

Fabricating a Value Revolution

Abstract

Within the last millennium, civilization has gradually become a “throw-away culture.” Consequently, out of the 78 million tons of plastic pollution produced every year, only 2% is actually recycled. Even with the increased awareness given to our environmental issues, there remains a lack of knowledge about the enormous amount of plastic pollution that is produced globally, including that of styrofoam. The objective of this paper is to bring attention to these issues through the materials and processes I employ. After first making art with used items, I turned to using styrofoam as a medium. I was able to turn discarded plastic into works of art, including jewelry that rivals expensive pieces. I want viewers to recognize that we can value recycled objects just as much as new ones. There is no simple answer to the problem of plastic pollution, yet we have to start somewhere, and that somewhere is to reuse.

Fabricating a Value Revolution

As an artist, my aim is to explore and transform how American culture thinks, makes, and values materials. I grew up in the country and developed a strong connection to what the West calls “nature.” The outdoors is a big source of inspiration for my art, and I have become increasingly aware of just how important it was to me to ensure the environment, as well as my art-making, be as less affected as it possibly could.

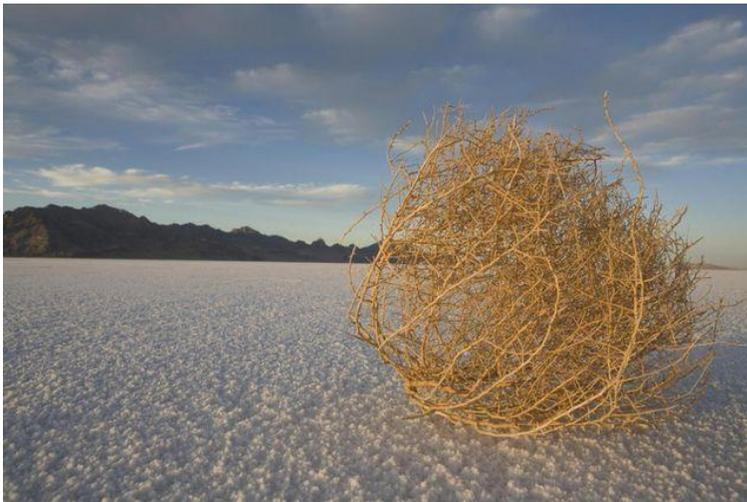


Fig. 1, Bear, Danger Ranger, “The Tumbleweed,” Photograph, 3/25/2019, dangerrangerbear.com.

On a nine-hour drive to Kansas, I found myself bombarded by thousands of tumbleweeds blowing across the road in front of me, which made me wonder about their origins. Tumbleweeds are an invasive species of sage that was brought here from Russia. ¹ Once tumbleweeds die, they break off from their root system and are at the mercy of wind, forcing them to roll along the ground or float through the air. For what is a tumbleweed without wind? It shapes itself in response to the wind and becomes one with it. This freedom of movement is what makes tumbleweeds so invasive, spreading their seeds over massive distances.

1. Nuwer, Rachel. “America’s Tumbleweeds Are Actually Russian Invaders | Smart News | Smithsonian Magazine.” Magazine. Smithsonian Magazine, August 15, 2014. <https://www.smithsonianmag.com/smart-news/americas-tumbleweeds-are-actually-russian-invaders-180952360/>.

During this drive, I also watched plastic bags floating as freely as the tumbleweeds. With thoughts of these two kinds of objects running through my mind, I created a sculpture called *Phenotypic Plasticity*, where I used a tumbleweed and plastic bags as materials. I melted plastic bags around branches of a tumbleweed to reflect how plastic bags are also an invasive species.



Fig. 2, McCoy, Rick, *Phenotypic Plasticity*, Tumbleweed, plastic bags, 58" x 60" x 35", 2019



Fig. 3, McCoy, Rick, *Phenotypic Plasticity*, Tumbleweed, plastic bags, 58" x 60" x 35", 2019

Fig. 4, McCoy, Rick, *Phenotypic Plasticity*, Tumbleweed, plastic bags, 58" x 60" x 35", 2019

According to Ocean Crusaders, currently shoppers worldwide are using approximately 500 billion single-use plastic bags per year. This translates to about a million bags every minute across the globe, or

about 150 bags a year for every person on earth. This number is rising every month. If you were to join all of these bags end to end, they would circumnavigate the earth 4,200 times.²

