DRAWING MACHINES

SIGGRAPH 2013 Educator's Workshop

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Sponsored by the SIGGRAPH Education Committee

Instructor Contact Info

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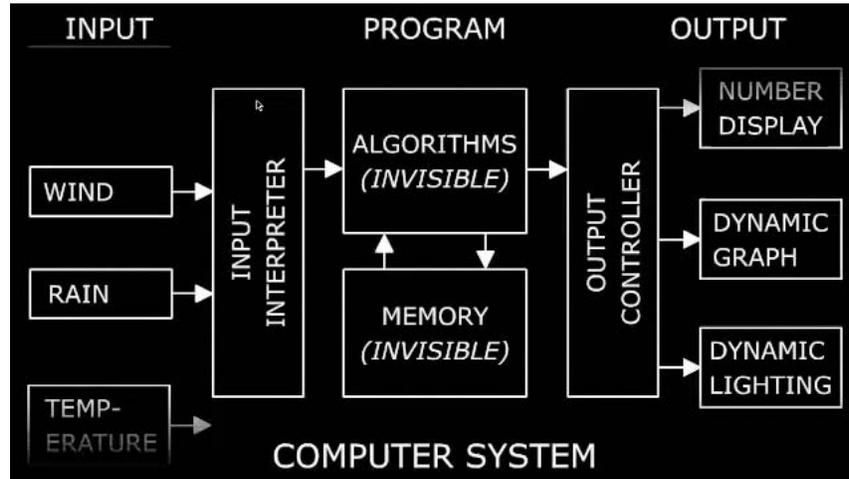□ Paul Stout, Dept. of Art and Art History

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□ Ginger Alford, Trinity Valley School

　□ gralford@acm.org

Jim Campbell's Algorithm

Electronic Kinetic Art

Drawing Machines

Mechanical Drawing Machines

Jean Tinguely
Metamatic
1959

http://www.youtube.com/watch?v=GOo5uq2fH6g

Mechanical Drawing Machines

Eske Rex
Denmark

http://www.happy-pixels.com/2011/07/08/drawing-machine/

Mechanical Drawing Machines

Designguide.tv

http://www.youtube.com/watch?v=5yumD0ezoVE

Mechanical Drawing Machines

Alfred Hoehn
Switzerland

http://www.youtube.com/watch?v=dPZ-Mpbn37U

Mechanical Drawing Machines

http://www.fi.edu/learn/sci-tech/automaton/automaton.php?cts=instrumentation
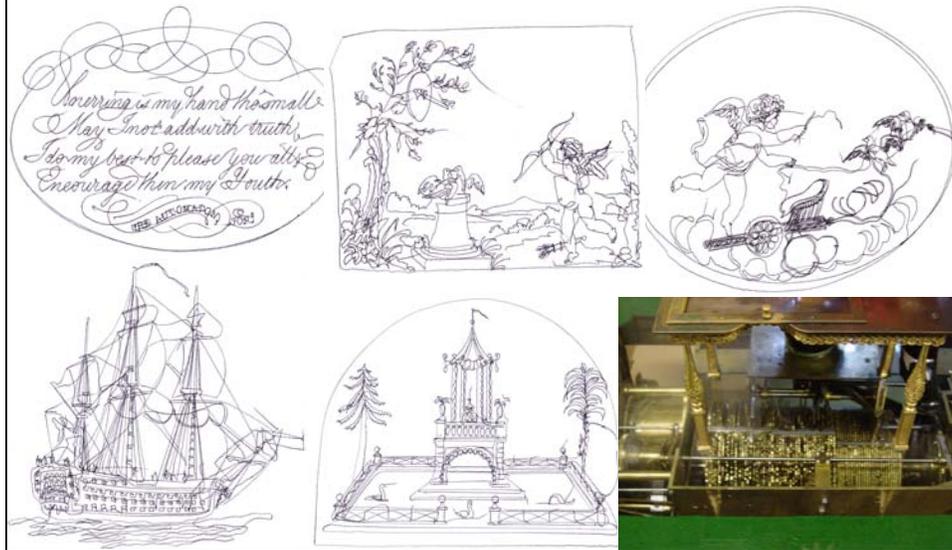
Maillardet's Automaton

Computer Controlled Machines

Computer Controlled Machines

Computer Controlled Machines

http://www.dwbowen.com/

Computer Controlled Machines

SIGGRAPH Art Gallery

Robert Twomey, 2013
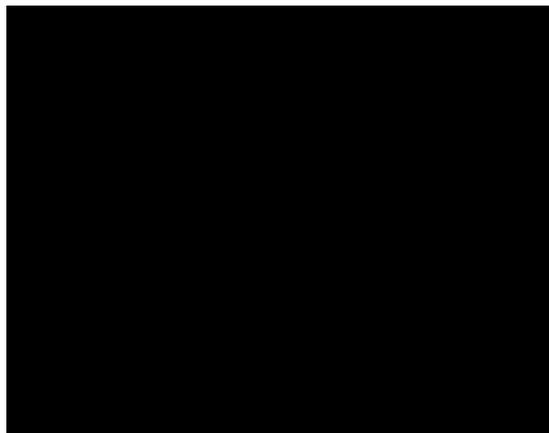
Whew!

