

Terra nova

It is just over one hundred years since electricity generation started, seventy since radio transmissions began, and fifty since radar and telecommunications entered our environment.¹

Anthony Dunne, *Hertzian Tales*, 2005

Three dot-matrix printers hang suspended like the steps of a staircase or an escalator; a loop of paper threads them, one large curve connecting first to last, two shallow cascades between. The printers' sprockets turn, engaging with the perforated edges of paper feed, turning the loop.

As the printers pass the paper through themselves and to each other, tiny people appear on the white wood-pulp, clusters of dots picking out business-people with brief-cases, children standing, a jogger.

Busily the printers shift across the moving surface; a population grows, hundreds of characters appearing in evolving tableaux, a crowd-scene growing denser all the time - the looms of the three Fates weaving all people and their stories into the warp of the world.²

If it continues, will mechanical styluses wear through paper made black with people, tear it into a ragged loop still pushed and pulled through its orbit till it parts and the paper falls to the floor?

And still the wheels would turn, printers printing on their own revolving insides, the machinery running on after the people have gone.

But before that apocalyptic vision, before the end of the world - a world. 'Dot Matrix Loop' revolving on itself, sealed, hermetic: a mechanical terrarium. A tiny world that grows before us, until its creator unthreads its over-populated matrix, and slips in a blank ream on which to start again.

The dot-matrix printers are themselves inhabitants of a smaller world, a world quarantined, closed off by changes in technology, by successive waves of newer electronic products. Now they can talk only to themselves or - through the intervention of artist and engineer - revived for new purposes.

The artist Corey Arcangel makes the closed worlds of defunct technology his material and medium. He uses old computer-game consoles (like the Nintendo game console rendered in marquetry on the walls of this exhibition) to make new works, rewriting parts of their code, replacing pieces of their circuitry.

In *Super Mario Clouds* (2003), he rewrote the code for the classic '80s arcade game Mario Bros to erase all elements of the game play, all images and animation, but for the sky, and clouds: white clouds on a blue sky, floating endlessly by.³

He worked directly on the original game cartridge, replacing the program chip with one of his own, and leaving the original graphics chip intact.

Corey Arcangel's use of old technology is tactical, a way of coping, as an electronic artist, with the rapid evolution of electronic media. Seeking some technical mastery in a continually evolving field, he decided to limit his medium to computer technology that would not change, to computer systems no longer in development.

"I wanted to work with machines that were fixed in time, like a fixed architecture... The Nintendo stuff is a perfect example. I know it's cheap, but it's never gonna change, because it's already obsolete."⁴

"Imagine trying to play Bach on the piano if they switched keys around every few years ... and charged you for it!"⁵

Not only that, but:

"the limited capabilities of these computers allows us to understand every aspect of the machine. Thus we can (pardon the phrase) become 'experts'."⁶

There's a certain poignancy in becoming master of an abandoned realm, a fixed and static world in a field of technology largely motivated by continual change and development. These worlds, of dot-matrix printers and old game consoles, are perhaps more approachable, more 'human', in their fallibility.

Doesn't the plea 'I'm only human', mean 'I make mistakes; I am fallible'?

Obsolescent electronic products are one reminder of the limits of technology: what was once new is now old; once fast, now slow. But accidental failures of our technology sometimes give us more spectacular reminders of its (and our own) fallibility...

Extensions of the Universe (2007) is a group of circular portraits of high technology disasters - images of the night sky, the constellations seen from the location of each of four major space disasters: the spacecraft Soyuz 1, which crashed on 23 April 1967 after a series of technical failures; the Soyuz 11, whose three cosmonauts died in the final stages of an otherwise perfect mission: probably from failing to properly close a hatch door, on 30 June 1971; the Challenger space shuttle, whose seven crew died shortly after launch in an explosion caused by the rupturing of rubber seals made weak by the winter cold, on 28 January 1986; and the Columbia space shuttle, which was destroyed on re-entry, along with its seven crew, on 1 February 2003, from damage caused during its launch two weeks earlier.

