

Drawer the Explorer

Pronounce it Draw-er ... one who draws. :-D

Go on, laugh! it's funny!

What is it?

Programming for Artists Term 2 Coursework by Phil Jones

Drawer the Explorer (DtE) is intended as a social, interactive digital art work in the form of a "workshop" involving people, computers, printers, paper and pencil, electronics, string and scissors. Within the workshop people will engage in a number of "interactivities" including drawing, watching, printing and listening. The components are as follows :

- A pencil and graph paper with which people can draw "maps".
- The pencil is actually electrically connected to an Arduino and circuits can be made between the point of the pencil and the graphite already scribbled on the paper. The Arduino measures the resistance between the pencil and a second terminal and can track the pencil's movements (at least in one dimension closer-or-further from the other terminal)
- The Arduino drives a small piezzo-buzzer playing a pitch that varies with the resistance of the circuit.
- It also passes the data from the pencil up to a laptop running the main DtE software.
- On the computer, DtE presents a stylized view of an "exploration" in a virtual rainforest where the participants are searching for "artefacts" from a "lost" civilization.
- Currently, these artefacts are in the form of masks (stylized faces) though in future we can perhaps think of equally interesting alternatives.
- When a mask is "found" through exploration of the virtual forest, the DtE program actually writes an image of it as a PDF file which can then be printed. Participants are encouraged to print out the mask shape, cut it out, decorate it further if desired, and wear it.
- Timing and number of participants should really be arranged such that everyone present has a chance to find, print and wear a mask during the workshop. At the end of the session masks and scribbled maps are available for the participants to take away with them as souvenirs of the expedition.
- Movement through the "forest" is controlled by the pencil interface. As the participant scribbles conducting paths on their map, this signals the computer to advance the player in the virtual world.

- In fact, the secret of DtE is that there is no lost civilization inside the program (I know. You're shocked!) In fact, the signals that the pencil sends are interpreted as "gestures" which feed into an algorithm which generates the masks. Hence there is an ambiguous blurring between "discovery" and "creation".
- When gestures are recognised by the program, the display of the forest is overlaid by game-like info-graphics. Meanwhile, exploration is accompanied by an electronic sound-track which also signals particular events.

Influences

Masks

On the original trip to the Horniman Museum, nothing grabs as much as masks. I can't say why. It's not that I care about identity or subterfuge. Irrationally I am touched by blank stares, ritual role-playing. Spirits. Daemons. Ancestors. Meaning. The sense of taking part in some eternal story.



And yet I have no superstition. No belief in goblins. I don't yearn for magic, damn-it! I am a rational modern European. Urban heir to civilization.



Perhaps the attraction is "*abstraction*"? The blunt simplifications of the features of the face? The aspiration to be "universal" rather than "specific"? Am I a wannabe resident in Plato's heaven? The nosy next-door neighbour of the Orixas?