The problem of plastic pollution arises partially due to a lack of understanding of how it is affecting the environment of this planet in the long term. The importance of preserving nature (or the environment) differs among cultures; people are shaped by culture and behave accordingly. But I have to agree with French philosopher Gilles Deleuze, in that all things in the Universe are interconnected, similar to a plant rhizome system. We are living in networks of energy, or intensities, always in flux and constantly responding to our environment, which we are a part of, not just as observers. However, Western values tend to see objects as something to be used and discarded. Consequently, the decisions we have been making on a daily basis have turned us into what I call a “throw-away culture,” whose values need to be reassessed and transformed.

While researching single-use plastics, I was appalled by the statistics on how atrocious the plastic pollution problem really is. According to Sky News, 78 million tons of plastic packaging is produced every year. Of that 78 million, only 14% gets collected for recycling. And sadly, of that 14%, a mere 2% truly gets recycled at a high enough quality to be reused. Then, 14% of it gets burned, and 40% of it goes straight to the dump. The last 30% doesn't get collected at all. It pollutes the planet, getting into our waterways, oceans, and backyards.³

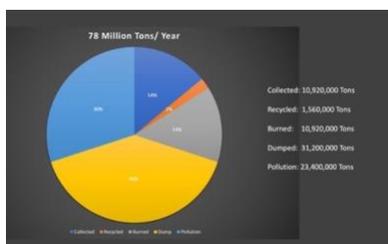


Fig. 5, McCoy, Rick, Sky News Statistics, 2020

2. “Plastic Statistics – Ocean Crusaders.” <https://oceancrusaders.org/plastic-crusades/plastic-statistics/>

3. Sky News. *Dirty Business: What Really Happens to Your Recycling*, 2018. <https://www.youtube.com/watch?v=oRQLiXLAIU&t=308s>.

To be clear, this amounts to 23 million tons that is not collected at all. This number increases exponentially each year. Plastics take somewhere from 500 – 1000 years to degrade to the point of becoming smaller plastic particles called microplastics, and even further to nano plastics. These are then ingested by animals, including humans. According to the World Wildlife Fund, the average human potentially eats around 2,000 microplastics per week.⁴



Fig. 6, Corcoran, Patricia, Plastiglomerate, Photograph, 06/19/2014, Huffington Post

Carla Russo's article in the *Huffington Post*, "Plastiglomerate: The New and Horrible Way Humans Are Leaving Their Mark On The Planet," discusses how scientists have recently discovered a new type of rock on the beaches of Hawaii.⁵ It consists of sedimentary rock and natural debris and is held together by melted plastics that were pulled in from the ocean. These have been named "Plastiglomerats," which are formed when plastic trash melds into one. These new rocks are an example of how the earth is consuming and altering synthetic oil-based creations back into itself, creating a new paradigm.

4. "Microplastics Found in Human Organs, According to New Study." <https://www.greenmatters.com/p/microplastics-detected-human-organs?gm>.

5. Russo, Carla. "Plastiglomerate: The New And Horrible Way Humans Are Leaving Their Mark On The Planet | HuffPost." 06/19/2014, https://www.huffpost.com/entry/plastiglomerate_n_5496062.



Fig. 7, McCoy, Rick, *Amalgamated Communication*, Cement mixture, chopped fibers, cement colorant, chicken wire and weed paper armature, tie wire, used telephone line, used telephone connection board, halo blue acrylic paint, copper powder, glow in the dark paint, steel cable, cable clamps, Form 1- 23" x 26" x 19" Form 2 - 27" x 26" 21.5", 2019

My piece, Amalgamated Communication is meant to mimic this paradigm shift, while using locally found materials. The sculpture is made from concrete, a wood and wire armature, and an assortment of plastic connectors I found at a local phone company.



Fig. 8-9, McCoy, Rick, *Amalgamated Communication*, Cement mixture, chopped fibers, cement colorant, chicken wire and weed paper armature, tie wire, used telephone line, used telephone connection board, halo blue acrylic paint, copper powder, glow in the dark paint, steel cable, cable clamps, Form 1- 23" x 26" x 19" Form 2 - 27" x 26" 21.5", 2019

Discarded cell phones are becoming an enormous predicament. Companies are also using telephones and electronic components that are constantly upgraded and discarded. We are continually creating more advanced technology to serve us better; however, once new equipment is distributed, the outmoded devices are discarded. We need to look beyond the initial usefulness of an object to see that it could have the potential to be used in other ways. My intention with this piece was to show how important the problem of constantly upgrading our technology is becoming.



