

LCC 6310
The Computer as an
Expressive Medium

Lecture 8

Overview

Look at project 2
Discuss readings
Readings for next week

Project 2

Due: Friday September 21

Background:

The contemporary computer scene is dominated by the graphical user interface (GUI). For almost every task, from manipulating text, imagery, sound, video, to configuring a computer's operating system (e.g. control panels), from searching for and organizing information (e.g. the web), to the process of programming (e.g. integrated development environments), there are special purpose GUI tools supporting the task through analogies to embodied interaction with physical objects. But no tool is neutral; every tool bears the marks of the historical process of its creation, literally encoding the biases, dreams, and political realities of its creators, offering affordances for some interactions while making other interactions difficult or impossible to perform or even conceive.

Project 2

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While the ability to program does not bring absolute freedom (you can never step outside of culture, and of course programming languages are themselves tools embedded in culture), it does open up a region of free play, allowing the artist to climb up and down the dizzying tower of abstraction and encode her own biases, dreams and political realities. *What graphical tools would you create?*

Project 2

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Create your own drawing tool, emphasizing algorithmic generation/modification/manipulation. Explore the balance of control between the tool and the person using the tool. The tool should do something different when moving vs. dragging (moving with the mouse button down). **The code for your tool should use at least one class.**

Let's look at some examples...

(Of course, your own design shouldn't be too similar to any of these!)

Hairy Brush

Golan Levin reimplemented Steve Strassman's *'hairy brush'* MS thesis from 1986. In this example, the brush strokes have a lovely (hairy) texture to them, and seem to come to life on the canvas, as they smoothen and fade away over time. Also notice the effect of mouse velocity on the strokes as well. The idea here was to simulate the traditional Japanese art of sumi-e by modeling the motion and bristles of the brush and the absorption of ink into the paper.

<http://acg.media.mit.edu/people/golan/brush/>

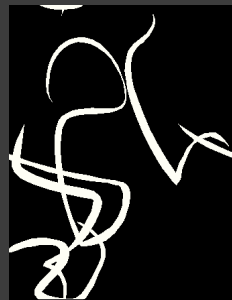


Yellowtail

Yellowtail by Golan Levin is drawing tool for creating and performing abstract audio-visual animations in real time. The parameters of a user's strokes simultaneously define the look and movement of the resulting line (e.g. stroke speed influences both the line's thickness and the speed of its movement).

<http://www.flong.com/yellowtail/>

[[video clip with audio](#)]



Moovl

A drawing tool that allows your doodles to come alive with animations and physics. Playful and fun - try it!

<http://www.moovl.co.uk/>

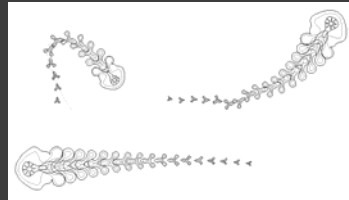


Manifest

Michael Chang's drawing toy for creating vertebral creatures that come to life on the screen. Driven by procedural animation and physics simulations.

<http://users.design.ucla.edu/~mflux/>

(Also look at some of his other drawing tools like Draw Steer and Auto Roads)



Readings

Summary presentations & questions for discussion

A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century - Donna Haraway (NMR pp.515-542)

The GNU Manifesto - Richard Stallman (NMR pp.543-550)

Cyborg Defined

"A cyborg is a cybernetic organism, a hybrid machine and organism, a creature of social reality as well as a creature of fiction. ... By the late twentieth century, our time, a mythic time, we are all chimeras, theorized and fabricated hybrids of machine and organism; in short, we are cyborgs." (p. 516)



A Cyborg World

"*From one perspective*, a cyborg world is about the final imposition of a grid of control on the planet, about the final abstraction embodied in a Star Wars apocalypse waged in the name of defense, about the final appropriation of women's bodies in a masculinist orgy of war. *From another perspective*, a cyborg world might be about lived social and bodily realities in which people are not afraid of their joint kinship with animals and machines, not afraid of permanently partial identities and contradictory standpoints." (p. 519)

"The *political struggle is to see from both perspectives* at once because each reveals both dominations and possibilities unimaginable from the other vantage point..." (p. 519)

What do you think?

Questions of identity

Gender: who is a woman? who is a man?

Race: who is black? who is white?

Sexuality: who is straight? who is gay?

Class: who is rich? who is poor?

The problems of dichotomies...

What happens to identity and politics if we fit into multiple categories or we do not feel comfortable in any category?

Questions about identity politics

Do these exclusive categories define one's identity?

Do these categories constitute political groups?

E.g. what happens to these divisions when all of the categories are invoked at once? (e.g. for the purposes of feminism is one always primarily defined by gender and only secondarily defined by race and class, or is the order inverted?)

Who / what is a cyborg?

Do you wear a prosthesis? E.g. contact lenses or eyeglasses?

Do you take any medications?

Have you ever had an immunization?

Do you depend upon any form of technology for transportation?

How would your life be affected if the power grid was shut off permanently?

Do you ever eat food or drink water that has been processed?

In short, how intimately tied are you to technology?

The breakdown of three dichotomies

Human/Animal

Machine/Organism

Physical/Non-physical

(Resulting from biology and the sciences & technologies of communication and information)

The cyborg as organizing myth

"There is nothing about being "female" that naturally binds women."
(p. 519)

"No objects, spaces or bodies are sacred in themselves; any component can be interfaced with any other if the proper standard, the proper code, can be constructed for processing signals in a common language." (p. 519)

"The cyborg is a kind of disassembled and reassembled, post-modern collective and personal self. This is the self feminists must code." (p. 519)

GNU Manifesto

"I consider that the golden rule requires that if I like a program I must share it with other people who like it. Software sellers want to divide the users and conquer them, making each user agree not to share with others. I refuse to break solidarity with other users in this way. I cannot in good conscience sign a nondisclosure agreement or a software license agreement." (p. 546)

What do you think of the free software movement and copyleft?

[["What is free software?" video](#)]
Speech by Richard Stallman at the
National Center for High Performance
Computing, Taiwan, May 27, 2005.



Readings for next week

For **Tuesday** next week:

Concepts: more on classes, Java platform API (ArrayList)

For **Thursday** next week: Theory Readings

Two students: present one reading each (actually, one person should present the first two shorter ones)

Everyone else: prepare one discussion question for each reading

Happenings in the New York Scene - Kaprow, NMR pp. 83-86

The Cut-Up Method of Brion Gysin - Burroughs, NMR pp. 89-91

Six Selections by the Oulipo - NMR pp. 147-189 (much of this is a paper poetry machine).