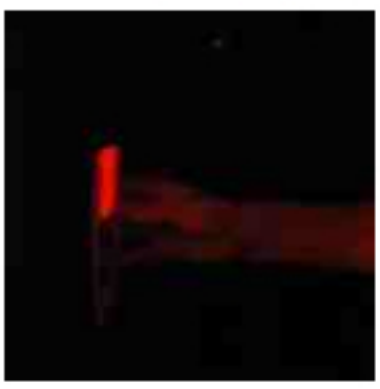
July 3rd, 2010 - LED Tests and Code Development

This project is continuing to develop along two related strands – the development of an ***object*** designed to encourage interaction with the urban environment and the generation of ***environments*** which are themselves interactive in a continuation of the discussed issues relating to public ownership.

As the methods of making (electronics/programming languages) all pretty much entirely unknown territory for me these developments are unfolding slowly. Thankfully as I am studying an MA in 3D Design at MMU I have access to a lot of expertise, workshops and support, however it's taking some time to consolidate all these inputs from various places. I'll summarise the latest news for each of these strands separately:

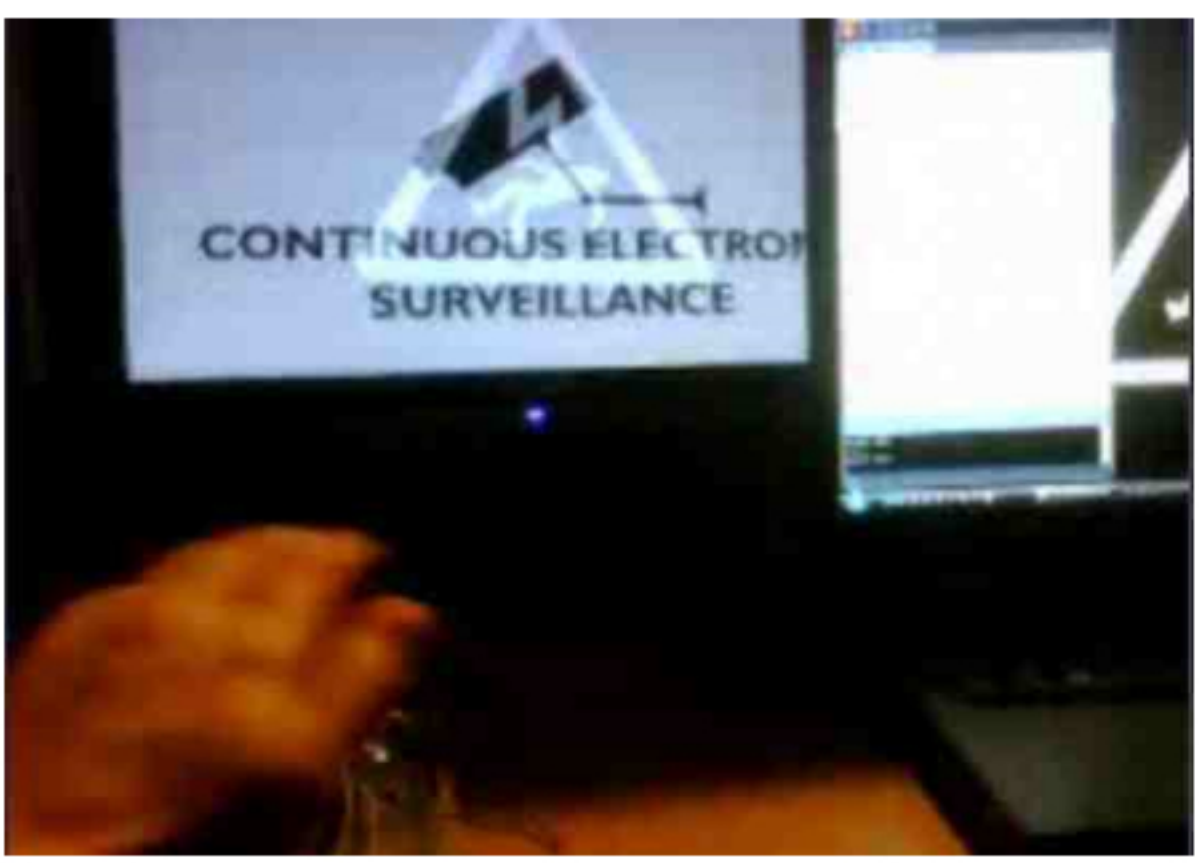
–This Belongs To (***Object***)




Since speaking with members of the engineering department at MMU I have manged at least to work out an appropriate LED to run tests with. I made some initial tests with the existing Belongs To cards and a couple of different basic LED circuits after having found a really simple LED keyring/torch which led me to believe it would be super-simple to make. Unfortunately, what I didn't take into account was the difference between emitting light, which in and of itself is quite straight forward, and projecting an image (text in this case but must still be focused enough to be legible). I found that the distance between the light source and the card needed to be much further than I had previously anticipated which has completely changed the likely physical realisation of the object. I've since ordered a 'super' LED, a P7, often used in camping torches or emergency signs – it can get to 700 lumens (and yes, this is all totally new to me but apparently that's pretty bright) which means I should need only one instead of a series of standard dimmer ones. This should arrive next week and I can then work with the technicians to work out appropriate resistance and a battery for the circuit. When that has been established, I will work in the optics lab to determine the distances needed to have a focused image and whether or not it will be necessary to use any lenses (something I hadn't thought about at all!). When *that* is decided it will be possible to design the housing for the unit which I plan to model digitally and produce using rapid prototyping techniques, but that's a little way off yet I think. As it's summer at the Uni, these developmental stages are not going to happen very fast unfortunately but I'm confident that they *will* happen, which is probably the important thing. Much as I'm starting to feel that I entered this project with a very naive expectation of what was required, I'm certainly on a huge and exciting learning curve!

– Installations (***Environment***)

I had previously worked on an interactive projection which used a light sensor to display different images based on an analogue input reading which assumed whether or not a shadow was being cast on the sensor by someone standing in front of it. This was fairly basic and I am now working on developing this further to include events at difference thresholds. I have managed to adjust the code now to include three images. You can see a video of that and view the code here. There is a potential exhibition opportunity in London in September for this work so I'm keen to continue moving this forward. Eventually I would hope that the Belongs To object could be used not only in the streets but also to interact with these installed environments, which could perhaps in time also move out into city spaces more directly.



Still from film demonstrating light sensor development

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