Using Art to Normalize Sustainable Behavior
Geography 360
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Summary

To the larger student population at OWU, behaving sustainably on campus is not a norm. There is a wide disconnect between sustainable thinking and sustainable living and oftentimes students have the best intentions but fail to fully act on them. Inconvenience, lack of knowledge, and social stigma cause many students to hold back from participating in recycling, using the green-containers, and attending 'green' events. In order to increase student involvement in current and future sustainable activities, sustainable behavior must first become the social default.

Training a behavior to become a norm is a long process that is full of abstract, psychological concepts. In relation to sustainability, the Minnesota Pollution Control Agency developed the *Psychology of Sustainable Behavior* (appendix A), providing tips to empower people to take environmentally positive action. It's clear that participating in sustainable behavior is very much a social construct rather than an environmental one. In order to transform this behavior into the social default, it's important to acknowledge that some modes of action are likely to be more effective than others. In the case of sustainability, forcing it on our peers is likely going to result in defensive, annoyed responses. Taking a subtler approach could prove to be more effective. One such approach is through the use of aesthetics.

Displaying art that is made of recycled/reusable materials is one way to capture students' attention in a nonaggressive manner. If placed in a common area where students see it every day, they may grow a new perspective on their own, without someone 'shoving it down their throat'. If students were to see a certain piece and develop a fondness for it, they might learn to appreciate what it stands for, thus provoking a shift in their ideologies.

The sustainable art created in this project consists of recycled clay and glazes molded into tiles that are to enhance the exterior of the chimney swift towers.

Methods & Results

The process of recycling clay can be slightly tedious, but worth it. Clay is a nonrenewable resource, but our desire for it appears to be open-ended. Not only is clay used for pottery and art, it's presence extends into beauty products (facial masks, deodorants, makeup, shampoo, toothpaste), medicinal products (for cuts, burns, food poisoning, bug bites, digestive issues, bloating, vomiting, acid reflux, and removing toxins, impurities and chemicals from the body), and construction (clay roofing, bricks, tiles). Because clay is found in many facets of our lives, being responsible with its disposal is extremely important.

For this project, we recycled clay from Ohio Wesleyan University's ceramics studio. There are four steps in the process: sorting and drying, slaking, more drying, and then using or storing it.

The first step involves sorting clay from old projects into buckets. It is important to sort like with like, usually by color and maturation range. If the next project is intended to be white, then keeping white clays separate is necessary. Furthermore, different clays have different maturation ranges or the degree to which a clay or glaze has vitrified or sintered during the firing. Keeping clays with higher maturation ranges from being mixed with those with lower ranges will prevent the project from turning out uneven. The clay is sorted into buckets until it is about half way full. The clay is then

left to dry completely. After drying, the larger chunks are broken down into smaller pieces. Once this is done, the next step is slaking.

The term 'slake' is essentially a fancy word to say we soaked the clay in water. We added water to the bucket of scraps until the clay was unable to absorb anymore. At this point we allowed the clay to sit for a few hours, typically overnight, resulting in a wet slurry. During this step, we mix in any other materials we wanted to recycle. Usually, this consists of leftover glazes which are unable to be poured down the drain due to their toxicity. After mixing in the glazes, we transferred the slurry to a shallow container to evaporate excess water. This process typically takes a few days, so we just stirred it as we waited. After the excess water evaporated, we were left with extremely wet clay, so we needed to let it dry.

This drying step is different from the initial one because we didn't want the clay to dry out entirely, otherwise it wouldn't be useable. We simply wanted to dry it to a working consistency that could be stored or used. In order to dry the batch of clay, we worked it onto a sheet of plaster. The plaster absorbed the moisture and allowed it to dry out to a nice consistency. When the clay could be formed into a ball without sticking to our fingers, we removed it from the plaster. At this point we reach our final step—storing and using it. We stored our clay in heavy duty plastic bags. Because clay doesn't go bad, it's important to make sure the bags are air tight and lock in the moisture, otherwise the clay will dry up. We pulled chunks of the recycled clay from the bag as needed to make the tiles.

To make the tiles we wedged the clay and placed it in a plaster mold. We worked the clay into the mold by pressing it with our fists and hitting it roughly to remove all the air bubbles. Once it was sufficiently molded, we used scrapers to remove the excess clay until the surface was smooth and even. At this point the clay needed to dry. This was done by either letting it sit for roughly 20 minutes or blow-drying it. We did both, depending on our haste. After it was dry enough we removed the clay tile from the plaster mold by tapping it on the table. At this point the clay is still wet, but dry enough to be fired. Before firing we cut the edges so they were straight and used a fork to scrape the back. This is to allow a point for the adhesive to attach to when we put them on the chimney swift towers. We then removed any excess clay pieces by wiping the tile down with a wet sponge. Once dry, the tile was fired in the hiln. Each tile resulted in more scraps that we threw into the bucket to be recycled again, as they were too dry to be put back in our bag of freshly recycled clay (appendix B).