Fig. 10-11, McCoy, Rick, (*Amalgamology*, Cement mixture, chopped fibers, cement colorant, chicken wire and weed paper armature, tie wire cement mixture, chopped fibers, cement colorant, chicken wire and weed paper armature, tie wire, densified styrofoam, used plastic duster, used floor cleaner, found marina foam, used plastic shopping bag, used plastic a/c filter, used plastic foam packaging, found used shipping crate, Crate - 33" x 37.5" x 33", Form - 24" x 27" x 16", 2019

While *Amalgamology* mimics a plastiglomerate, I also used plastics that we are finding floating in the oceans. *Amalgamology* is displayed inside of a shipping container as if it had been found and shipped to be put on display. These materials pull the viewer in to try and ascertain what the work is made of. Hopefully, my sculptures cause viewers to scrutinize their own responsibility for how these new rock types have come into existence.

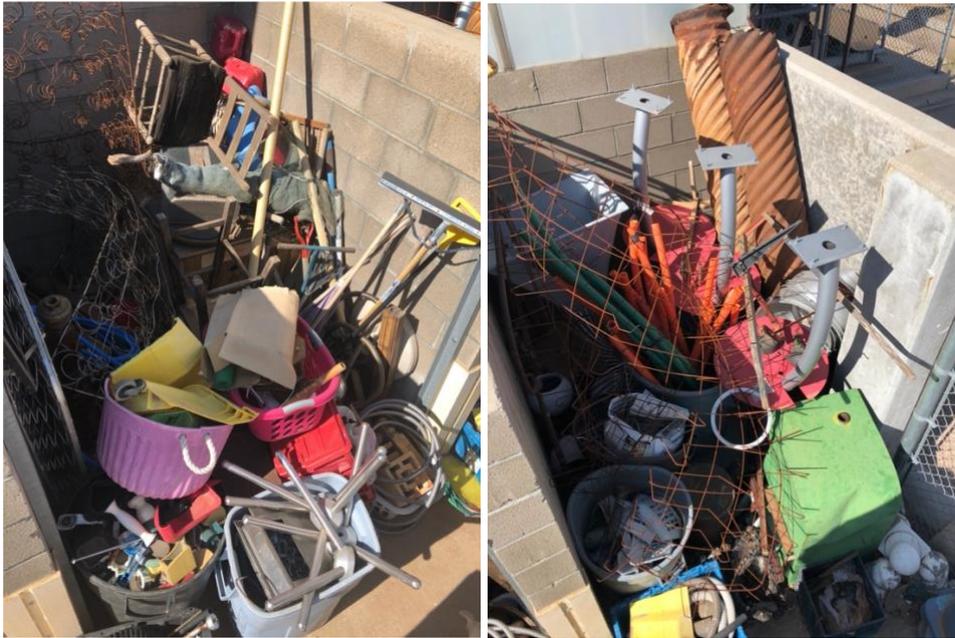


Fig. 12-13, McCoy, Rick, Collected materials from Lubbock, Photographs, 2020

My current research has also influenced the way I collect materials for my art. I am an avid scavenger or “trash miner.” Collecting obsolete discarded objects has become an integral part of my making practice. I spent the previous two years gathering items from hoarders, scrappers, and trash collections in the Lubbock area. By transforming these items into artistic expression, I have been able to add new value to these items and illustrate to the viewer one potentially answer to the problem of a disposable society: that of reusing before buying new.



Fig. 14-15, McCoy, Rick, Locations where materials were collected in Lubbock, Photographs, 2020

In the images above, you can see some of the sites where I collected materials. This unique art statement illustrates how one person can make a small difference to help keep the environment cleaner.

Continuing with this idea of using objects, I began experimenting with jewelry design to create wearable works. I use found materials in an evidentiary way to defamiliarize and recontextualize them. Thereby, I am questioning their potential functionality, values, and our dependency on them.



