[container(**space**)]

PROJECT

Adaptive Reuse of a Shipping Container as Sustainable Student Exhibition Space

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We, Art and Visual Technology students Daniel Dean, Tom Nutt and Ellyce Morgan, have undertaken a re-construction and research project focused on a discarded shipping container. Acquired by Tom Ashcraft, Associated Professor and Coordinator of Sculpture, in the spring of 2008, Ashcraft challenged upper level sculpture students to investigate the properties of this object for a transition from global shipping container into a versatile exhibition space for art. We have begun working towards this end by reaching out to the wider resources within the campus and broader community. Partnering with GMU's Art & Visual Technology Department and the Sustainability Office we hope to bring together a diverse group of people that can share knowledge and experience transforming this object into a student run exhibition center/space. This project is underway and owes much to the material and advisory support of Tom Ashcraft, Ben Ashworth and the GMU Art & Visual Technology Department.

We perceive substantial educational benefits gained in the safe adaptive reuse of the container as well as critical design challenges inherent in this project. The gathering and coordinating of diverse aspects, people, materials, technical skills and funding provide interesting opportunities for collaboration and mutual benefit. Such As:

1) **an exhibition space for students.**

    a. This container will function outside of expected norms of art gallery spaces. We have decided not to add onto the container in an effort to disguise its origins but to rather work within the constraints of its architecture to highlight possibilities for creative exhibition opportunities. Since it is a collaborative effort on the part of students, the space works outside/alongside of the conventional, top-down administrative system. This has led to the establishment of an exploratory committee to research and establish the container as a standalone, student managed exhibition space.

2) sustainable building and design:

a. This project investigates and implements many innovative, small-scale sustainable building practices while also using recycled materials to reduce costs and eliminate waste. The container will be painted with "0" VOC paint, installed with custom fabricated skylights which will allow natural light into the exhibition space, and a complete flooring redesign that will complete the construction process. We have begun a plan for both human-powered electrical turbines and solar panels to power low-voltage, home-made LED gallery-style lighting. We are currently researching to work collaboratively with GMU undergrad/graduate electrical engineering students in developing an innovative power system aligned with the philosophy of sustainability.

b. With the inclusion of a discrete power system, we hope to create one of the first spaces on campus that completely abides by GMU's zero emissions commitment (http://www.presidentsclimatecommitment.org/). This effort will act as an experimental proving ground in regards to the development and implementation of renewable energy technologies and stand as a model for the larger community.

3) investigation of the container as a global economic/industrial/cultural object:

a. The presence of an industrial shipping container on an inland college campus far from its point of entry is an interesting and important starting point for multiple levels of investigation into the role this object has played in economic globalization. The container has VIN-style plates that identify its manufacturer (Chinese), the primers used to protect the steel shell (Korean), the owner of the container (U.S.) and the international organization that inspects and approves it for international standards (French). Some unknowns; its wood floor was constructed of cedar and it has traveled on one or more ships to an unknown number of ports before being sited on the university. This leads to interesting social/economic/anthropological investigations and has been the genesis of new visual research on behalf of the artists involved.

4) **National and International precedence.**

containerart.org

ContainerArt.Org is an international organization that provides grants to develop and exhibit proposals for innovative uses of shipping containers with in a contemporary art framework.

http://www.fabprefab.com/

A web resource that tracks developments in the use of shipping containers as the basis for habitable structures.

http://www.cmu.edu/news/archive/2008/September/sept26_arttrailer.shtml

Carnegie Mellon University project

5) Partnerships

-Below are the campus departments and private companies, to date, that have generously donated time, expertise and resources into this project

