Coding the Printed page

Impacts of the research one year on, and what the future may hold

Oswin Tickler

Area of research

An exploration into creative coding as a means of producing variable digital print.

- This led to the creation of HP Spark by digital print manufacturer HP Indigo.

- The first materials showcasing this approach were launched July 2022.

Area of research

This presentation is focused on the impacts
of furthering this approach over the last year:

1. Research activities and impacts

2. How this fits into the wider context
   of "creative" technologies

3. The future

1. Research activities and impacts

Research activities

The research activities:

1. Workshops (education/participation)

2. Designed materials

Activities
Workshops

Over the last year I have delivered:

- 13 Workshops, to

- 300 participants (approx.)

Participants included:

- 16/17 year olds (as part of UAL Insights)
- Undergraduate and postgraduate students across Publishing, Graphic Design and Illustration courses
- Design agencies and organisations associated with print…

Activities
Workshops

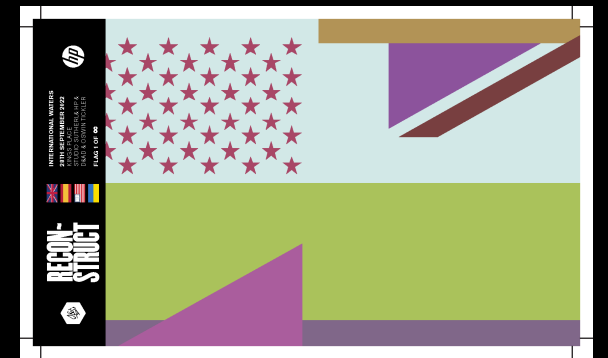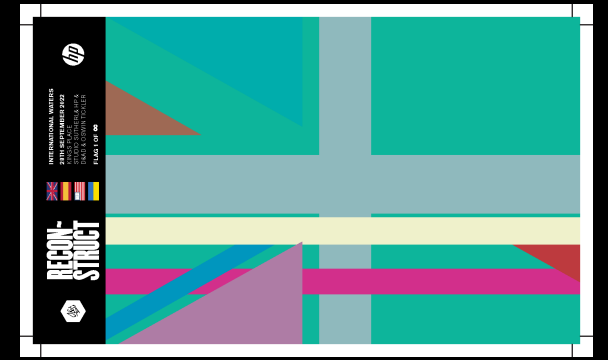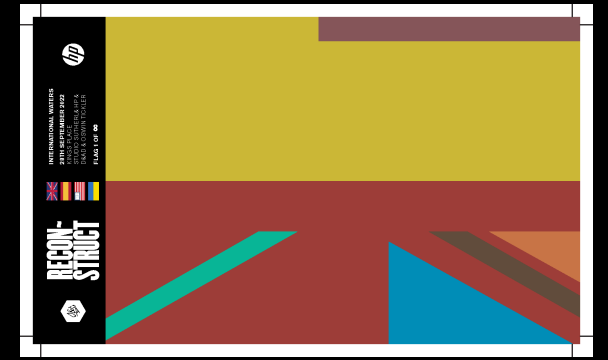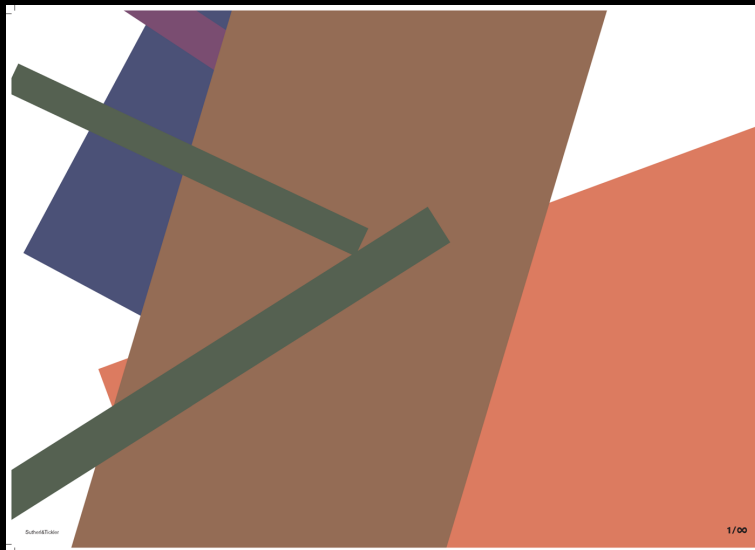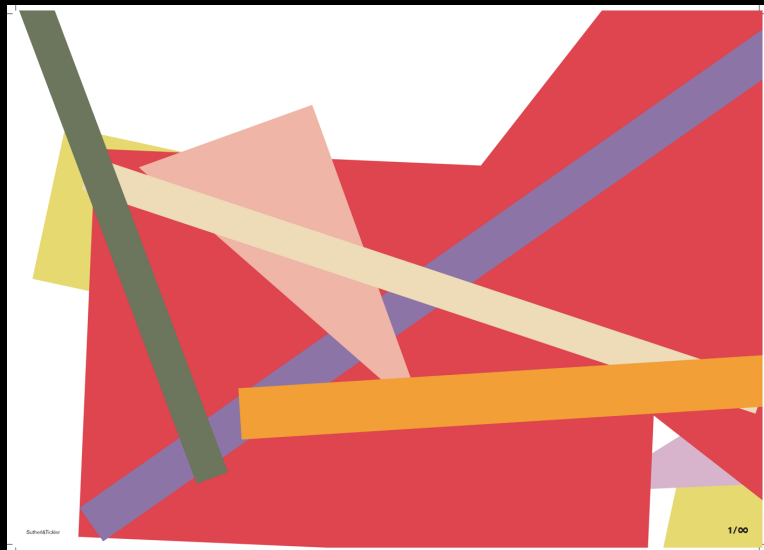GF Smith employees attending one of my workshops at FE Burman
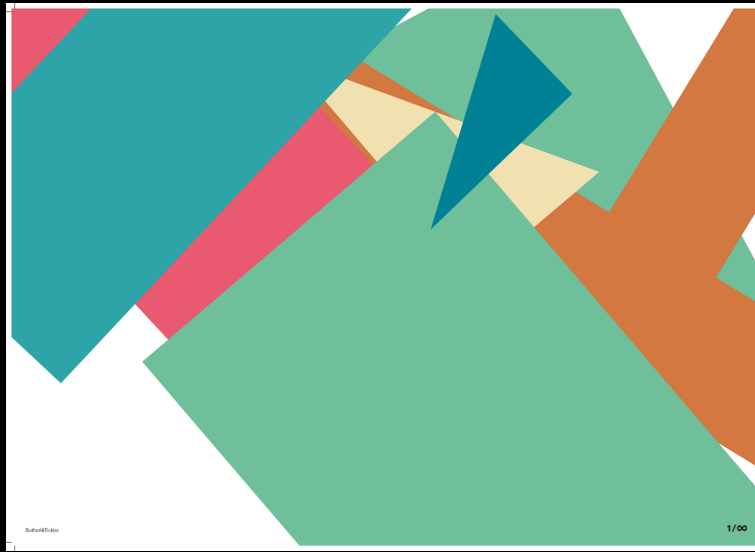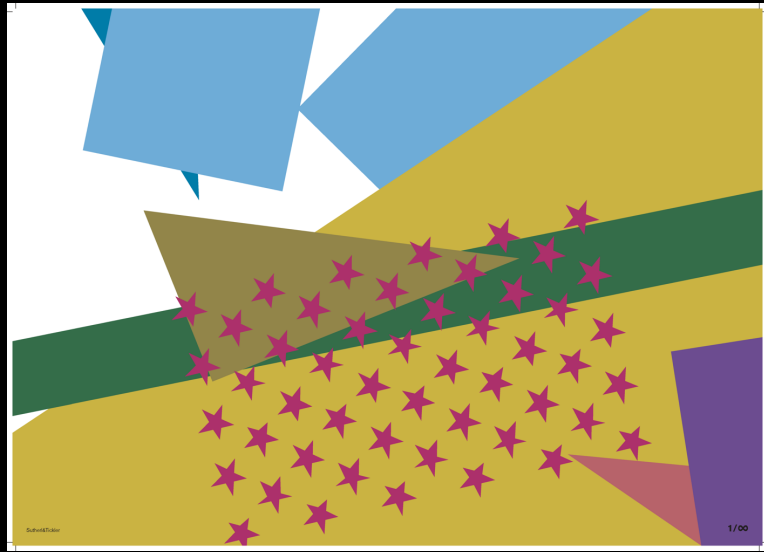
Activities
Workshops