Fig. 16, McCoy, Rick, *Dissemination of Detritus*, Used PVC, neoprene rubber, brass screws, 14" x 12.5" x 5", 2019

Dissemination of Detritus uses found objects like this orange PVC pipe as material for a wearable piece, reminiscent of the shift in the making of jewelry in the 1960s.⁶ Using found objects helps open the tradition of jewelry up to new possibilities.



Fig. 17, McCoy, Rick, *Dissemination of Detritus*, Used PVC, neoprene rubber, brass screws, 14" x 12.5" x 5", 2019

6. Victoria and Albert Museum. "V&A · A History of Jewellery." <https://www.vam.ac.uk/articles/a-history-of-jewellery>.

Transmission of Ignorance was created using discarded wires that were twisted and cut into equal lengths. Copper and walnut spacers were used to spread the wires to create a fanned-out wearable.



Fig. 18-19, McCoy, Rick, *Transmission of Ignorance*, Used wire, 20-gauge sheet copper, copper wire, walnut, 18" x 9" x 3.5", 2019

In the middle of this investigation, I visited the recycling center at Texas Tech University to find out what I could recycle from there. I was introduced to a machine called a styrofoam densifier.⁷ Styrofoam is a form of plastic called "expanded polystyrene foam." When foam is heated and melted down while removing air to a 90:1 ratio, it leaves a very dense, hard, material.⁸ A few months after my visit to the recycling center, I discovered they were selling the densifier. I jumped at the opportunity to purchase the machine to continue my research with this material. By using this machine, my goal is to call attention to this process of recycling, which most have never seen or heard of. I am now using this densified foam to create art.

7. RecycleTech. "RecycleTech – Plastic Foam Densifier XT 200." <http://www.recycle techno.com/products/plastic-foam-densifier-xt-200/>.

8. Rogers, Tony. "Everything You Need To Know About Polystyrene (PS)." Creative Mechanisms, 11/05/2015 <https://www.creativemechanisms.com/blog/polystyrene-ps-plastic>.



Fig. 20, McCoy, Rick, Recycle Tech XT-200 styrofoam Densifier, 2020



Fig. 21, McCoy, Rick, *Densified Absurdity*, Densified styrofoam, magnets, monofilament, 21" x 11" x 3.5", 2019

Densified Absurdity came from my observations of the different qualities of the styrofoam after it had gone through the process of densification. It has a look similar to bone, petrified wood, stone, or even bark. The white has qualities of pearls, and at its size, it looks very heavy. However, being made out of plastic, it is lighter than it appears. If it were made of petrified wood, for instance, it would weigh around 10-15 lbs. As it is, it only weighs 2.3 lbs. It is interesting to use plastics to mimic the things we are destroying with the very thing destroying it.



Fig. 22-23, McCoy, Rick, *Densified Absurdity*, Densified styrofoam, magnets, monofilament, 21" x 11" x 3.5", 2019

For jewelry, I further experimented with the densified styrofoam, pushing the material and thinking about value systems and why certain materials are viewed to be worth more than others. Within these experiments I used mimicry in *StyroStone Jade*, where the densified styrofoam processed through my machine was cut, shaped, sanded, and polished.



Fig. 24, McCoy, Rick, *StyroStone Jade*, Polished densified styrofoam, sterling silver piping, sterling silver sheet, sterling silver necklace, 2020



Fig. 25, McCoy, Rick, *StyroStone Jade*, Polished densified styrofoam, sterling silver piping, sterling silver sheet, sterling silver necklace, 2020

When the styrofoam is polished, it mimics stone similar to jade. In this piece, silver is combined with the styrofoam, creating a juxtaposition between the two materials. One material has been valued for centuries, and the other is viewed as trash. The discoveries I made while using densified styrofoam in jewelry led me to wonder what else I could make or how else I could use this material. I began to wonder how much of this material is made and how I could portray this in sculptural form. I knew then that densified styrofoam needed to find its way into an installation-based piece, and while thinking about this, I began reading a book about hyperobjects.

