THE PROBLEM

In 2012, Americans generated about 251 million tons of trash. Around 75 percent of this trash is recyclable, yet only about 30 percent actually is recycled. Landfills form, filled with usable materials that can be revived to serve a new, or improved, purpose. Americans have an inclination of buying new items instead of repurposing the ones that they already own. It is estimated that this year, Americans will spend about $121.7 billion dollars on refurbishing homes.

So why is it that new is so appealing? I feel like poor design is part of the blame for this issue.

THE PROJECT

I believe that constraints make you be more creative. The world is running out of resources so what the intention of this capstone project will be to make one realize that using what is readily available is not trash, but quite the opposite. What if found objects and reclaimed materials become all that we can use? We should take what we already have and see it in a new light. Commonplace objects are meant to serve several purposes. After all, necessity is indeed the mother of all invention.

Design should last decades, not just a few years. Design should be aesthetically pleasing as well as educating individuals on how to be more cautious with the environment. Material choices play a significant role in teaching about sustainability. If we limit ourselves to sources that are not harmful and local, as well as methods that are non-polluting, we will be forced to design smartly. We need to learn how to rediscover the norm. When everything is readily available and cheap, we don’t value what isn’t. That leads to the next issue in sustainable design: why are sustainable products so expensive? Whilst researching for this paper, I noticed a majority of the companies that use sustainable methods to create their products sell them at quite a ridiculous price. While I do understand that maybe taking out a few of the production process requires more work and expense, sustainability should not have a reputation for not being affordable. Through the projects I will be working on this semester, I am hoping to convey that sustainable products can be inexpensive; even free.

SUSTAINABILITY

Social Systems – Several designers, artists, engineers etc. have already created works along this line, but it hasn’t reached popular publishing. Most of these works get published on design websites, which are geared towards designers and not the general public. These types of articles need to be integrated in areas that the general public will see them. The easiest and cheapest solution would be to share them on social media.

Built Systems-Thinking about a cleaner way of building. Not throwing out the scraps from a project when finished would have the biggest impact. Craigslist and other community listings can be a good aid in sharing those scraps, one man’s trash is another man’s treasure. Altering designs to fit the needs of what is available instead of vice versa.

MATERIALS AND METHODS

There was a wide range of materials used in this project. The materials for the lamp were locally sourced wood (recalimed wood is harder to obtain than I figured), LED lights, available paper and recyclable plexiglas. The method involved a process known as coopering, which is used in making buckets. I used the Architecture department’s woodshop, which was readily available to me.

The materials I used for the bike bag were a reusable shopping bag, velcro straps and a sewing machine. The project cost me nothing as I had all the items. It was a very simple project that only took me about an hour. I have been using the bag for about 4 months now and it has proved useful. For the second bike bag, which is a roll bag for my saddle for tools, I used an old pair of ripped jeans, some stiff foam paper, velcro, sewing machine and a pair of old shoulder pads with some felt. A belt can be used as well but is optional. The cost of this bag has also been close to nothing as I had these materials and altered my design to fit with whatever I had.

The method for altering older clothes and making them new again is pretty simple. I like to thrift my clothes and change them to fit my needs by dying them with natural fruit and vegetable dye and also altering them with my sewing machine. The example I have represented is a pair of pants I had laying around and had not worn in about 3 years. To make them more wearable, I changed them into straight leg pants and they have proved to be a lot more useful than when they were laying around in my closet.