Once the tiles were fired, we were finished with them. However, on some tiles we used photolithography. This is the process of transferring a picture of high contrast to clay. This involved taking a photo through an inkjet printer, covering a hard glass surface with oil, laying the photo down on the surface and then applying more oil. After wiping the excess oil off, a roller was used to press the oil into the photo. The photo was then taken off the glass and pressed onto the clay tile. After waiting for the photo to dry almost completely, we used the back of a plastic spoon to rub the photo onto the clay more, thus transferring the image. Once we were sure the image had been transferred completely, we removed the photo from the tile (appendix C).

Although we don't have enough tiles for the chimney swift towers yet, a total of # tiles were made. However, the chimney swift project itself is not complete yet, so there is still plenty of time to develop more tiles. Whenever the chimney swift towers get put up, the tiles will be put up shortly after.

Recommendations

1. Time management is key. The tiles can only be made so quickly, so it's important to budget enough time to meet the goal number.

2. This project was focused on creating as many tiles as we could, but once we know exactly how big the chimney swift towers are, we can develop a projected number of tiles necessary to cover them.
3. Considering more ways to embellish the tiles. As stated earlier, we were focused mostly on making them (aside from the lithography), so coming up with creative ways to design them, or a creative idea for when they get put up, such as a mosaic, might be something worth looking into, as this is a project geared toward sustainable art and aesthetics.