As mentioned earlier, like tumbleweeds and plastics, styrofoam has become tremendously invasive in today's society. In fact, Timothy Morton, the chair in English at Rice University, has determined styrofoam has become prevalent enough to qualify as a "Hyperobject." In his book, *Hyperobjects: Philosophy and Ecology after the End of the World*, he defines hyperobjects as things that have become "massively distributed over time and space in relation to humans; they are so huge and so long-lasting, that they seem both vivid and slightly unreal for exactly the same reasons." ⁹ Hyperobjects are "hyper" because they are

9. Morton, Timothy. *Hyperobjects: Philosophy and Ecology after the End of the World*. Posthumanities 27. Minneapolis: University of Minnesota Press, 2013, 1.

enormous objects whether they are tangible or an elusive principle. Even if you can't touch them, they have an effect on everyone because they are massively distributed in time and space, like race or class. They could also be a very long-lasting product of expressly human manufacture, such as styrofoam or plastic bags.¹⁰

Morton says, "hyperobjects seem to force something on us, meaning they are there whether we want them or recognize them."¹¹ In fact, the long-term effects of being a throw-away-culture are so daunting, that once you become aware of them, they necessarily affect the decisions that we make. With plastic pollution, one cannot help but realize that we all have contributed to it, and that it will significantly affect how we live in the future because each and every styrofoam cup will outlive us by at least five hundred years.¹²

With Hyperobjects in mind, I created a new series called *Manufactured Landscapes*. I used the styrofoam densifying machine to create each piece, which became a part of a large installation for my thesis exhibition. This installation illustrates a tiny fragment of a hyperobject and as I display it in a gallery setting it becomes a dreamlike installation that gives densified styrofoam the agency it deserves. I wanted to make this installation ominous with a weighted feeling to make the viewer uneasy and possibly think about the collective actions of a throw-away culture. I called this *Manufactured Landscapes* because they are meant to be metaphors of landscapes that have been altered by large-scale human activity; and they are also manufactured from man-made materials. They are displayed on the floor to mimic geographic strata, which grounds them in our time.

10. Morton, 1.

11. Morton, 15.

12. Morton, 60.



Fig. 26, McCoy, Rick, *Manufactured Landscape 1*, Densified styrofoam, 62" x 34" x 9", 135.6 lbs., 2021

Manufactured Landscape 1 is created from styrofoam sourced from shipping containers, cups, clam shell containers, and egg cartons. Colored advertisements printed on some of these items gave this piece its color. You can see the once viscous nature of this material as it was being run through the densifier. This piece rests on the floor, frozen in mid-melt and the colors mimic flowing oil from the styrofoam is made.



Fig. 27, McCoy, Rick, *Manufactured Landscape 1*, Densified styrofoam, 62" x 34" x 9", 135.6 lbs., 2021

This piece bears marks across it similar to those of fault lines on the earth's surface. In addition to a number of colors shown here, there are many layers of different types of styrofoam that mimic geological strata.



Fig. 29, McCoy, Rick, *Manufactured Landscape 2*, Densified styrofoam, 46.5" x 33" x 14", 131.8 lbs., 2021

The densifier machine is a hungry beast with a never-ending appetite. I feed the styrofoam into the machine as a meal, and the results are immediate. It will spit out the likes of the above rock-like forms, or long tubes of spiral pipelines. In goes the styrofoam, and the big tines act like teeth breaking it down then forcing the foam into the auger, which acts like a stomach digesting it, then the machine excretes it. This is an uncanny correlation because animals are ingesting plastics on a daily basis.



Fig. 30, McCoy, Rick, *Manufactured Landscape 2*, Densified styrofoam, 46.5" x 33" x 14", 131.8 lbs., 2021

Manufactured Landscape 2 is made up of 132 lbs. of styrofoam which is an absurd amount. To date I have densified over 2,600 lbs. in just a few months. This goes to show the ludicrous amount of single-use styrofoam that is thrown away on a daily basis. I am just one person collecting what I can in one location

from just five companies and a few consumers. You can now imagine the amount that a larger city, with a larger population and more businesses, is throwing out every day. Now imagine how much that would add up to in a full year. Or even try to imagine the entire world...



Fig. 30, McCoy, Rick, *Manufactured Landscape 4*, Densified styrofoam, 26" x 32" x 12" Stand – 22.5" x 66", 40.4 lbs., 2021

Manufactured Landscape 4 is made up of 40 medium-sized styrofoam coolers. I then placed it on a simple black frame in order to get it up off the floor to get it into space and time, instead of being placed on the floor and grounded in our current time. Bringing this material up to eye height gives it prominence as well as a feeling of higher value. In doing this it forces the material to confront the viewer at their level.