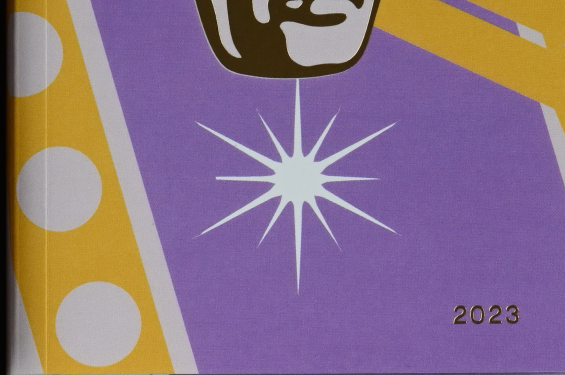Students exploring creative coding

Randomness assigns value to everything and everyone it touches by giving each participant equal weight: everything is equally valuable.
In this, randomness is inherently political and inherently empowering…each and every thing matters; everyone matters.

Ways of Being. James Bridle

D&AD 'Reconstruct' materials (posters and can labels).

Bafta Film Awards Brochures

for the subsequent BAFTA awards, the covers were also used as animated gifs across their social media campaigns.

Activities
Designed materials
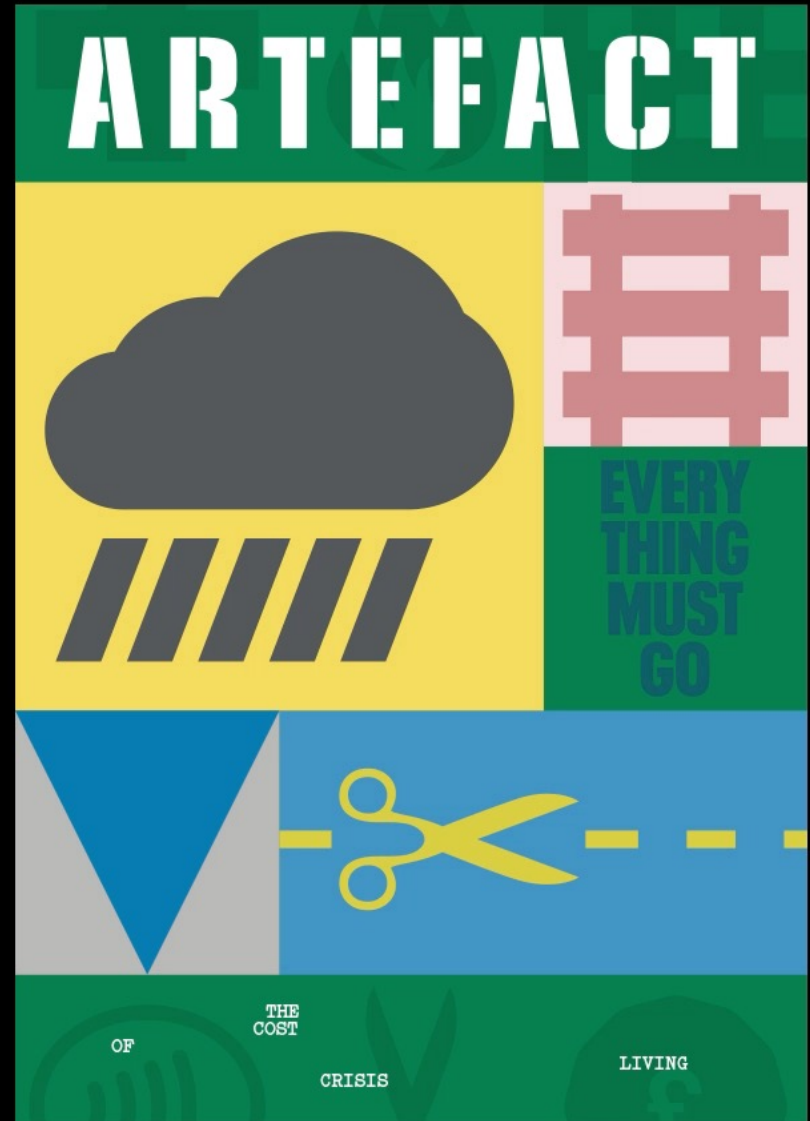
Artefact magazine. London College of Communication
'The cost of living crisis' Issue. (1000 unique covers)

Impact:
Workshops

- Increased engagement. Participants spend longer looking at, choosing, and discussing their preferences.

