites/elizabethmacbride/2017/01/08/in-cairos-garbage-city-the-lure-of-profits-is-strong-so-are-the-mothers/#1f6dd9721c39>]. I would like to learn more about this creative reuse community.

Association for Protection of the Environment - <http://www.ape.org.eg/index.html>

The last TED Talk about creative reuse that I recommend is by Akira Sakano. Her talk is called "ZERO WASTE - A way to enrich your life & the society" from 2016 [<https://www.youtube.com/watch?v=pgRnAsK18es>]. Akira lives in Kamikatsu, the first community in Japan which set a goal for zero waste. The town works on this goal mostly through composting and recycling. Residents sort waste into 45 categories. Akira talks about how sorting waste makes people reconsider taking the item in the first place. Since a disposable coffee cup contains four types of waste, that's a lot of work. In that context, it is less work to bring your own reusable cup.

The part of their efforts that I'm most interested in is of course how they encourage creative reuse. There is a shop in town called the Kuru-kuru shop. Kuru-kuru means "circulate." It has items people can take for free. In one year, the shop resulted in 11 tons of material being reused, which is a lot for a small rural town.

In addition they have the Kuru-kuru Craft Center where people remake items and upcycle things into new items. For example, Akira wears a beautiful coat made from a fish flag. This is a decorative flag that is typically flown on Children's Day. Craftspeople in town made these coats and many other beautiful items for the shop.

There is also a pub in town that was built from upcycled building materials. It is a cool looking building with a wall made from recycled windows [<https://www.weforum.org/agenda/2017/11/this-japanese-pub-is-made-out-of-100-recycled-materials>]. It is my dream to visit Kamikatsu some day.

Great Big Story - <https://www.youtube.com/watch?v=OS9uhASKyJA>

Stories - <https://youtu.be/eym10GGidQU>

Thank you!

Thank you for listening! This was a lot of fun! I think I might do more episodes about the best TED Talks related to creative reuse, so if you come across a good one, please let me know at trashmagination@gmail.com. Until next time – may you see more TED talks on creative reuse as a source of inspiration in your life!

Instagram / websites of the TED Talk presenters:

- Arvind Gupta - <http://www.arvindguptatoys.com/toys.html>
- Dan Phillips - <http://www.phoenixcommotion.com/>
- Suzanne Tick - <https://www.instagram.com/suzannetick/>, <https://suzannetick.com>
- Jamie Furniss - http://www.san.ed.ac.uk/people/faculty/jamie_furniss
- Akira Sakano - <https://www.instagram.com/akirakakapo/>