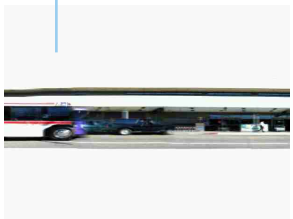
loop city

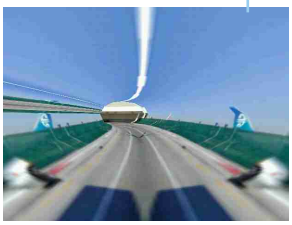
sketch for a typical loop city environment

curve mode

ribbon mode

tube mode





internal views ribbon, tube mode

in his novel LíInnommable Beckett describes a strange world made up from a complex system of repetitive cyclical events. What is described as social architecture - the spatial / temporal organisation of everyday life- is often very similar to this: people do the same things at the same time. They follow the same routes in regular periods. Sometimes when riding the tram, visiting a cafe or going to the supermarket I am surprised to recognize strangers who seem to live in the same ìloopsî like I do.

The Project which I propose is a subjective description of the city as a set of repeating actions and events on different scales. A space composed of closed loops, intersecting each other. each loop is a thematic entity, a story: a stroll through the shelves of a local supermarket. Looking for a free place in a parking lot. A tourists guide round through a district. A hotel maidís morning round.

Loop cityís concept of space is topological and relativistic ñ the lengths of each strand donít have to correspond to its accurate metric length in real space. They can be scaled by its temporal length or by the amount of information contained within.
In a way this project builds upon my ongoing wegzeit work, a project where I investigate virtual spaces that are structured by relative, non-metric units and parameters.

ìCities are movement economiesî B. Hillier

I am interested in

- modes of organisation
- structures of subjective space
- circulation systems (in supermarkets, public buildings)
- work cycles: hotels, a factory assembly line
- elements of traffic infrastructure ñ subways, freeways...
- tourist routes
- commuting
- way descriptions

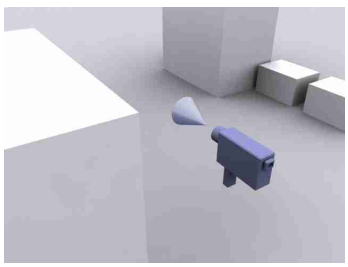
sketch for a typical loop city environment

Technical

Loop city (working title) will be an interactive, participatory virtual environment that can be viewed either as a standalone installation or as a web3d environment inside the web-browser. The technology to accomplish this is preferably a combination of Virtools and Flash.
Unlike typical VRML environments, the user is not required to deal with a fly/walk/examine type navigation. The visual traces serve also as navigational constraints. The user follows a route simply by moving the mouse left and right. He / She can easily switch to other routes by clicking on them.

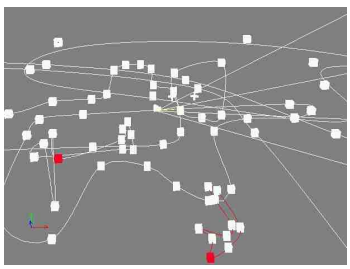
Interaction

The loops have the function of thematic containers - the user can expand them and descend to deeper information layers. The environment can be quite complex, most of the loops will be displayed as simple curves. once a curve is selected, it expands into a 2d visual trace of the loop. This ribbon contains hotspots as access points to the embedded information.
These ribbons can be inflated further to three dimensional tubes, which can be entered and followed from the inside. Each loop contains an immersive virtual environment.



Process

Data collection
Mapping the city as a subjective, participatory process. Personal experiences, descriptions, stories etc. will be recorded as video, audio and textual data.



Video Sources from the Real Environment

A special camera will be used, capturing 360∞view around the axis of movement. This can easily be accomplished with a mirror cone positioned in front of the lens. While moving, the camera constantly records the video.

stitched to a continuous image of variable length

The captured video is converted to single frame images, and cropped to a thin slice around the center of the image. This image sequence is stitched together to a continuous image. this is assigned as a texture to the corresponding curves in the virtual environment.