Percy Fawcett

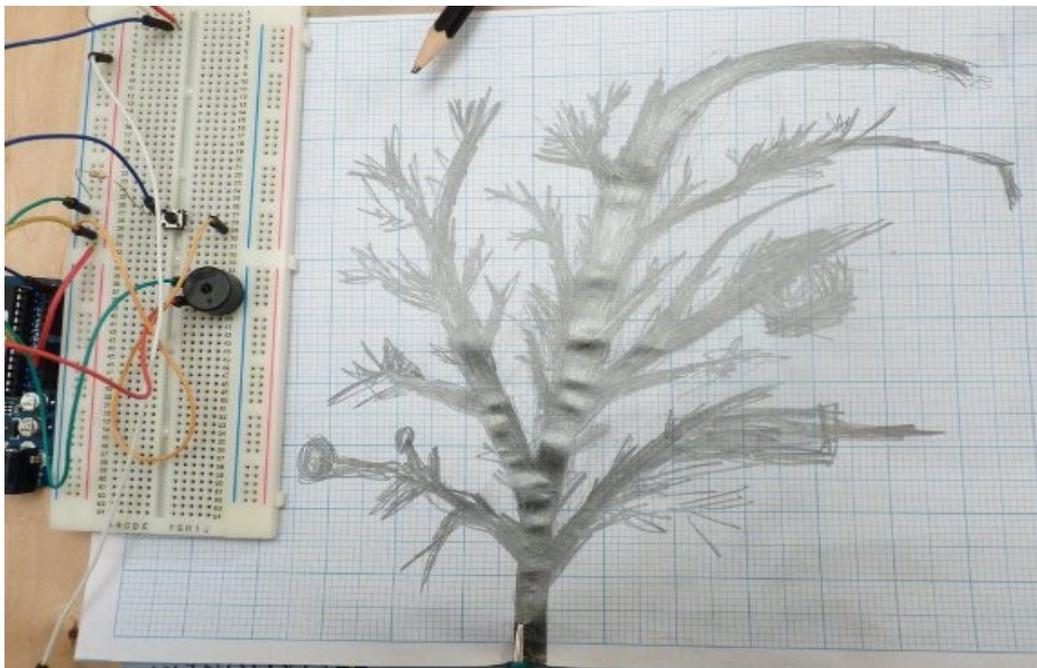


I presume ...

Last of the "individualist explorers". Searching for the lost city of Z in the Amazon jungle. Trained, equipped and turned loose by the Royal Geographical Society. Fawcett starves among the plenitude of the rain-forest. But, despite his European upbringing, he *notices*. Begins to understand that there was once something else here : a thriving community. Finding sustenance in florid wastes.¹

Drawing / Exploring

I can't draw. But I love to wave my magic wand and inscribe the plane. Trajectories and tracings. Mapfictions. The difference between "navigation" and "wayfaring".² Bifurcating samambaia, L-systems, gardens of forking paths, river tributaries. Thick graphite, as old as a smudge of soot on a cave wall, makes black circuitry.



An earlier version of the pencil input device can be seen at <http://www.youtube.com/watch?v=c1bGHB1URV4>

1 Grann, 2009

2 Ingold, 2007, p. 15

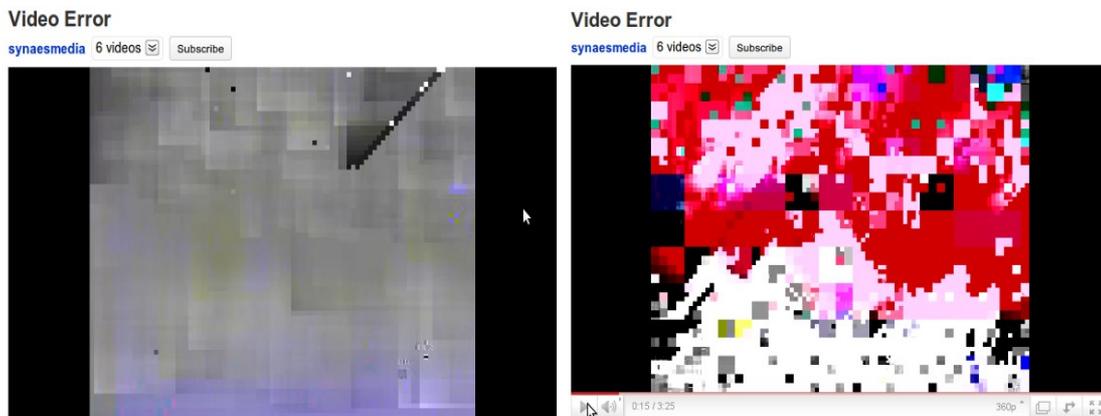
Workshops

Please, no white cube mausoleums. "Interactive" art left unplugged and inactive; over-poked and broken. Instead *workshops* : live, interactive, intimate, room to explore and discuss. Technology can be a bit ramshackle because you're there to explain and fix it.

Plus, you can charge twenty-five quid a head for a good workshop. (So I've heard). Here's the pitch : computers make stuff. Don't want to stare at a screen. You want a party-bag of goodies to take home with you : a clown who twists animal spirits out of rubber bags of air. For my next trick ... what's to hand and underused? Printers. Pencils. And Paper.

