HDCC105
December 12, 2011

TECHONOLOGY AND ART
techné

As was discussed last week, *techné* the Greek root of *technologia* which gave us *technology* was used to speak of *craftsmanship, craft, or art*.

A highly influential work in the world of computing is called “The *Art* of Computer Programming”.
Computing and Art

There are many connections between computing and art in fields such as computer graphics and human-computer interaction.

Even in theoretical computer science, elegance is a much-used word to describe certain algorithms and goals.

The last director of this campus’ HCIL has a B.F.A. in Graphic Design from Rhode Island School of Design, an M.S. in Media Arts and Sciences from M.I.T., and a Ph.D. in Educational Technologies.
Who Helps Whom?

- Both **computing** and **art** can and have helped inspire and advance one another.

- Some art is created because of the technology available.
- Some technology is created because it is needed for art.
Visual Accent & Dialect Archive

- Actors and actresses need to be able to adopt accents and dialects and expressions appropriate to their roles.
- There’s a BIG world out there.
- Some accents and dialects will die out.
- The Visual Accent & Dialect Archive wants to store and provide access to audio/visual records of speakers from around the world.
  - http://mith.umd.edu/vada/
Interactive Art

Myron Krueger’s work with responsive environments goes back to 1969 (GLOW FLOW). He is a computer scientist and an artist. He works with artists and engineers and has built a number of large interactive exhibits, many based on silhouette interaction. His work has been showcased by both communities.

Another set of examples are the 1999 “Text Rain” (also showcased by both the art and the computing worlds) by Camille Utterback & Romy Achituv [http://vimeo.com/13141591](http://vimeo.com/13141591) as well as many of Utterback’s other works [http://vimeo.com/15433770](http://vimeo.com/15433770).
Welcome to the Future: 3D Scanners

Starting in the 1990s, Ben Kacyra began working on improving the technology available for surveying, on a quest to support the creation of “as built” blueprints.

He talks about the device that came out of this and the ways it is being and can be used:

“How do you know what to cut away?”

The old tale says that when Michelangelo was sculpting *David*, the Pope came and asked him how he knew what to cut away, and that Michelangelo said he simply removed everything that wasn’t David.
Is it art?

In 2004, a French sculptor asked a company to create a 3D laser scan of a 19th Century lion’s face and then use their computerized milling machine to sculpt a set of rough replicas based on that. The sculptor said he would then take these pieces and perform the final stages of hand detailing of the faces himself.
Replicas

The most accurate (scaled) replica of the statue David (as well as the discovery of its true height in the scanning process) was created with similar scanning but a totally different production method by a team at Stanford around the same time.

http://graphics.stanford.edu/projects/mich/
Is it art?

With this technology, a sculptor could make a small and detailed model of a new work, have it scanned, have a machine do the first pass of creation of a much larger version in stone, and then come in and do the fine detailed work at the end.
What could YOU make?

What could YOU make if you had the ability to create a 3D object from a computer/digitized model?