generative systems

what is this talk about?

- a practical perspective on generative art from a fellow student
- generative art as a big subject in general
- generative software art
- practice and theory
- my thinking in the process of coding generativity

generative art

"Generative art refers to any art practice in which the artist cedes control to a system with functional autonomy that contributes to, or results in, a completed work of art. Systems may include natural language instructions, biological or chemical processes, computer programs, machines, self-organizing materials, mathematical operations, and other procedural inventions." (Galanter 2008)

generative art

- Gallanters definition is robust and covers a lot of different practices of generativity
- Generative software art is a relatively new contribution to the wider field of generative art
- System
- Autonomy
- Instructions
- Ceding control

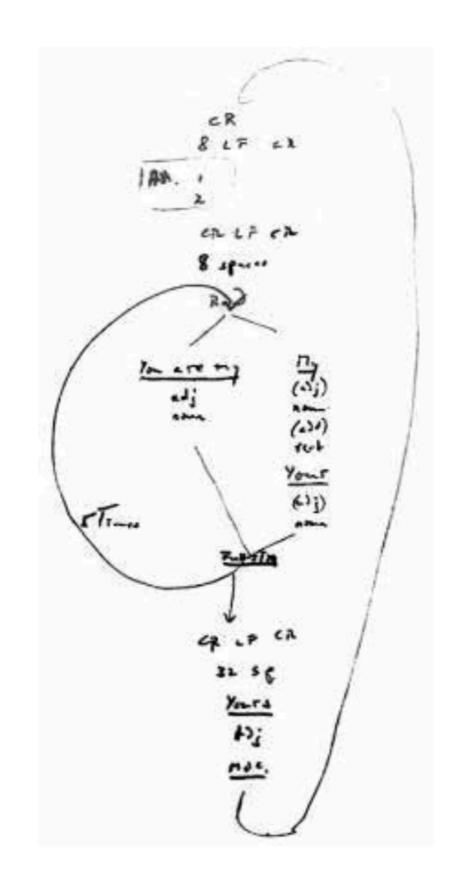
DARLING MOPPET
YOU ARE MY SEDUCTIVE CHARM. MY ANXIOUS LONGING BREATHLESSLY
SIGHS FOR YOUR WISTFUL FELLOW FEELING. YOU ARE MY LOVING AMBITION.
MY AVID AFFECTION PINES FOR YOUR KEEN DESIRE. YOU ARE MY CRAVING TENDERNESS.

Yours CURIOUSLY

MUC

JEWEL DUCK

YOU ARE MY AFFECTIONATE FANCY. MY TENDER HUNGER
SEDUCTIVELY CHERISHES YOUR SWEET FONDNESS. MY COVETOUS FANCY
LOYINGLY PINES FOR YOUR PRECIOUS ENTHUSIASM. MY EAGERNESS
PANTS FOR YOUR DEAR YEARNING. YOU ARE MY DEVOTED AFFECTION.
YOURS ANXIOUSLY



process

- Bottom-up process rather than top-down
- Systems evolve and become gradually more complex
- Suprises in behaviour

emergence

- Often the resulting behaviour of the system is quite unexpected
- Surprising results emerge from the system
- Letting go of control and observing how the code behaves in an unpredictable way
- The process becomes an ongoing exploration of what the system is doing at a particular moment in time and how it evolves

the unpredictable code

- Instead of programming to achieve a specific goal the code challenges us
- Surprises and exceptions forces us to think about the software in new ways
- Experiencing the systems unpredictability is when generativity is for me the most satisfying - and frustrating
- The heart of the generative software in the microtemporal changes in the code

between practice and theory

- Aesthetic and political implications of software -> The unpredictable and emergent behaviour of code itself
- Bottom-up process of emergence rather than a top-down functionalist process of pure problem-solving
- Because code has consequences that go far beyond functional aspects
- Practice feeds back into theory
- The code becomes an expressive material for thinking
- Generative software as an inquiry into the hidden, obfuscated and unpredictable nature of code

self-criticism

- Projects might be visually beautiful but my practice needs to grow into something more critical
- Aesthetically challenging rather than pleasing
- Generative systems exploring how software breaks, bends, cracks and hacks
- Code affeting our daily digital practices in unforeseen ways

what i hope you take from this

- practicing generative art feels magical and is a powerful tool for inquiry into the nature of software and other systems
- coding demands practice but you learn quickly
- the technological tools and platforms will always be there - focus on ideas
- use computational thinking for your own learning process