Visual Influences

Video Errors³ from YouTube created a fogscape I'd never seen before. Blocky "8-bit" shades of fluorescent grey and rude little burps of colour.



Video games are an unavoidable reference when you explore in pixels. "Dance" games have lovely overlays. Arrows of info-graphic design flowing up the screen.



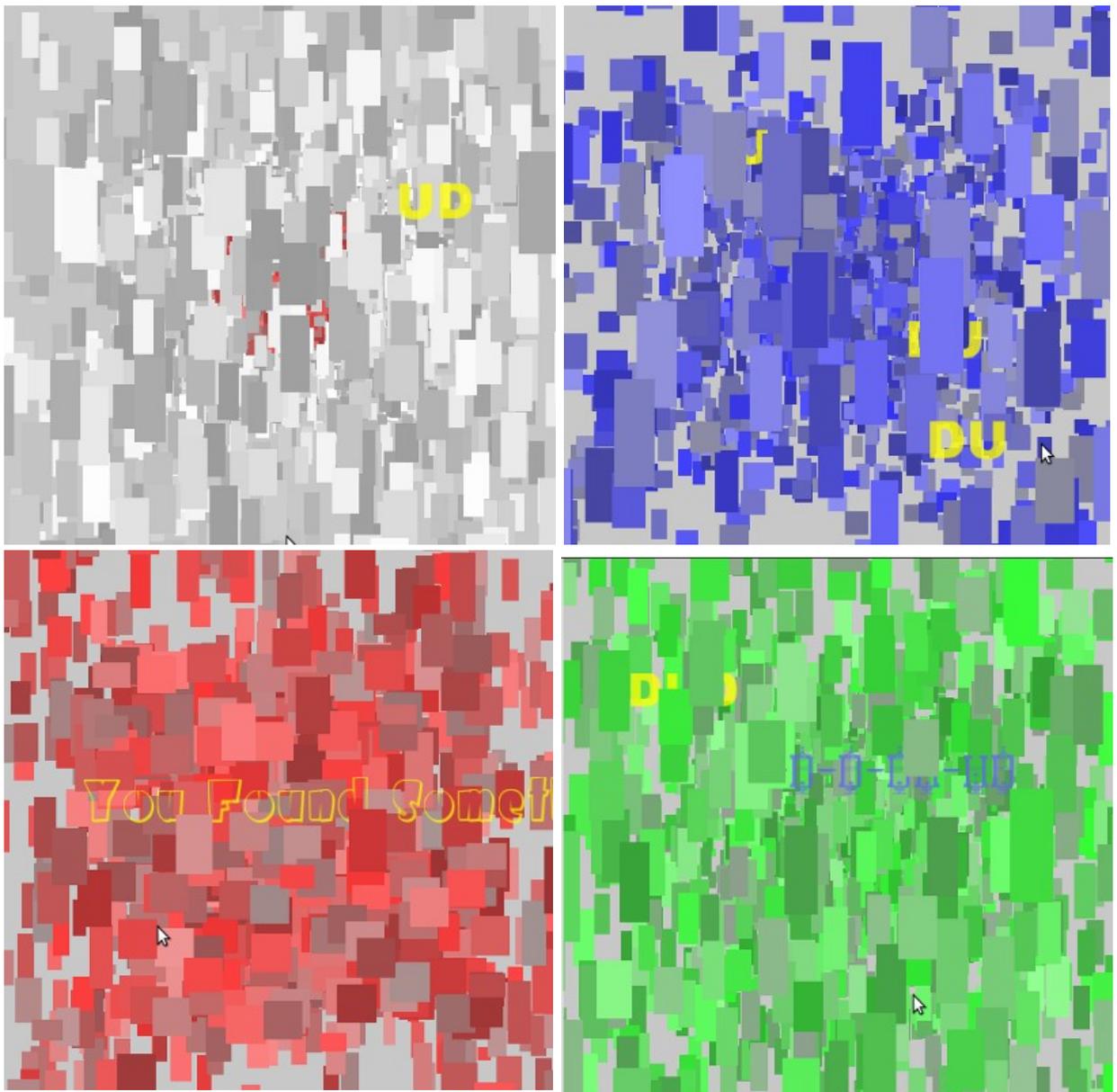
How it turned out

Source code and further information can be found at :
<http://www.doc.gold.ac.uk/~ma001pj/drawer/index.html>

A video can be seen on YouTube at <http://www.youtube.com/watch?v=M0aYUiMeWXU>

I am still waiting to present the full piece in the form of a workshop so documentation of DtE in its true habitat isn't available. Here are some of the other productions from the work.