- Helps participants overcome fear in relation to software and coding. De-mystifies. Encourages continued learning beyond session.

- Enthusiasm for working in innovative ways.

- Participants work individually but with a collaborative output.

- Participants support/teach each other.

Impact
Designed materials

"Your work has been instrumental to the creative this year for the brochures and they caused a lot of excitement at each award. It also helped us increase pick up overall which is one of our big aims with sustainability in mind and wanting to reduce waste."

Abigail Bills, BAFTA, Designer

Impact
Designed materials

- Increased engagement with print.

- Reduced waste.
    - Digital printing allows you to print only what you need.
    - Increased desirability minimizes copies being discarded/ignored.

- Diversity:
    - Artwork can be generated by a variety of people (regardless of skills) and their work can be utilized without bias.
    - Sense of diversity of output from the organization (e.g. BAFTA)

- Closer relationship between print and digital assets/campaigns than previously possible.

Impact:

"We see this kind of technology as being the future of the [paper and print] industry."

Vanessa Fletcher, GF Smith, Education Manager

Impact

- Invited to be part of the British Printing Industries Federation Education steering group.

- (Long term) Assisting with LCC's Capital Investment bid for an HP Indigo press in the new building.

- (short term) Assisting with a formalising of LCC's relationship with FE Burman giving students access to variable digital print.

- Interviewed for latest edition of *'Editorial design: digital and print'* by Cath Caldwell. Laurence King. (2024)

2. How this fits within the wider context of "creative" technologies

Wider technological context
Open-source communities

- HP Spark is built using the open source language p5.js there is a community of existing users – albeit working for screen.

- Websites share code to explore, modify and troubleshoot.

- Free code editors & teaching resources.
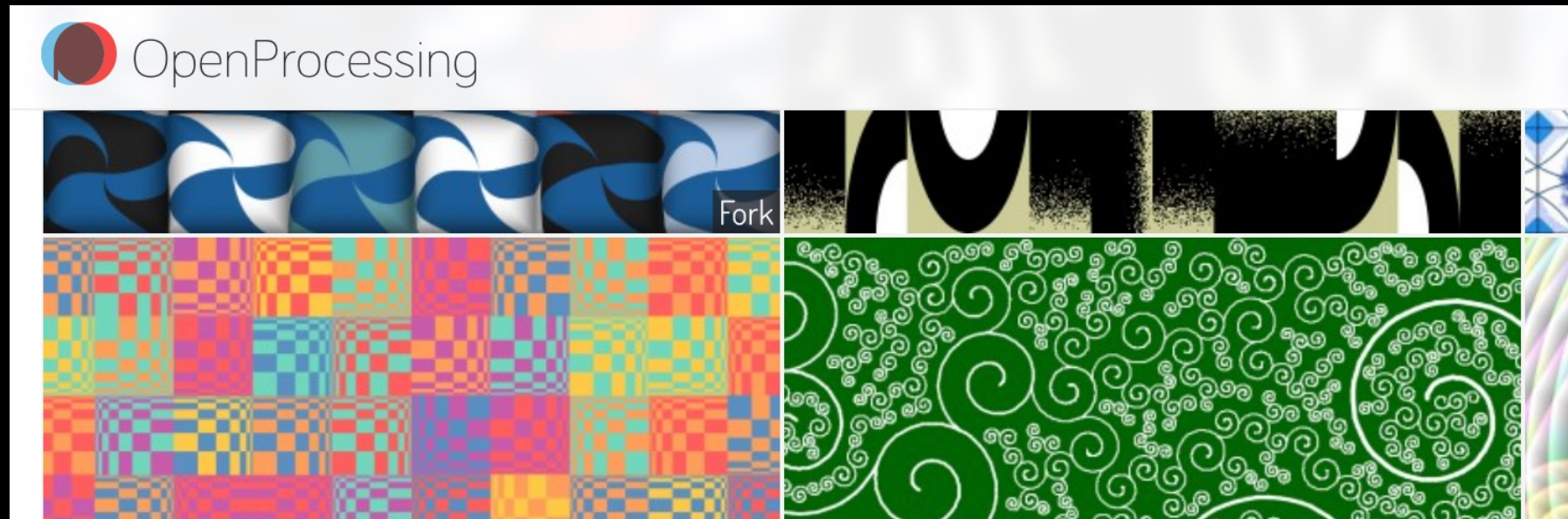
Wider technological context
Artificial Intelligence

While HP Spark isn't an example of AI, it shares similarities with the basic building blocks:

Algorithms + data = output

AI is created from complex combinations of algorithms and very large data sets from which the system "learns".

