Scrapyard Challenge: A One Week Assignment
Location: 12ᵗʰ Floor, 6 E. 16th Street
Duration: 6.0 hrs
Date: Sunday September 24, 2011

Description:
1) Design an interactive musical controller out of found materials and junk. Use the materials present to improvise behavior and operation of the physical object and interface you create. Don't worry about getting it "right" or making it "good," focus more on your process and response to the practice as well as the material affordances of what is made available to you. Take risks, document your work as you go along.
2) During the following week document your creation using multimedia and audiovisual methods. Consider how you would explain to your audience the function and behavior of your artifact.
3) Read the accompanying assigned texts and write a one page paper which analyzes and reflects on your experience. Be sure to relate concepts and terminology introduced in the readings into your work.

Guiding Questions:
1. What kind of material affordances does your object provide? How does this influence the way in which another person would interact with your object? How have the affordances of your object changed from the original artifacts you started with?
2. Using the definition provided by Houde & Hill, is your object a prototype? Yes or No? What is your reasoning?
3. What is your understanding of the system image vs. the conceptual model of the workings of your artifact? How do they diverge?
4. How both specifically and in more general terms is the "electronic object" different from the "non-electronic object?" Do they differ at all?

Reading:
- Interaction Relabelling and Extreme Characters:Methods for Exploring Aesthetic Interactions Gaver, Djajadiningrat, Frens
- "Hertzian Tales," Anthony Dunne (excerpt)
- "The Design of Everyday Things", Donald Norman (excerpt)
- "Why We Need Things", Mihaly Csikszentmihalyi
- "The Computer Revolution Hasn't Happened Yet" Alan Kay

References:
- www.scrapyardchallenge.com
- Moriwaki, Katherine, Brucker-Cohen, Jonah
- "MIDI Scrapyard Challenge Workshops"
- Published in the Proceedings of NIME 2007, NYC, USA
- Moriwaki, Katherine, Brucker-Cohen, Jonah

- "Lessons From The Scrapyard: Creative Uses of Found Materials Within a Workshop Setting"
- AI & Society, Springer, Pages 1-20.
- Brucker-Cohen, Jonah, Moriwaki, Katherine.
- "Hacking Creativity: Scrapyard Challenge Workshops"
- About Face Interface: Creative Engagement in New Media Arts and HCI, (Workshop)
- Presented at CHI 2006

Scrapyard Challenge: Logistics

Note: This is not part of the assignment to be given to students. These are specific logistical notes on how a Scrapyard Challenge would be run. For more information see: www.scrapyardchallenge.com

Materials Requirements for Workshop:
- Found Objects/Junk: (including old electronics, furniture, outdated computer equipment, appliances, turntables, monitors, gadgets, etc..)
- Large Room or table to work with
- Glue Guns/Soldering Stations
- Materials budget for Drawbots - (very inexpensive)
- New or Found Wire
- Sound PA for performance/testing during workshop
- Various other materials - Tape/Aluminum Foil/Batteries
- Tools - hammers, screwdrivers (for taking things apart), wire strippers

Tech Setup:
- Custom digital/analog input boards programmed to output pin state via serial
- Max patch designed to trigger sounds using the on-board software synthesizer in a laptop

Description:

1) The workshop begins with an introduction to basic principles of electricity.
2) How to make a switch, and how to scavenge a variable resistor are explained
3) People make stuff!
4) After the alloted time leave 1 hr. to organize and conduct a final presentation for participants.
5) Musical Jam!