## Generative Design

- "interfaces" libraries, formats, and languages to create a "medium" through which to generate an "output"
- can be self-perpetuating, ala demoscene
- requires environments of relative specificity
  - can resemble alchemy in necessitating very strict, even 'esoteric' steps/connections
- Simondon's transduction: "By transduction we mean an operation—physical, biological, mental, social—by which an activity propagates itself from one element to the next, within a given domain, and founds this propagation on a structuration of the domain that is realized from place to place: each area of the constituted structures serves as the principle and the model of the next area, as a primer for its constitution, to the extent that the modification expands progressibely at the same time as the structuring operation" (Simondon 2009: 11)

Generative practices increasingly take a larger prominence in design workflows. "The process is the product," declares the *Conditional Design Manifesto*. Employing the "methods of philosophers, engineers, inventors and mystics," the four authors of the manifesto seek to abandon the idea of a product in favor of "things that adapt to their environment, emphasize change and show difference" (Maurer, et al.). The text is split into a prose introduction and three sections of manifesto-like declarative sentences:

The powerful Java-platform tool named Processing has become wildly popular amongst visualization designers. The demo scene has long employed generative techniques to instantiate complexity on-screen using as few as 4 kilobytes of compiled binary code.

The case study at the core of this paper will explore these concerns as the materiality of the thesis itself remains ethereal. It is more than its input, it is more than its output: it is literally and figuratively very much a *process*.

The substrate of the text you are reading right now is a simple formal markup language called Markdown. Originally written in Perl, it has spread to any language that ends up touching the web. This is due to its popularity as an approachable 'pre-formatting' markup language for operations such as blog posts and comments, where HTML is the desired output but a simpler *and more readable* input is often preferrable.