

Colour Coded

A Project Proposal
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For:
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Assignment: "Things in this World"
MPM032 Concepts
March 9, 2004

Project Synopsis

Colour Coded is an art installation that will explore the idea of human activity and how it is documented online through the use of webcams and video broadcasts.

Brief Description

To convey the concept of a network of activity and energy, any available or participating online video feeds from within the city of Toronto will be dynamically polled on a regular basis. Each frame from an individual feed – for that moment of time – will be reduced to a single coloured dot representing the predominate colour in that image. As time passes, the colour of the dot may or may not transform in order to reflect changes in video content.

A compilation of these coloured dots will be organized into a map based on its location origin¹ and presented as a video/computer projection. The map will be projected from below onto a large, translucent dome structure located within a dark room. The projection can be experienced from two viewpoints – while standing inside the concave part the dome and looking up, or from a balcony view looking down on the convex area of the dome.

Through this reduction of people as light, *Colour Coded* hopes to both create an environment that can be enjoyed purely for its use of light on one level and for its theoretical concepts on a deeper level.

¹ Whether it will be based on street address or IP address has not yet been decided, although if IP addresses are used, it will allow for a wider range of participants.

Detailed Description

The following sections will detail the inspiration, concepts, technical considerations and feasibility of *Colour Coded*.

Inspiration: Activity and Energy

I was thousands of feet above the ground on an evening flight to Toronto. The cabin was quiet with most of my fellow passengers dozing in their seats as we cut through the dark sky. The interior lights were dim allowing me to peer out the tiny airplane window as I looked for signs of civilization in the darkness below.

I noted how the presence of farmers, rural homeowners and lonely truck drivers were precisely pinpointed in the speckles of lights that were far and few in between; glowing clusters indicated small towns. I wondered about all the people who must be getting ready for bed at this very moment, or perhaps they were cuddled in front of their televisions. Although I could not see actual people from this height, the electricity that flowed through the space they occupied marked their existence.

Hours passed by and finally an announcement was made to indicate that we would be approaching Toronto shortly. I will always remember the breathtaking moment of watching the clusters of lights getting bigger and closer together until finally the entire horizon exploded with illumination.

A mass of moving car headlights snaked between grids of streetlamps. Brightness emitted from the pores of all the stores and restaurants open late and from the rows upon rows of homes. At that moment, I felt that I could see the

entire city from my seat in the air as if it were laid out in front of me like a map of energy.

With *Colour Coded* I hope to re-mediate the wonder I felt seeing the electricity that went hand and hand with human activity. To convey this idea, the concepts of mapping systems will be employed.

Maps as Interface

Maps come in many forms and can essentially be thought of as the measurement, naming and ordering of relational information in order to be accessed from a central location or to be experienced in a cohesive manner.

Due to the elastic nature of map representation there are no restrictions to what can – or has – been mapped and this is not exclusive to such things as physical landmarks (ie. road or topographical maps), structures (ie. floor plans, Periodic Table of Elements) and information (ie. political boundaries, historic timelines, psychogeographic maps and internet traffic).

Although maps may be based on the natural world, with the widespread proliferation of mapping systems and their conventions, they are often accepted as “fact” rather than the codified abstractions that they are. Maps are man-made creations that are semiotic sign-vehicles, usually with only one interpretation. So while this is used out of convention now, we must remind ourselves that maps are highly objectified and exert a great deal of power over how we orientate ourselves *around* these mapping conventions.

The perception of scale between the map and what is mapped is often taken for granted; an effective map should allow the user to see a view that is bigger than

what they can currently see within their immediate physical environment or provide sufficient information to allow to the user to orientate themselves within the context of the map. *Colour Coded* plays off this by adapting the often used “god-like, top down” perspective when the dome is viewed from above while subverting the position of the viewer while standing within the dome, making them feel smaller than the map rather than larger.

Maps are typically read with eyes only and, in many cases, light itself has been used as an interface for orientation (ie. light houses, camp fires, strings of LEDs in aisles of dark theatres). The immensity of being inside the dome may even recall the feeling of looking up into the stars, possibly the oldest “map” or way finder ever used.

However, with an all-encompassing view, too much information cannot be revealed at once otherwise a viewer will be overwhelmed and cannot cognitively make sense of it. Reducing each video feed down to a single coloured dot follows this convention however it should be noted that not much “useful information” could actually be extracted from it. This destabilizes how viewers expect maps to function and even comments on how maps have become ‘eye candy’ for many people – especially graphic designers.

