Assignment 1.1

Posted January 13
Due January 20 before class

Overview

This assignment is intended to cover preliminary aspects of the course, such as the blog, an introduction to your work, (very) basic aspects of the Processing language, and a first exploration of the state of the art in computational design practices.

Part 1: Introductions

Write an introductory blog post in the course's blog. Use this part of the assignment to become familiar with the Wordpress platform, and introduce yourself and one computational project you have developed using computer code (it can be as simple as a website you coded, or a script you wrote for manipulating). Introduce the project with a description of the ideas and motivations behind it, as well as a technical section about the technologies/languages you used. Add a section about what you think is more interesting about the project, and a critical section saying what you would now do different now, and the pitfalls you encountered. Document the project with images, videos or animated gifs of the project. If you haven't worked on a project involving computer code, write a post about a project that you would like to create using code. Include a text describing the project conceptually and technically, as well as sketches, drawings, links, etc. Tag the project with both your name, and the tag "Introductions."

Part 2: Examples

Cast a wide net in search of computational design projects that are interesting to you. You can use the links below as starting points (but ideally you should explore more). The projects of your choice must fall broadly within the category of "experimental CAD systems:" computational tools that enable a way of designing or producing shapes that departs from conventional CAD systems and metaphors. The projects of your choice must also involve original software. Choose three different projects and explain why you chose them. Try to choose different projects and in your documentation/analysis, try to explain how you think they work.

Princemio – Choreographic Coding
http://www.creativeapplications.net/processing/pathfinder-generative-geometry-as-a-creative-impulse/

Generative/Computational Design Class in Porto
http://jorgecardoso.eu/htmlblog/2014-05-17-Computational%20Design%20Projects%20-%202014.html

Trace Modeler
http://www.creativeapplications.net/openframeworks/trace-modeler-openframeworks/

Columbia Studio Projects "Studio Toys."
http://www.proxyarch.com/kaizen/

Columbia Laboratory developing Processing Libraries
http://thecloudlab.org/processing/

Nervous System
http://vimeo.com/38204725
http://vimeo.com/14813911

M. Jogan
http://processing.org/exhibition/works/versionb/index_link.html

N. Fischer
http://vimeo.com/42144061

Glitch-Mesh: M. Plummer-Fernandez
http://vimeo.com/43848831

Generative Gestaltung
http://generative-gestaltung.de/M_3_4_01_TOOL

thecloudlab
http://www.thecloudlab.org/kinect_digital_lathe.html

Axel Killian's Catenary project
http://designexplorer.net/projectpages/cadenary.html

Postspectacular (Karsten Schmidt)
http://postspectacular.com/

Part 3: Processing Basics

Download Processing into your computer (http://processing.org) Get familiar with the fundamentals. Write your first Processing program making sure that you understand the basics of shapes, color, and mouse interaction. If you have no experience programming, don't be afraid of starting with the basics. Daniel Shiffman has a basic intro that is very easy to follow: "Hello Processing" tutorials (http://hello.processing.org).
Lastly, do a bit of research and get familiar with the concepts of syntax, variables, and data types. Be prepared to discuss these concepts during next class.