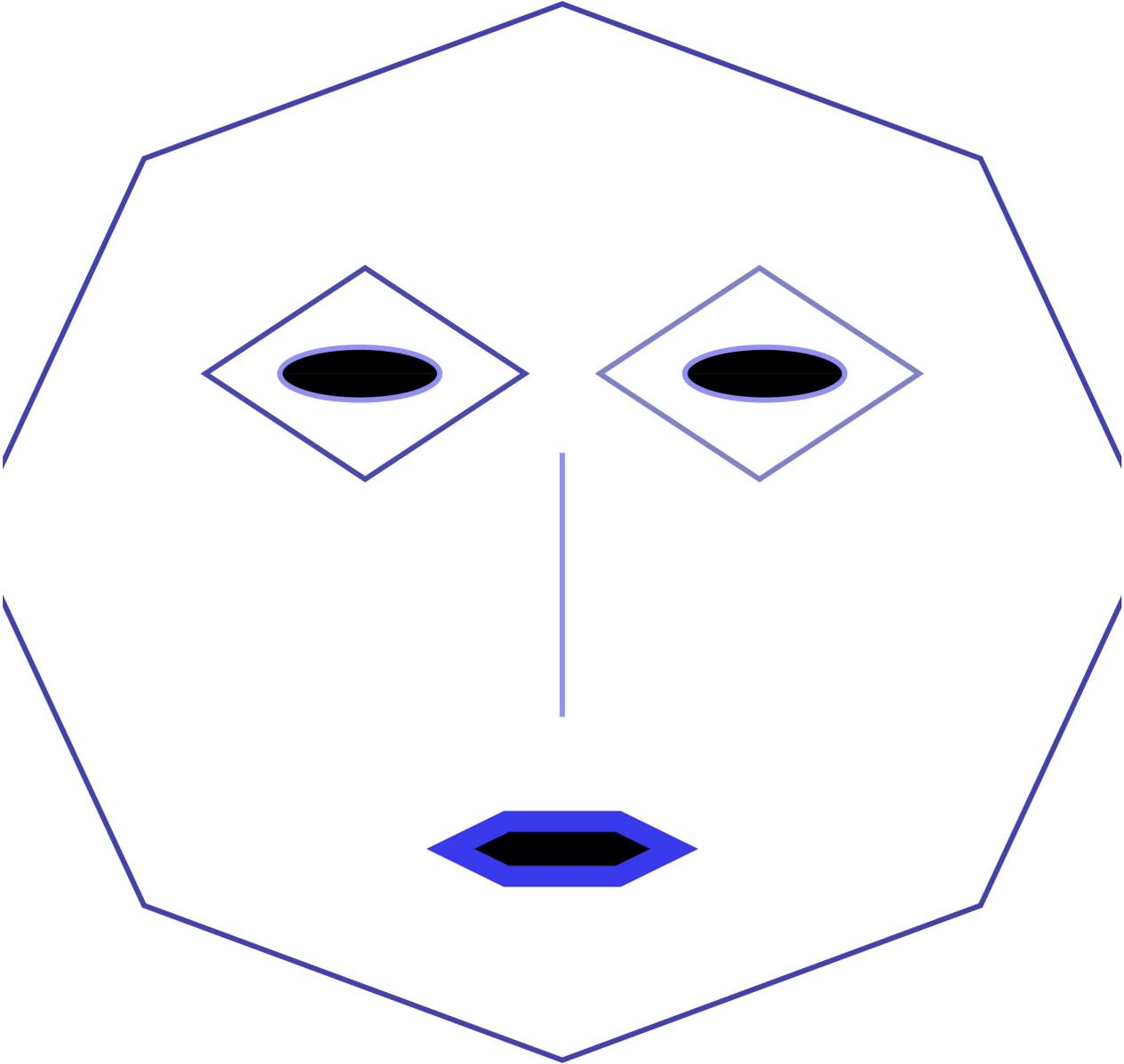
Screenshots



Drawings

See the Drawing / Exploring section above for an example of a drawing in progress. Because you only get a signal when the pencil is connected to the "root" (other electrical contact), drawings usually end up looking tree-like.

