MARINE OPTION MIXED MEDIA PROJECT

DURATION
September 1 - December 13, 2004

PROJECT MEMBER
Reiko Trow, UHM MOP Student

ADVISOR
Dr. Sherwood Maynard
Director of the Marine Option Program

PROJECT IN CONJUNCTION WITH IS 400
3 Credits
Fall 2004
Dr. Sherwood Maynard

PROPOSAL DATE
September 27, 2004

FINAL PROJECT CRITIQUE
December 13, 2004
INTRODUCTION

My final MOP project will focus on gaining further knowledge of some of the materials used in sculpture. I will be using glass, bronze, and clay as my main components.

My influence as an artist has come from the ocean and its problems. One thing in particular that has caught my attention is the decline in bill fish, and tuna populations, and their individual sizes per pound.

The catch of primarily skipjack tuna from the Aku Boat fishery continued its decline since the closure of the tuna cannery in Hawaii in 1984. In the late 1980's the tuna catch from this fishery was around 3.0 million pounds per year. The aku boat tuna catch reached a record low of 700 thousand pounds in 2000 and bounced back to 990 thousand pounds in 2001 (NOAA 2004).

One thing of interest about the decline of local stock, is that it may not be due to humans, according NOAA's article about the Non-Longline Pelagic Fishery, 2004: "The absence of clear declining trends in local CPUE associated with local fishery expansion, combined with distinctly seasonal variations in CPUE, suggests that pelagic fish availability in Hawaii was most strongly affected by factors other than local fishing pressure."

This project is important because I have never truly done a mixed media work before (a work made up of different materials), and I have not yet seen how these materials will go together. My main point of study will be in finding a way to make all these different components work together to form a cohesive compilation.
Through the process of completing this project, I will be learning more about the materials that I will be using, particularly glass and bronze, since glass is brand new to me, and I've only done a bronze casting once before. As for ceramics, even though I know quite a bit, there are tons of information I have yet to explore.

The goals of my MOP project will help me to focus on my marine influenced artwork, and allow me at the same time, to pursue and gain further knowledge of the materials I intend to work with as an artist. I will finally be able to combine my two life passions ... art and science.
METHODS AND MATERIALS

My proposed art work will be of multiple components from a variety of media. I will be incorporating cast bronze, ceramics, glass, plastic, and labels, to make up the final piece. Please refer to the copy below of my sketch.

The fish that I will be using for the above work are local reef fish: manini, menpachi, and a surgeon fish. They have been chosen because they seem like the easiest ones to take molds from.

This art work will address the problems of our declining ocean resources. I will also highlight the importance that people have on fish as a main food source, especially here in this island nation of Hawaii.

I will emphasize the declining ocean resources by sticking on a price tag for a
ridiculous amount of a fish, especially a reef fish. I will emphasize Hawaii by using some of the state’s native reef fish. I will also show how important fish are to people by casting the fish in bronze, which is a material ranked among silver and gold, and one that is used to create monumental works of fine art.

For the fact that this art work is of mixed media, many different methods will be used to create it, all of which I have studied here at the UHM Art Department at one time or another in my four years of undergraduate study.

The overall design of the project will be directly related to a packaged fish you would find at your local supermarket, in the seafood department. It will include a blue tray, fish, and garnish. The fish and trays will be wrapped in saran wrap, complete with a barcode label.

METHOD OF CAST BRONZE

Main Materials: bronze, wax, plaster, gas.

#1 Sketch ideas, brainstorm, come to a conclusion: cast bronze fish.

#2 Buy 3 frozen or fresh caught fish from Tamashiro’s Fish Market.

#3 Make a 2-part plaster mold from each of the fish, to make a wax casting from.

#4 Melt microcrystiln wax in a pot over a flame.

#5 Pour melted wax into fish molds.

#6 Let wax cool, and “pop” out the wax fish.
(This process is done because wax burn out better than organic materials, therefore creating a better casting, and allowing one to cast multiple pieces.)

#7 Sprue up wax fish. (Spruining means to rig a system made up of wax rods to hold the wax fish in place during the investment, and to create hollow pathways for the molten bronze to travel thru to cast out the bronze fish.)

#8 Invest wax fish. (Investing in a process where the wax fish will be put/invested into a plaster/sand mix, that will serve as a negative mold of the fish once the wax has been melted or burned out.)

#9 Put investments in a kiln and burn (to melt out the wax castings of the fish) out for 2-3 days.

#10 Buy bronze and melt it on day 3 or burn out.