In many cases, often that which cannot be seen can be just as revealing as to what is explicitly shown on the map. In relation to *Colour Coded*, the blackened areas of the video projection not only denote where there are no participating video feeds, it might also reveal correlations of low-income households and lack of internet availability – an example of how very simple objects can be very politicized.

The decision to make *Colour Coded* a non-interactive installation for a viewer in the installation space relates to how we experience maps as separate entities from what they are originally based on. Maps today are often found as printed objects and are static in nature compared to the changing landscape that born them.

There is a temporality to maps also in the material – most often paper – that they are made of. With the use of digital technology for mapping, this temporal hurdle is being taken down and is replaced with an even more complex juxtaposition of collapsed time and space. The dynamic comparisons of changes over time with maps are easily utilized with the use of digital mediums. An additional component of *Colour Coded* may be to continually document the installation space with video in order to play back an archive of time-lapse clips showing movement within the space and the changing colours of webcam feeds.

Colour Coded adapts many map-making conventions but through this adaptation it also comments on the futility of a map's ability to "reveal all". In contrast to the compilation of information in a central location, what may be most interesting about maps is that they often invoke spatial relationships that are unwritten – relationships that can only be experienced on individual basis.

Technical Considerations and Feasibility

As it stands, additional research on specific technologies and materials will be required in order to implement *Colour Coded* as outlined above. Also, due to the current budget available of \$0.00, a means of fundraising or sponsorship will need to be confirmed.

A custom-built or modified web application will be required in order to dynamically collect video broadcast feeds. With my background in programming this should not be a hurdle at all, however issues of costs related to bandwidth and server space will need to be considered.

The availability of a large number of participating web broadcasts may be a concern but this can most likely be offset by first creating a prototype using publicly available webcasts (ie. Ryerson University has several webcam broadcasts of building constructions) and then use the prototype to promote to personal or home webcam users. Issues of privacy may arise but it should be noted that this is not a project about surveillance since all participants must consent to the use of their video feeds before it will be used in the installation.

For the physical installation of the piece, an adequately sized venue with high ceilings or a second-level balcony must be confirmed and available for a certain length of time to allow for set up and tear down, along with the actual length of the show. An art gallery may be the most open to showing this piece due to the resources available such as the ability to control lighting, however other public and private spaces such should not be ruled out.

Materials to be used for the dome will most likely be a translucent plastic or glass depending on costs. A contraption to house and suspend the video projector will also be needed. The construction of the dome will either require outsourcing or collaboration with someone with the resources and knowledge of working with these types of materials such as an interior designer, architect or engineer.

With all that said, I believe that *Colour Coded* is very much a feasible project – it will simply require a good deal of fundraising and coordination.

Academic Resources

Fawcett-Tang, Roger (Ed.). (2002). *Mapping: An Illustrated Guide to Graphic Navigational Systems*. Switzerland: RotoVision SA.

With essays by William Owen, this 'coffee table' book mostly serves as a compilation of different approaches to mapping systems that graphic designers have used.

MacEachren, Alan M. (1995). *How Maps Work: Representation, Visualization, and Design*. New York: Guilford Press.

"A milestone in the literature of cartography," as one reviewer puts it. This book comprehensively covers many different aspects of mapping systems, its history and its impact.

Artistic Inspiration

James Turrell

Turrell's ability to mould light as if were metal or plastic creates a very spiritual feeling for viewers. The "interface" of viewer and light remains very simple but has powerful effect. (<http://www.henryart.org/ex/turrell.htm>)

Jason Salavon

His piece, *The Top Grossing Film of All Time*, was created by sampling frames from the movie *Titanic* and arranging them into a timeline of solid colours. What's really interesting about this piece is that a single frame alone means nothing but, when all frames are taken in all at once, a tapestry of colour is created.

Luc Courchesne

At his gallery show at Gallery TPW (Jan. 9 – Feb. 15, 2003) entitled *Panosopic Journal* featuring the *Panoscope 360*, I was delighted with how the world was captured using a dome-like attachment to his camera.
<http://www.photobasedart.ca/html/Exhibitions/exhibitions2003.html>

Note: There was also a very interesting Canadian artist who used beams of light in performance pieces. Images of his/her work was shown at the Quebec/Ontario Symposium event held at Ryerson last year but the website has since ceased to function. (<http://www.imagearts.ryerson.ca/QuebecOntarioSymposium>)