Wider technological context
Artificial Intelligence

- ChatGPT can be used to write/generate P5.js code from text prompts.

- May help reduce the barriers to learn coding, or provide shortcuts so less time is spent writing code.

- It can produce iterations from the same prompts – possibly useful part of the process?
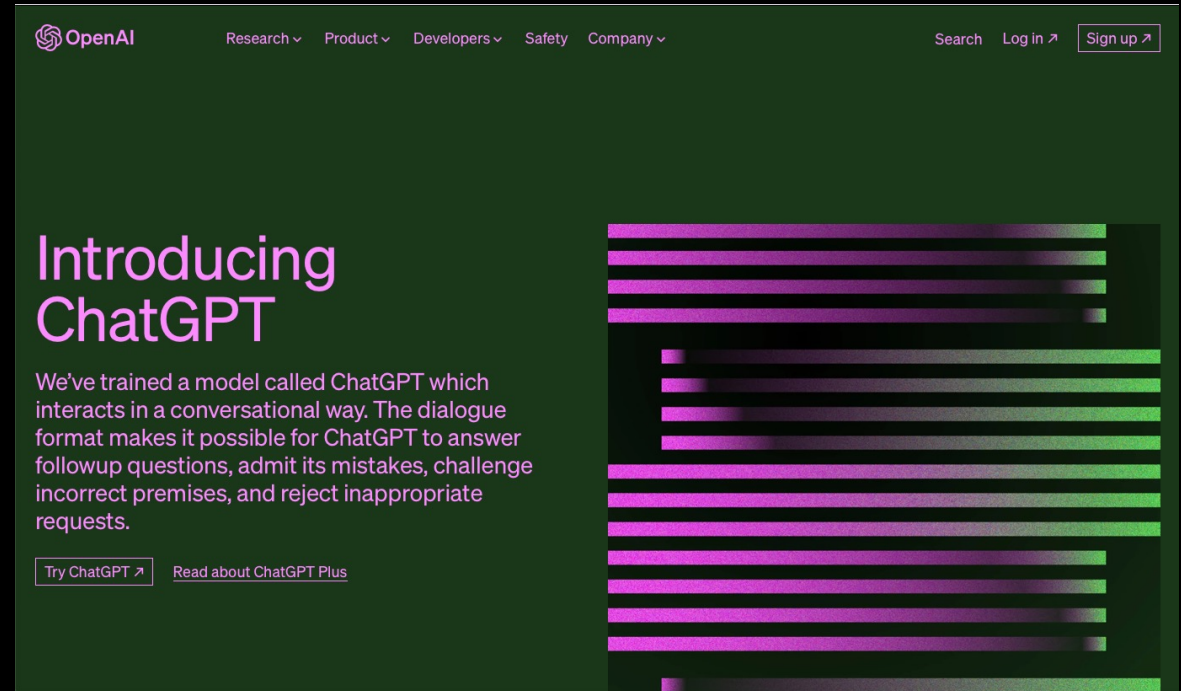
3. The future

The future
Challenges

- Time: to continue exploring new approaches (workshops + clients).

- Money: Currently rely on favours regarding printing and paper to help me demonstrate developments.

- Other than HP Indigo's team, I am the only designer in the world working in this way at the moment (pressure + bottleneck).

- Increased additional commitments.

- I don't have control over how HP Indigo license the software.

The future
Opportunities

- Interest from Penguin Random House (among others), in relation to both workshops and designed materials.

- Discussing partnering with paper manufacturer GF Smith delivering workshops and connecting universities and local printers (PSPs).

- In talks with universities + organisations about further lectures and workshops.

- Potential funding available in relation to paper being a "foundation industry".

The future
Areas of further development

- Further exploration of AI in relation to creative coding and the software (alongside ethical implications).

- Development of future workshops – these seem a good way of people getting to grips with the process and coding, and how it connects into other areas of interest/business.

- Continued exploration + experimentation
  – Currently exploring this from the perspective of "*paper as interface.*"

Thank you.

o.tickler@arts.ac.uk
@oswintickler
oswintickler.com