#11 Pull investments out at 500 F.

#12 Pour melted bronze into investments, let cool.

#13 Break open molds.

#15 Cut fish from bronze sprues.

#16 Clean up metal fish.

#17 Patina. (Using chemicals like liver of sulfur and iron, to create a layer of color on the bronze piece.)

METHOD OF CERAMICS

Materials: low fire casting slip, porcelain, plaster, gas, glaze.

#1 Collect Styrofoam containers used for displaying meat and seafood.
#2 Make a plaster mold from them.
#3 Allow molds to dry completely.
#4 Press a slab of clay over mold to create a ceramic
   "styrofoam" tray.
#5 Allow to dry.
#6 Bisque fire (2 days, one to fire and one to cool the kiln down).
   Generally a bisque firing is the first firing a ceramic piece goes thru, so
   that it can be handled by the artist when glaze is applied. It is fired at a
   much lower temperature than a glaze firing.
#7 Glaze. A glaze firing is a firing done to a bisque piece after it
   has been coated with a glaze. The high temperature turns the
   glaze into a glass.
#8 Glaze fire (2 days).

PROCESS OF GLASS

Materials: glass, gas, color.

#1 Buy green frit. Frit is glass that has been crushed to a specific
   grain size and is of highly concentrated color.
#2 Gather frit over melted glass on a punti. A punti is a steel
   metal rod used to gather hot molten glass, to be worked with.
#3 Pull green glass cane w/ a partner.
#4 Shape cane into a "plastic" sushi grass decoration.
#5 Fuse the glass cane together.
#6 Clean up and cold work.
METHOD OF LABELING

Materials: paper, ink.

#1 Ask seafood employee if he/she can print out several package labels.
#2 Or create my own on a computer.
#3 Print out and stick to bronze fish wrapper.

METHOD OF COMPLETION OF FINAL PIECE

#1 Collect all pieces of various materials.
#2 Make sure all have been properly finished.
#3 Combine all components, and make sure piece is ready for critique.
#4 Critique.

DESCRIPTION OF FINAL CRITIQUE

Project will be presented to, and critiqued by MOP students and advisors who are present at the time of completion. I will present on December 10, 2004 to my fellow MOP students and advisors at the MOP mini symposium. I will also have it on display at the MOP graduation ceremony December 16, 2004.
REFERENCES

Fish on display at the supermarket, in the seafood department. Personal observation at the Safeway in the Manoa Market Place.


NOAA. *Non-Longline Pelagic Fishery*. 2004
<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
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<tbody>
<tr>
<td>Bonze</td>
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<tr>
<td>20 minute set plaster</td>
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<tr>
<td>Wax Sprues</td>
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<tr>
<td>Plaster</td>
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<tr>
<td>Student Lab Fee</td>
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<tr>
<td>Low fire clay</td>
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</tr>
<tr>
<td>Glaze</td>
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<tr>
<td>Frit</td>
<td>$30.00</td>
</tr>
<tr>
<td>Labels</td>
<td>$8.00</td>
</tr>
<tr>
<td>Foam trays</td>
<td>Free</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>$216.52</strong></td>
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The majority of the funding will come from my personal account. I will also ask MOP for $100.00 to help cover the cost of supplies.
A shortage in the world's ocean resources has become an important issue, especially to the people who depend upon it, like the people of Hawaii. Throughout the history of Hawaii's fisheries, there has been a decline in the numbers of their fish stock. The significance of this decline, is that eventually people will have to start harvesting food from lower parts of the food chain. A decline in numbers of large fish like marlin, and yellowfin tuna, will cause humans to start eating the next best thing. The next best thing could be anything from sea cucumbers to reef fish.

They way I have chosen to educate the public about this problem, is by using a hands on approach, through art. I wanted to create something that people could interact with. They could look at it, though it, pick it up, and be able to really think about it. That way they would remember something a lot better, than if I were to just state the problem orally.

For my MOP project I created a mixed media work called, Running on Empty. It looks exactly like the fish for sale at one's local seafood market, except for the fact that everything has been fabricated. For example, the foam tray is made of ceramics, and the fish used were castled from bronze.

The results of this project went well. Running on Empty came together nicely, and my audience got a kick out of realness of the work. I felt that they understood what the project was about, and were better able to understand that, through the interaction of the art work.

I feel that there are still many marine related issues that need to be dealt with, and that the public needs to be educated about, and one way of doing this is through art. Through art one can present a problem in a physical sense, not written, that another person can view, and be able to learn, and think about the issue on hand.