

LCC 6310

The Computer as an Expressive Medium

Lecture 14

Overview

Programming questions?
Assignment 3 questions? (due tomorrow!)
Project 3 questions?
Discuss readings
Readings for next week

Assignment 3

Posted online, due **Friday**

- A3-01: Create a subclass of PImage that implements a mosaic(int blockSize) method. The blockSize parameter specifies how big the mosaic block is (e.g. blockSize = 4 would mean the mosaic block size is 4 pixels by 4 pixels). The mosaic method should replace each block of pixels in the image (e.g. if blockSize = 4, each block of 4 by 4 pixels) with the average color value of the pixels in that block. Look at the Pixelate->Mosaic filter in photoshop for an example of what this image operation does. Demonstrate your new class by drawing an image with several different block sizes.
- A3-02: Write a small app that demonstrates kinetic text. Your app should allow the user to type something and move the text around in some way while they type. For example, the user might type text on a line, but slowly the words or letters start drifting apart, or perhaps the line starts bending, or the words and letters flutter to the bottom of the screen, etc. Of course you shouldn't exactly copy any of the typographic examples in Processing or that you find on the web (though using such examples for inspiration, as a place to start modifying code, etc. is fine).

Project 3

Due: **Friday October 12**

Literary machines are potential literature, procedurally producing textual traces in response to interaction. Examples of literary machines include interactive fiction, nodal hypertexts, interactive poetry (often with animated typography), and chatterbots.

Create a literary machine. The literary machine must include algorithmic elements, such as animated typography, generated text, conditional responses as a function of the previous interaction trace. It must respond to external inputs (e.g. user interaction). Your piece may include conjunctions of text and imagery.

Readings

Summary presentations & questions for discussion

As We May Think - Vannevar Bush, NMR pp. 35-47

Mythinformation - Langdon Winner, NMR pp. 587-598

Vannevar Bush



(1890-1974)

Engineer & scientist, Faculty at MIT

Coordinated WWII effort with 6,000 scientists

Played political role in the development of the atomic bomb

As We May Think

(1945, *Atlantic Monthly*)

"...publication has been extended far beyond our present ability to make real use of the record."

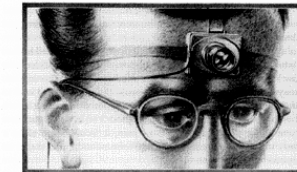
"A record if it is to be useful to science, must be continuously extended, it must be stored, and above all it must be consulted."

Concepts: wearables, voice interaction... and of course the memex vision of trails of linked information!

Devices of the future

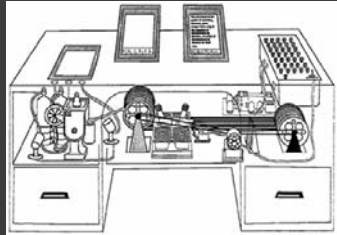


Supersecretary of the coming age, the machine contemplated here would take dictation, type it automatically and even talk back if the author wanted to review what he had just said. It is somewhat similar to the Voder seen at the New York World's Fair. Like all machines suggested by the diagrams in this article, it is not yet in existence (*LIFE* 1941), p. 114).



A scientist of the future records experiments with a tiny camera fitted with universal-focus lens. The small square in the eyeglass at the left sights the object (*LIFE* 1941), p. 112).

Memex device concept



Use technology to augment human intellectual abilities
Can store all records/articles/communications
Large memory
Items retrieved by indexing, keywords, cross references (hyperlinks)
Can make a trail of links through material
Envisioned as microfilm, not computer
Inventing the future

Langdon Winner



Political theorist focusing on social/political issues surrounding modern technological change

Blog: <http://technopolis.blogspot.com/>

"Technopolis, a weblog by Langdon Winner, offers occasional reflections on historical, philosophical, and contemporary questions that involve the perplexing intersection of human ends and means. Not a minute-to-minute news blog, it includes stories, poems, personal observations, and scholarly references posted every now and then, but at least every two weeks."

Mythinformation

The almost religious conviction that a widespread adoption of computers along with easy access to information will automatically produce a better world

Breaking down the political arguments of computer romantics:

1. People need more information
2. Information is knowledge
3. Knowledge is power
4. Increasing access to information enhances democracy and equalizes social power

Consequences of a revolution...

The consequences of computerization need to be carefully thought through and planned to ensure that the outcomes are desirable

Some areas to consider:

The surveillance state and self-surveillance

Issues of privacy and freedom

People become passive and compliant in the face of surveillance

The alteration of patterns of human sociability

Because computers are deliberately introduced to eliminate social layers previously needed to get things done and do away with the reasons people had for being together

Without human buffers between institutions of power and individuals, the latter will be more susceptible to external pressure

The increasing mobility and un-locatability of power ("rhizomacy")

Instantaneous action at any point on the globe, not limited by geography

Big transnational corporations make use of this and political authority is redefined

Automatic Professor Machine

The automatic teller machine revolutionized the way the world banks. The automatic professor machine could revolutionize the way the world learns... find APMs at colleges, shopping malls, etc!

A spoof of the distance-learning craze, the APM is based on the idea that the essence of education consists not of classrooms, books, teachers, or other students, but information.

[[APM video clip 1](#)]

[[APM video clip 2](#)]

Readings for next week

Next **Tuesday** is fall break...

No class!

For **Thursday** next week: Theory Readings

Two students: present one reading each

Everyone else: prepare one discussion question for each reading

Nomadic Power and Cultural Resistance - Critical Art Ensemble (NMR pp.781-790)

The World-Wide Web - Tim Berners-Lee, et. al. (NMR pp.791-798)