

Science and Society Lectures 2015: Bridging Art and Science The Impact of Creative Technology on Society (13 October 2015)

Technology as Art: Visualisation, connection and imagination

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The contention of this short talk is that technology and art are twins. And that technology is itself a twinned beast. There is nothing new in this observation, but it is nonetheless a pertinent reminder of how the disciplinary versions of being and doing in the world in circumscribed languages and specific bundles of knowledge, are often powerful but if held to the exclusion of any other way of thinking, might entail lost opportunities, and dropped connections.

Techné in Greek designates skill, craft and art. It involves both the design and application of things made through the skill and imagination of wo/man. *Jishu* in Chinese is a combination of two characters—*ji* incorporates the radical for *hand* (*shou*). *Shu* is 'art' – here a hand art – a technical skill, *meishu* refers to fine arts. In earlier times in British education and in the design industries we used to talk about the Applied Arts.

My twins come from a strange parentage of Heidegger, the philosopher and Samuel Beckett, the writer. Twin Number One (but not necessarily the elder twin) – : technology may be understood as instrumental. Heidegger was deeply worried that this twin was managing humanity rather than the other way around. His fears are familiar, but need to be reframed as humans' fear of each other to use technology for power. Modern warfare is a technology. Mediaeval siege warfare was also a technology of its time. Humans create and design technology in order to manage and order the worlds they inhabit. In Heideggerian language – technology *enframes* aspects of the material world. We build a bridge to cross a river. We have mastered / *enframed* the river – up to a point. The river still flows beneath (unless we use other technologies to redirect

it – but – as the Three Gorges Dam project in China evidenced – that is harder than we like to believe without unforeseen consequences).

Twin number two: Technology is also revelatory, even as we use it to manage – space, time, concepts, actions. Imagining technological development is both about the human power to see connections in advance and design our way towards those connections, whilst the use of technologies of manipulation and organization may also be a way to reveal and show what is innate. This is coming close to art.

Once, through design, we reach a place or a possibility, we see more, make more, do more. I don't particularly like the concept of the prosumer – but I do like the idea of humans as makers and inventors, one making the pass, another taking it forward, another shooting at goal, except that every goal (or miss) becomes another pass, and on we go. In Beckett's later plays, there sometimes seems to be very little going on but this is an artist at the peak of his techné. A character speaks, her mouth only visible. The character is indeed MOUTH. So, in *Footfalls* (1975) the script contains an exact set of instructions – complete with a dance notation for the only visible actor on stage. Commence walking with the right foot, take nine steps, wheel, take nine steps back in the opposite direction on the same axis. *Lighting: dim, strongest at floor level, less on body, least on head.*

Beckett has set up a precise geography for his drama, a geometry of hysteria and loneliness. A creature who beseeches a dream of her mother's voice to make her own aged childish feet sound more noisily on the floor, or entreating herself to listen more closely to hear what noise they can make at all, 'I must hear the feet, (she says) however faint they fall'. Our point is that the play can only work through obedience to the stagecraft written into the piece. The connection that Beckett makes between psychoanalytic descriptions of hysteria, and the visions of madness is made through techné – mind, hand, foot, notation, 1,2,3,4,5,6,7,8,9, wheel ...

Beckett is endlessly renewed through performance. Other inventions are more clearly technological but are also understandable as objects of the imagination. It

is beyond banal now to think about the newness of the smart phone, the reinvention of touch, the intimate relationship between object and eye, between security, connection and mental health. Is the smart phone a work of art? Possibly not. Is it a combination of engineering, anthropology, design, physical science, sociological understanding and communications. Yes of course. Ten years ago in Sydney Australia, I asked two groups of eleven year olds to use colour and scale to show me where communication made a difference to them in their everyday lives. One girl drew her house with carefully scaled spaces and graded colours to show where things were best heard and where she could most easily understand what was happening in her life. On her map there were two hotspots (coloured in her favourite bright yellow). One was the small downstairs bathroom where she could sit and read and think. ... The second was her trampoline outside in the yard, down the side of the house, right near the sitting room window, where she could bounce on her own, whilst still hearing what people were saying through the window. I imagine her 1- (bounce) 2- (bounce) 3-4-5-6-7-8-9 turn ... Another girl drew a complex image of the entire globe crossed by a triangle of black lines connecting three hot spots – Ryde in north Sydney, Guangzhou in Southern China, and Bristol in the UK. These were the three places where members of her family resided and they were of course linked by phone.

Then the same groups were given the challenge of designing a perfect device to accommodate all their communication desires. They worked alone or in small teams of three. This is what phones looked like in 2004. Most eleven year olds at that time would not possess their own phone, but might have access to a parent's phone for emergencies. Anyway, apart from one boy who had a built-in nuclear warhead in his offering all of their designs were of what we now call smart phones, technological features that had already been released or were in transition to the mass market. They wanted mobility, privacy, playability, picture exchange and sound file exchange, and a great camera function. Some wanted targeted friendship functions (the type of function now available through many Apps). Their imaginations were well in step with that of the technology's

emerging capacity and the ideas of designers and interface specialists working on the next generation of mobile devices.

This isn't very surprising because one of the things that makes connections between the work of the hand, the eye and imagination of the artist, and the way in which we all see and feel the techné through which we hold and manage our worlds, is what we share so deeply (and what divides us when that is not shared) - our sense of space. So in the last few moments available to me I want to share a few constructions of space, through which artists and their techné manage and create the world in ways which make sense of our collective imaginations, and - when managed space becomes art a- helps us see into the fear and comedy of what makes us human, as the film director Hal Hartley puts it in *Simple Men*, nothing but trouble and desire.

Images ...

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