- A lot of variation in kinetic art drawing machines
- That's just a sampling…
  - Random drawing machines
    - powered by pendulums, wind, mail carriers, etc.
  - Mechanical drawing machines
    - hand-cranked, motor driven, wind-up, etc.
  - Reactive drawing machines
    - use environmental sensors of some sort
  - Computer controlled drawing machines
    - range from random to precise
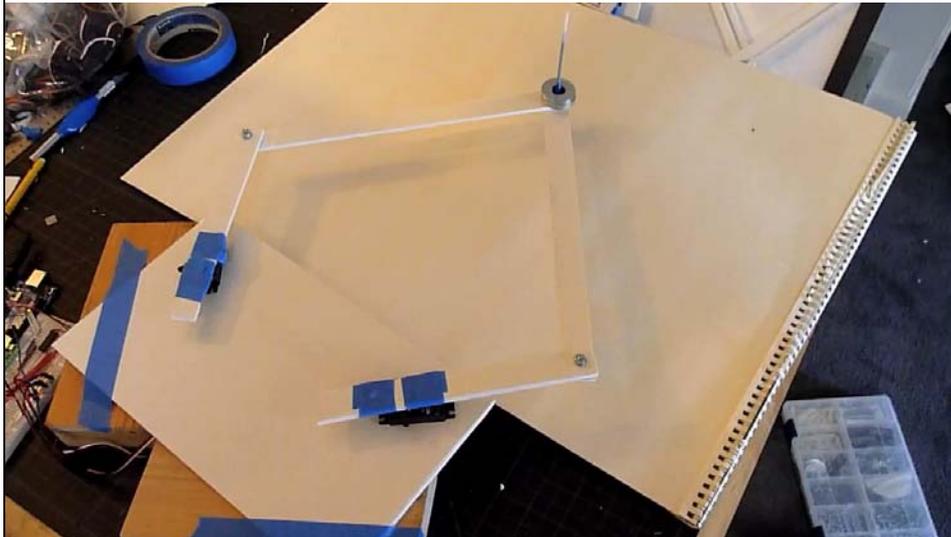
Our Agenda

- Activity one: Make sure everybody is up and running
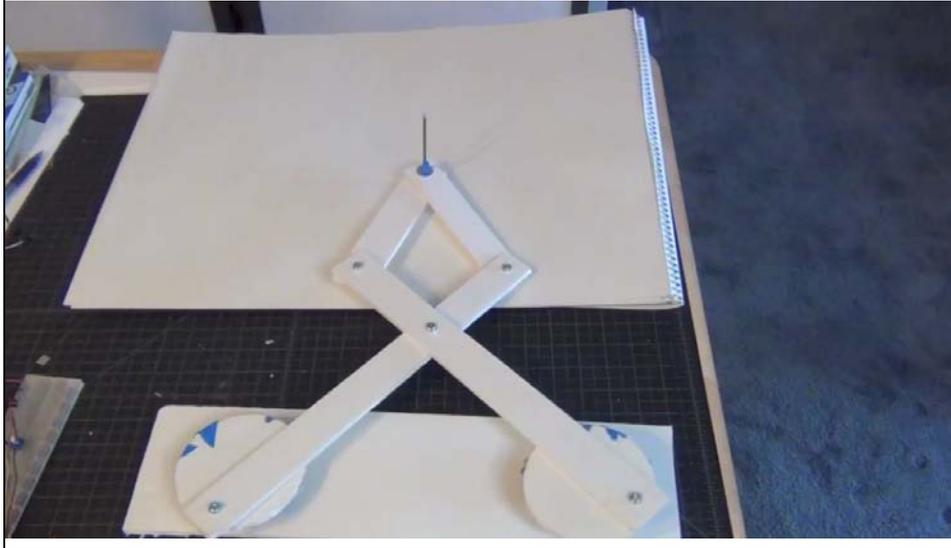 - Connect Arduino to an LED
  - Blink and fade the LED

- Activity two: Basic building blocks
  - Connect Arduino to a sensor (Potentiometer)
  - Connect Arduino to a servo

- Activity three: Have at it!
  - Use tools from Activities one and two to make your own drawing machine!

Our Target

Another Possible Target

Extra Slides

☐ Only if there's time…

Mechanical Drawing Machines

Tim Knowles
England

http://www.bitforms.com/tim-knowles-gallery.html

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Computer Controlled Machines

Computer Controlled Machines

http://storyteller.allesblinkt.com/

Computer Controlled Machines

http://www.youtube.com/watch?v=T0EAvqCdP2s

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