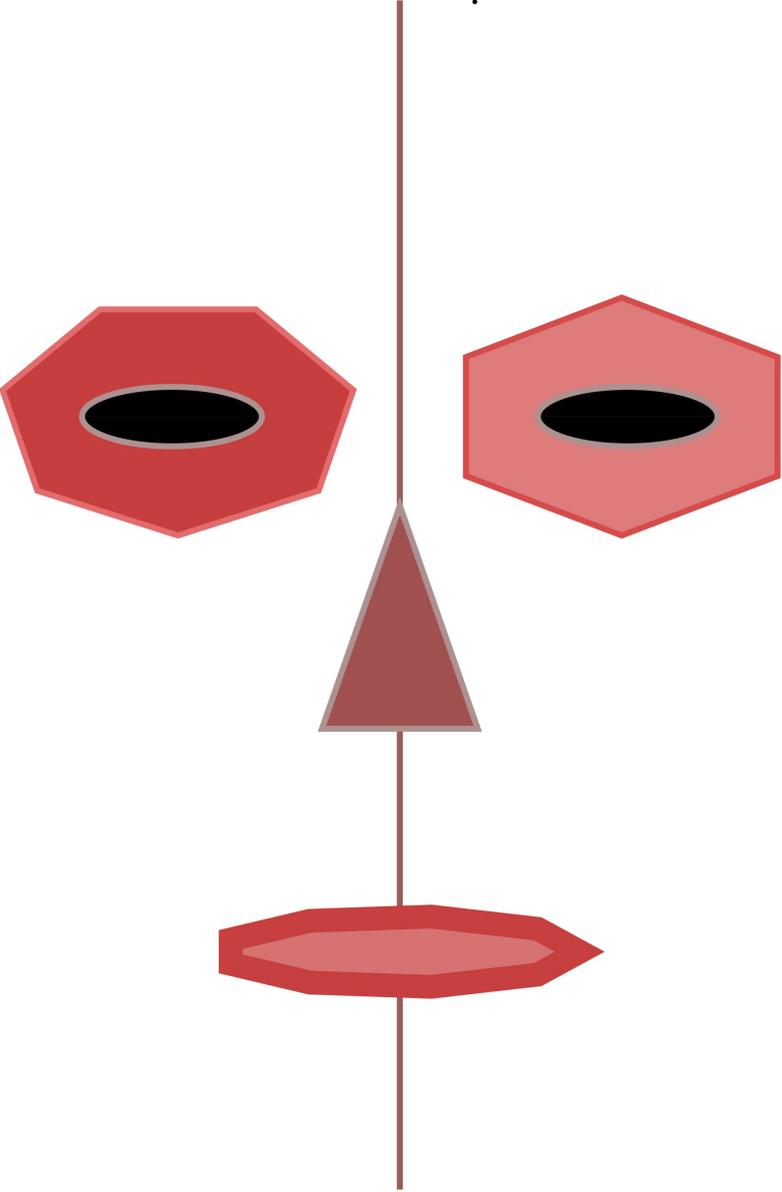
Example Mask 1



Example Mask 2



Example Mask 3



Bibliography

- Grann, D., 2009, The Lost City of Z, Simon and Schuster UK
- Ingold, T., 2007 Lines : A Brief History, Routledge
- Jones, P., 2011 Video Error (seen 30 March, 2001 <http://www.youtube.com/watch?v=SSPv-xzMwOI>)