OUROBOROS – Project Proposal (1000 Words, without images)

By Alvaro Cassinelli, 2008

Project webpage: www.k2.t.u-tokyo.ac.jp/members/alvaro/Ouroboros/
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**Description**

“Ouroboros” is a shared virtual space, a world-scale tunnel built by chaining video-conferencing cameras and projectors in a closed loop around the world. This virtual space comes into contact with the Earth at several gates situated in different cities, each standing at a location particularly representative of the place (public squares, markets, private homes, etc). Each gate is simply composed of a (portable?) projection screen, a video camera a little far away, and an “interstitial” public space in between. The camera captures the whole view – that is, the passersby and the standing projection screen blended in the background - and the resulting live stream is sent over the internet to be projected onto a similar structure - in a different city, in a different country, in a different continent. The process repeats until the loop is completed, as the final video is projected back onto the first screen - only to restart a tour in an eternal cycle (Fig.1a). In its (almost) instantaneous travel around the world, the video stream will gather “souvenirs” of the visited places. People from all around the world will appear on the screen as standing in the middle of a tunnel whose walls are composed by an infinite recursion of (Matryoshka-like) nested video windows; one can recognize the actual location of the shooting in each of these rectangular frames (Fig.1b).

To make these ideas concrete, let’s picture a gate in Linz (Fig.2). A large projection screen in Hauptplatz is filmed (along with the crowd) by a camera on the other side of the square; the captured video appears a few milliseconds later on a large advertisement screen in Shibuya-crossing at the heart of Tokyo. It is then filmed by another camera from a spot nearby; this live video stream is then sent to a similar screen in Singapore… and so on, until the chain closes itself and the image is sent back to the Main Gate in Hauptplatz.

**Artist Statement**

The body of Ouroboros is both a virtual space for inter-personal communication and a (networked) land-art monument: a world-scale rosary composed of living beads of people and places. Ouroboros’ interior looks slightly different from gate to gate, yet it is a view of the same space, from different perspectives (in a geographical but also in a sociocultural sense). People from all around the world will be able to see and communicate with each other (if not with voice, at least by waving their hands), while a hint of the location and time of shooting can be sought in the borders that frame each image (Fig.3). Depending on the number of cities visited...
by Ouroboros at any particular time - as well as the resolution of the gate’s cameras - people may even be able to perceive their own “reflection” in the distance, as if standing between two mighty parallel mirrors.

By controlling the zooming of the cameras it is possible to momentarily give focus to a particular place; for instance, by setting the zoom on every camera (but one) so that the filmed screens cover almost the entire field of view of the cameras, the place where the zoom is still set to wide will grow on every screen, while the images of all the other places will be reduced to abstract colorful sediments piling up on the borders or compressed in the center of the screen (Fig.4). By controlling the zooming in a synchronized way (with a time frame of several days), attention can be sequentially shifted from place to place, perhaps partially following the schedule of the 80+1 main tour and ending of course in the Main Gate in Linz. Since one of the proposed locations is “Internet”, a computer generated image could be injected in Ouroboros body: a simple alphanumeric banner framing the image currently in “focus” and displaying data related to its associated Topic. In this way, Ouroboros can add an aesthetical and conceptual layer to the main 80+1 project goal.

**Technical statement**

The “gate” structure is a very simple thing: a standing rear projection screen and a video camera. The networking infrastructure is also elementary, as even standard video-conferencing software can be used; however, in order to enhance the quality of the images, I will write an applet for those “gatekeepers” having a better camcorder at their disposal. (This software can also be used to inject personal text messages in the alphanumeric banner.) After the exhibition, one can imagine that Ouroboros will be kept alive running as a screensaver in any desktop or laptop computer, interconnecting the World as gates randomly open and close all around the surface of the Earth. The figure on the right (Fig.6) represents a proof-of-principle demonstration (interconnecting Tokyo, Paris and Montevideo - but not in real time).

**Collaboration and actual deployment**

Although not technically challenging, this project may require a good (international) coordination. While one cannot expect to have it working with a hundred cities at the same time and/or for the whole duration of the exhibition, it can be relatively easy to automatically “stitch” the broken topology by redirecting the internet addresses whenever necessary. A realistic strategy may be to maintain three to five “official gates” around the world (perhaps on buildings, museums or places momentarily related to the main 80+1 project). Other less stable, “unofficial” gates may open and close randomly. This solution has the additional advantage that the visuals will be easier to decrypt (since the borders of the video frame will be significantly fatter). Finally, in order to accommodate a more dynamic topology embracing as many places
as possible, one or two official gates could physically travel from one city to another every now and then, perhaps partially following the 80+1 project route. The challenge will be to recruit “gatekeepers” all around the world willing to install and take care of the Gates, but I am confident that this can be easily achieved by properly advertising the project, contacting fellow artists and recruiting gatekeepers among the circle of my friends.