Each circular panel of the work has an electrical cable running from it, unplugged. On closer inspection the cable and the plug it terminates in prove to be made of wood, incapable of carrying electricity. What power do they carry?

The exhibition's other power-cable and plug connects *Dot Matrix Loop* (2007) to its power supply. This is a world self-contained but for creator and power-source: its connection to the electrical mains, this world's sun.

The cable is its vulnerable point, a fragile linkage to its life source; pull the plug and, like the *Extensions of the Universe* (2007), suddenly no people moving across the world, no machines in motion, only stillness. Fragile umbilical cords lie coiled, homages to power, wooden relics. No electrons flow here.

While the movement of electronic product development is towards dematerialisation, miniaturization and software, towards 'pure information', a corresponding and largely invisible hardware base grows to support it, requiring more and more power. Google is buying land near hydro-electrical stations so they can reliably and independently power their ever-growing server farms in a future where energy-provision may become... unreliable.

"With the vast concentration of energy needed to run the megaservers - and equal and opposite megawattage needed to remove the excess heat - power and cooling have surfaced as critical issues in the expansion of global IT."⁷

While new technologies hide their vulnerabilities, older ones have no choice but to reveal theirs. These older technologies, with their superfluity of signs (whirring, pixellated) provide material for the artist, supplying extra, emotive stimuli: slow, noisy, ponderous, forgotten. Artists like Rowan and Cory reassemble old electronic artefacts to invite new readings, new meanings. Like the clouds floating by in *Super Mario Clouds* (2003), with all competition, all labour gone, so the printers of *Dot Matrix Loop* might be imagined collectively dreaming, the paper loop like a thought bubble passed between them. Dreamers now, not workers.

As the designer Anthony Dunne writes of the tendency of electronic products to spill their own electromagnetic fields into the space around them, to slip their containers, they could be said to 'dream':

"Despite the images of control and efficiency conveyed through a beige visual language of intelligibility and smartness, electronic objects, it might be imagined, are irrational - or at least allow their thoughts to wander. Thinking of them in terms of dreaminess rather than smartness opens them to more interesting interpretations."⁸

More interesting interpretations: printers as looms, spinning worlds; power cables as suns; cables as reliquary; game consoles as cherished ancestor, rendered in marquetry. *Nintendo Marquetry* acknowledges our electronic products as more than tools, pays homage to them as part of our 'artefactual culture'⁹: framed and rendered through pain-staking handicraft.

Getting beyond the intended function of electronic products to other meanings - easier to acknowledge when they're past their use, when they've been succeeded by more 'able' descendants. They activate other senses, other feelings: empathy? We understand 'not working'.

Commercial technology developers may tell us to move bravely forward and discard the old; humanness prevents us from doing so easily. Art works such as these make stories with and about old technologies that also, naturally, spin tales about that which can't be separated from technology: us.

Ralph Borland 13.11.2007

1 Anthony Dunne, 'Hertzian Tales', MIT Press, 2006, p.101
2 In Greek and Roman mythology, the world is sometimes depicted as a woven cloth passing through the looms of the Moirae, or the three Fates.
3 Corey's Web-log, 'Super Mario Clouds - 2005 rewrite', http://beigerecords.com/cory/Things_I_Made_in_2003/mario_clouds_2005.html
4 'Profile: Corey Arcangel', Corey Arcangel interviewed by Cathleen Chaffee for Contemporary Magazine no.84, 2006. Reproduced by the NY MoMA in 2007 for the show 'Automatic Update', http://www.moma.org/exhibitions/2007/automatic_update/subs_wrapper.php?section=arcangel_interview.html
5 'Cory Arcangel Doesn't Even Like Super Mario Brothers', Corey Arcangel interviewed by Eryk Salvaggio, 2003, <http://www.turbulence.org/curators/salvaggio/arcangel.html>

6 *ibid*

7 Kate Rich, 'Promised Lands', MUTE magazine, May 2007, <http://www.metamute.org/en/Promised-Lands-Google-and-Morningstar>

8 Anthony Dunne, 'Hertzian Tales', MIT Press, 2006, p.117

9 Anthony Dunne, 'Hertzian Tales', MIT Press, 2006