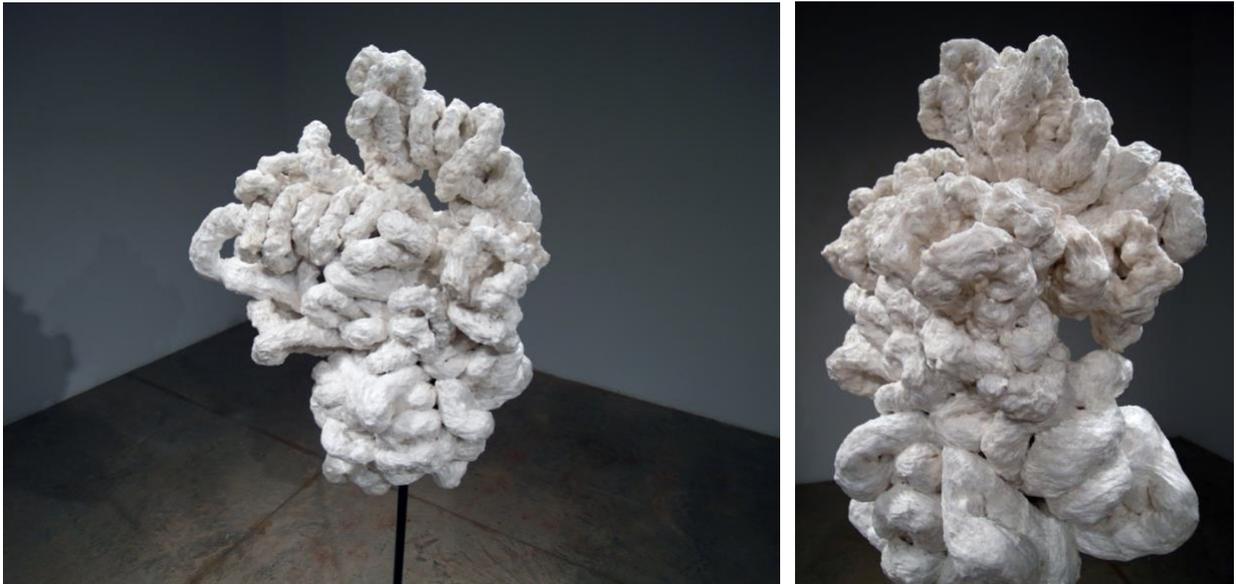


Fig. 31-32, McCoy, Rick, *Manufactured Landscape 4*, Densified styrofoam, 26" x 32" x 12" Stand – 22.5" x 66", 40.4 lbs., 2021



Fig. 33, McCoy, Rick, *Composition 1*, Densified styrofoam, nails, 40" x 49" x 15", 15.8 lbs., 2021

Composition 1 is a more gestural-styled piece that mimics Gilles Deleuze's theory of the rhizome. Deleuze believed that "all things in the Universe are interconnected, making them similar to a rhizome

system.”¹³ In the introduction chapter to ‘Thousand Plateaus’, Deleuze describes what he calls the “image of thought” which is based on a plant rhizome that is a “dimensionless unity with no beginning and no end. While growing, they form plateaus at the middle of the networks where the connections are located within the tightly interwoven system.”¹⁴ Here, you can see that no elements work alone, they are all interconnected. You can visually see the connection points within this piece, which are similar to plateaus. Deleuze stated, “rhizomes ceaselessly establish connections between semiotic chains, organizations of power, and circumstances relative to the arts, sciences, and social struggles.”¹⁵ *Composition 1* mimics the gestural, multidirectional, and multiplicity of connections. By using plastic to make this piece, it creates a physical demonstration of what a rhizome might look like and ties these ideas together rhizomatically because the material used has invaded and connected every area of the planet.



Fig. 34-35, McCoy, Rick, *Composition 1*, Densified styrofoam, nails, 40" x 49" x 15", 15.8 lbs., 2021

Through this research into humankind’s wastefulness, I began to realize how much scrap is made during the process of creating art. With this in mind, I wanted to see if there was a way to get to zero waste while using styrofoam to make art. Consequently, I found that any off-cuts, grindings, or shavings from the

13. Deleuze, Gilles, and Félix Guattari. *A Thousand Plateaus: Capitalism and Schizophrenia*. Minneapolis: University of Minnesota Press, 1987.5.

14. Deleuze, 5.

15. Deleuze, 5.

densified styrofoam can, in fact, be collected and then remelted to create other objects like brooches, earrings, necklaces, rings, etc.