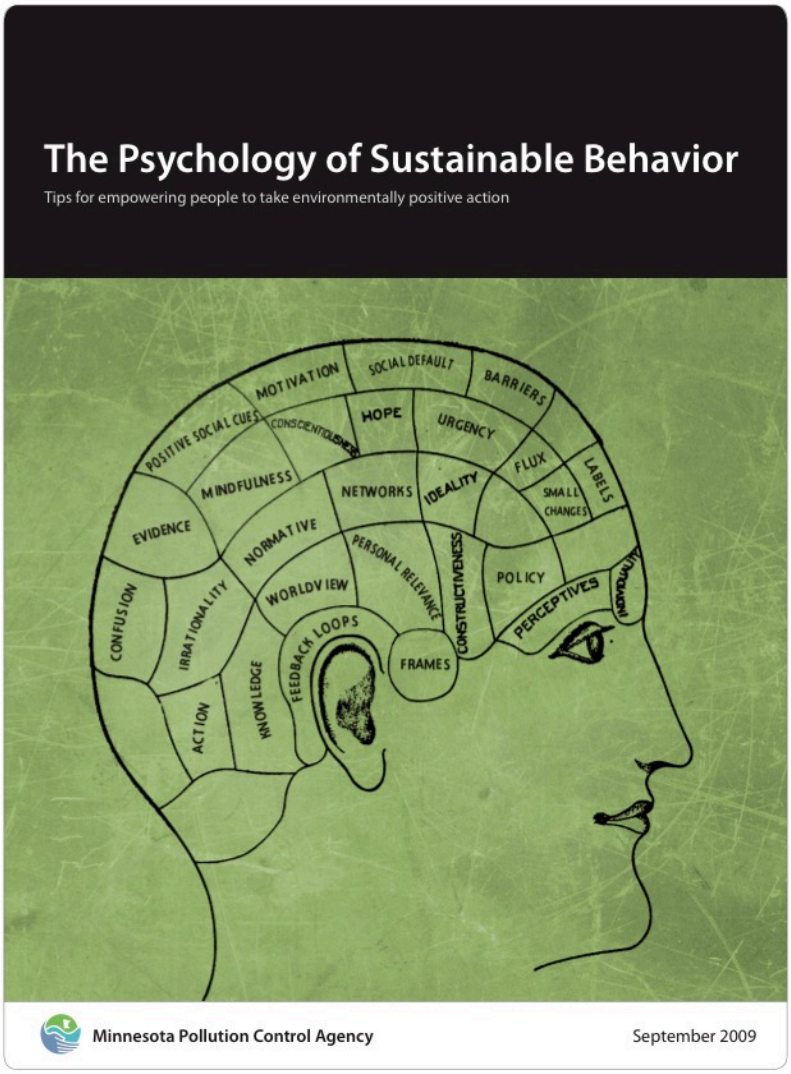
Contacts

Ashley Tims: aatims@owu.edu
- Partner in the project

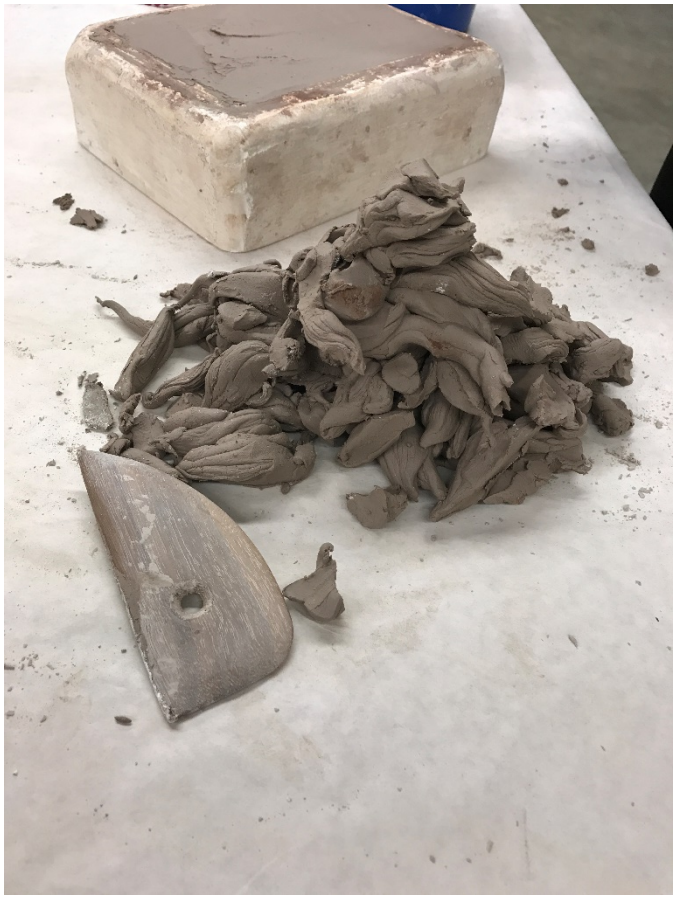
Kristina Bogdanov: kkbogdan@owu.edu
- Ceramics professor who helped through the entire process, from brainstorming the project to photolithography

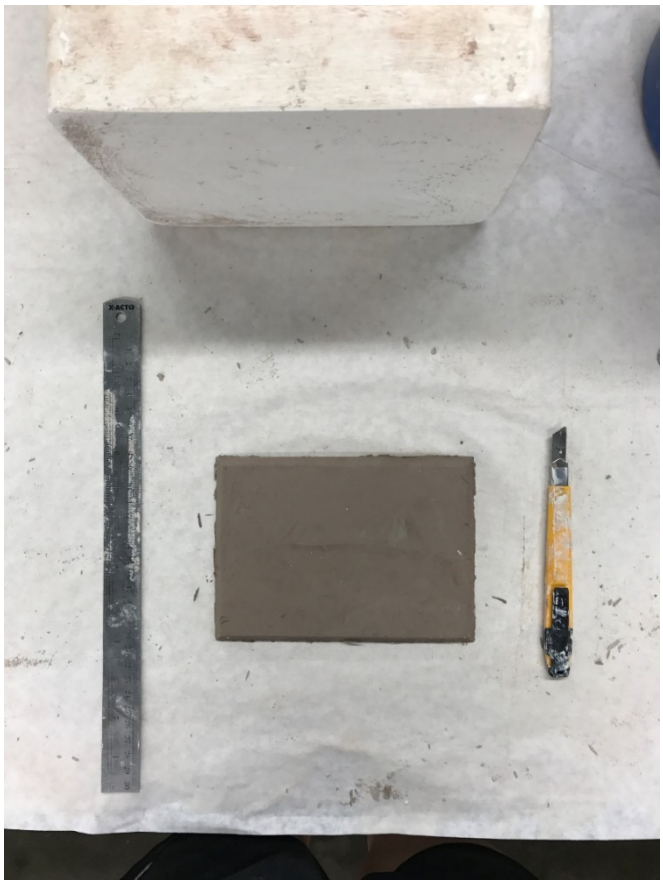
Appendix

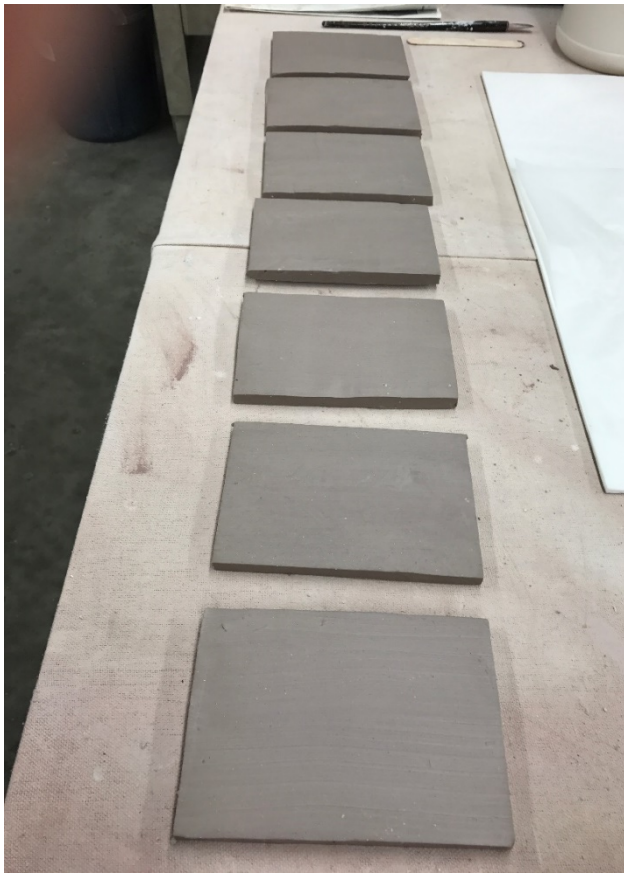
A.



B.







C.