a. GMU Department of Art & Visual Technology, College of Arts & Sciences

   http://www.avt.gmu.edu/

b. GMU's Office Of Sustainability

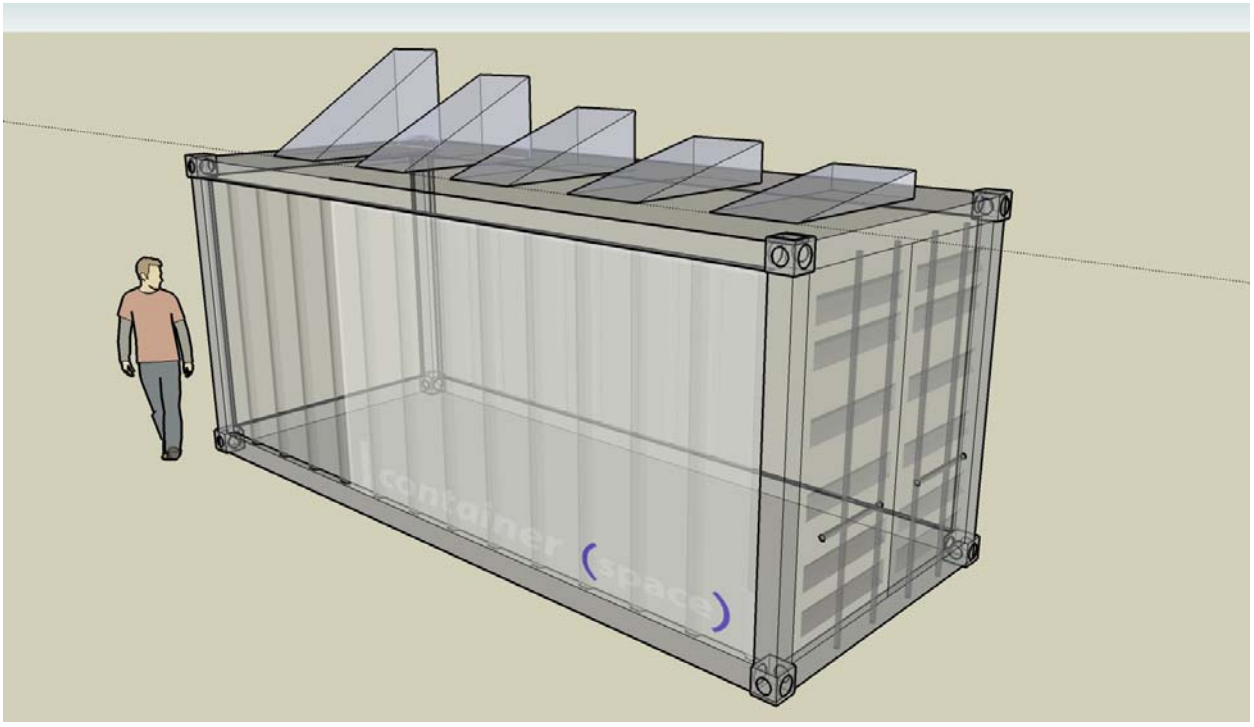
   http://green.gmu.edu/

c. VStarz Corp, Clynton Caines

   http://vstarz.net/

d. Blue Army Corp

   http://www.bluearmyhandyman.com/



(Figure 1- 3-D rendering of shipping container; to scale; demonstrating size, along with placement and spacing of custom skylights.)

We envision this project as a long-term sustainable work with tremendous educational/outreach benefits. Alongside the practical and technological issues that exist, we are approaching this endeavor as a conceptual artwork. Presenting the (re)design in an aesthetically interesting way that highlights the container's architectural and historical assets is an essential aspect of our project. We are also researching the uniqueness/ubiquity of the container as an industrial product and using this as a departure point for the creation of related artwork. The container is an contemporary artifact of globalization that exists as an object and metaphor for the exchange of commodities between nations. We are curious about the geographic reach of this object from the time of its creation to its placement on GMU's campus. As an object, this container can be defined in many ways, from materials to architecture to content. We plan to investigate these ideas, put them in motion, and allow for new perspectives to emerge regarding its role and implications in our culture and society.

Thank You

-Daniel Dean

-Ellyce Morgan

-Tom Nutt

Construction Outline:

1) **Rehabilitation**

a) Flooring

-Remove

-Forensic testing for chemical traces

-discarding?

-sanding and coating undergirding/metal

-Replace

-3/4" Plywood flooring base

-Install wood repurposed from shipping pallets

-beltsanded & clearcoated "0" VOC coatings

b) Painting

-Preparing Exterior/Interior (wire brushing rust & loose paint)

-Priming Int/Ext "0" VOC waterbased paints

-Painting Interior bright White

-Painting Exterior light Grey with an as yet undecided design/logo scheme

c) Door Seal

-Research replacement

- Hinging Mechanism

2**-Redesign**

a) Solar Power

-Funding?

-Engineering?

-Materials?

b) Skylights

-Found frosted/tempered glass

-Custom skylights - welded from 1 ½" angle iron and angled to reflect the 23.5˚ of Tropics of Cancer & Capricorn, deviating 10˚ each from center

c) Rainwater Filtration and Reuse

-Capture and filter rainwater for potable use by attendees

d) Entryway

-Modularity

-Door/locking

-Porch

-Ramp - for wheelchair and materials accessibility

-Stairs to Roof – to expand exhibition real estate/access skylights/maintain water filters

d) Lighting

-Skylights provide most general interior light

-Low-power LED derived custom lighting for highlighting exhibitions

3) **Conceptual Research**

-(re)Design

-Paint & Color

-Archeology/Anthropology

-Origins

-Commodity space

-Forensic analysis

-Materials

-Form vs Function

4) **Program**

Students will be invited to submit proposals outlining their objectives in using the adapted container as an exhibition space. They will be asked to also consider the space and how they and they're interact with the space and architecturte as an exhibition for them is developed and installed. Like many university resources, the container will be available for the broader community. It will be a flexible space and open to evolving the ways in which it is used.