Fig. 36-37, McCoy, Rick, *Densified Brooches*, Densified styrofoam, pins, Dimensions Variable, 2021

Here you can see examples that I call *Densified Brooches*. In jewelry, fine materials like gold, platinum, and diamonds are considered valuable because these resources are more rare than other materials. If humans would realize there is more reason to value the refuse we have created, it would be a giant step in the right direction. We must find ways to reuse it and to value it as much as precious metals.

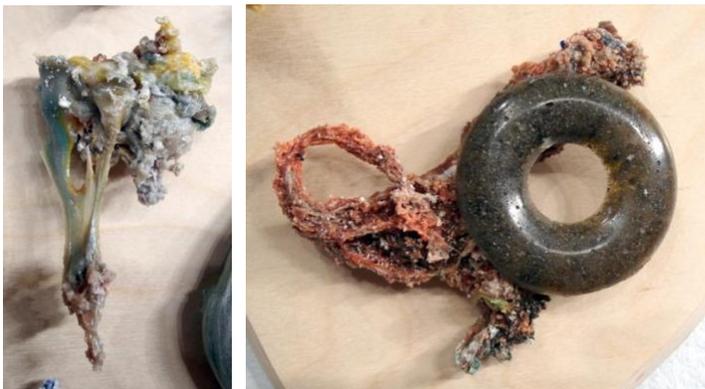


Fig. 38-39, McCoy, Rick, *Densified Brooches*, Densified styrofoam, pins, Dimensions Variable, 2021

My methodology in using styrofoam as a material is to treat it the same as other substances such as wood, metal, and plaster: by breaking it down to its stock form before using it. Through this investigation I aim to see how this altered material can be manipulated and how it responds to different processes. My principal goal is to use this exploration to call attention to the absurdity of humankind's wastefulness and consumption choices. I also want to call attention to this unique process of recycling styrofoam, which most have never seen and generally don't know exists. And by using plastic and "trash" in creative ways, others will have an opportunity to realize that any material can be reused and that anything can become something else, instead of throwing everything away and adding to our pollution problems. Plastics have become a particularly harmful hyperobject that we won't be able to eliminate easily. There is no simple answer to this problem, yet we have to start somewhere, and that somewhere is to reuse. Through the process of making art in this way, I want the viewer to recognize that in order for change to be made, the entire world needs to start valuing materiality and the objects we make, sell, and use.

Bibliography

Deleuze, Gilles, and Félix Guattari. *A Thousand Plateaus: Capitalism and Schizophrenia*. Minneapolis: University of Minnesota Press, 1987.

“Microplastics Found in Human Organs, According to New Study.”

<https://www.greenmatters.com/p/microplastics-detected-human-organs?gm>.

Morton, Timothy. *Hyperobjects: Philosophy and Ecology after the End of the World*. Posthumanities 27. Minneapolis: University of Minnesota Press, 2013.

Nuwer, Rachel. “America’s Tumbleweeds Are Actually Russian Invaders | Smart News | Smithsonian Magazine.” *Magazine*. Smithsonian Magazine, August 15, 2014.

<https://www.smithsonianmag.com/smart-news/americas-tumbleweeds-are-actually-russian-invaders-180952360/>.

“Plastic Statistics – Ocean Crusaders.” <https://oceancrusaders.org/plastic-crusades/plastic-statistics/>.

RecycleTech. “RecycleTech – Plastic Foam Densifier XT 200.”

<http://www.recycle techno.com/products/plastic-foam-densifier-xt-200/>.

Rogers, Tony. “Everything You Need To Know About Polystyrene (PS).” *Creative Mechanisms*, 11/05/2015

<https://www.creativemechanisms.com/blog/polystyrene-ps-plastic>.

Russo, Carla. “Plastiglomerate: The New And Horrible Way Humans Are Leaving Their Mark On The Planet | HuffPost.” 06/19/2014, https://www.huffpost.com/entry/plastiglomerate_n_5496062.

Sky News. *Dirty Business: What Really Happens to Your Recycling*, 2018.

<https://www.youtube.com/watch?v=oRQLiXLAIU&t=308s>.

Victoria and Albert Museum. “V&A · A History of Jewellery.” <https://www.vam.ac.uk/articles/a-history-of-jewellery>.