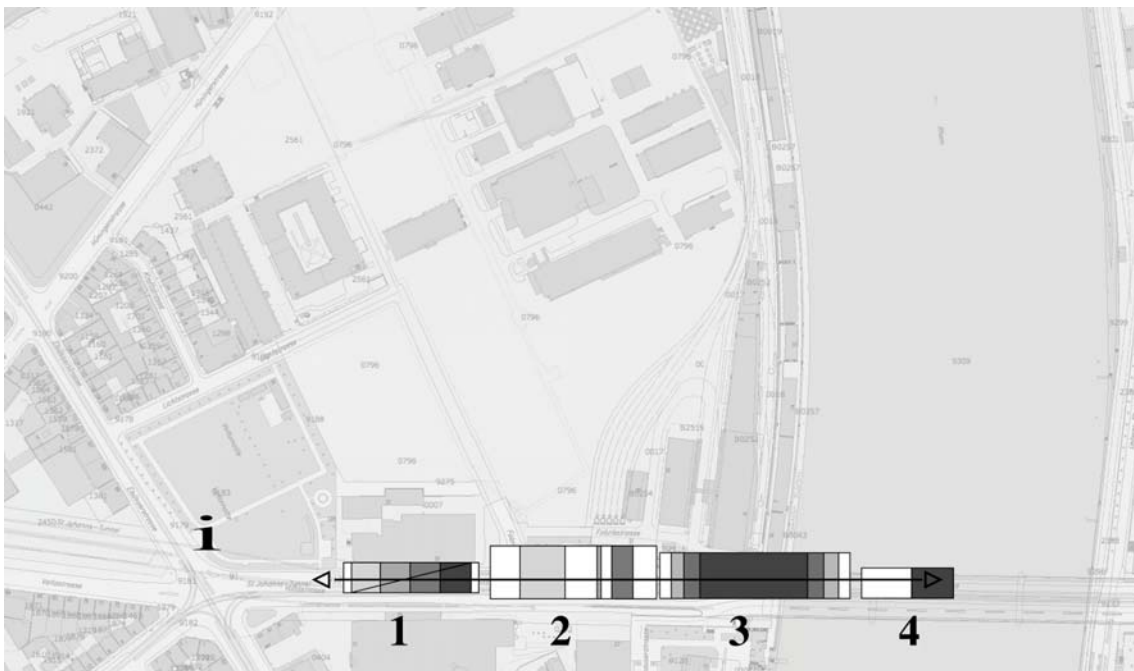


lifeClipper2 – concept for the exhibition from the 8-17.05. 2007

For the opening of the NT-opening and the following evaluation phase we developed a concept including and situating several research questions. Aspects like navigation, interaction and the treatment of media for different types of media were included. The partners deliver and prepare the contents.

A handheld device, the "clicker" with only two buttons (choose/confirm), enables the user to change to different visualization styles and to activate additional information. The mode chosen with the first button is displayed at the lower right corner in written words. The second button is needed to confirm or to go through the options within that mode. This option is very useful for the evaluation of design approaches.

The walk starts at the info-container (common trade container (i)) in the park called "Voltamatte" and then follows the axis of the Voltastrasse (main street of the opening) showing 4 different scenarios.



Interaction map

Scenario 1: Celtic village (archaeology)

Script:

When walking alongside the the celtic village the virtually overlying elements of the village are added stepwise accoring to themaitc groups and the user gets slowly immersed into the scene. The elements of the added scenes are as well the closest to the walking visitor. On the most immersive level additionally to the cultural elements (houses, ovens, streets, etc.) the landscape around the village with vegetation to the far horizon with a sky overlays the scene with about 80% transparency. The whole village (which is much bigger that what we see as 3D-models) will be represented as a darker area in that landscape.

To make the scene look more alive effects like fog on the ground and smoke from the ovens get implemented. The life-video image turns stepwise brighter (grey colour in texture).

The acoustic ambient develops stepwise too: the sounds of the real world get stepwise overlaid by the illustrative sounds coming in. When getting into the area wind and birds show that there is a new scenario starting. The illustrating sounds are 3D-sounds attached to the 3D-elements were they produced (like 3D-model "oven" with sound "fire"). Instead of using 3D-figures the whole area is made

alive by sound: human voices, animals, activities like work in the fields, hacking wood, hammering, etc. There is one sound in motion too: a wooden car with horses passes by when the street is shown.

The scenario builds up according to the following themes:

"Privacy"

- 3D-objects: houses in the first area
- 3D-sounds: humans, animals, music instruments
- Additional images: photos of household articles

"Pottery"

- 3D-objects: ovens and houses
- 3D-sounds: fire, wood-hacking
- Additional images: photos and drawings of pottery

"trade with the Mediterranean"

- 3D-objects: streets
- 3D-sounds: wooden car with horses, roman music
- Additional images: images and drawings of roman import articles

"blacksmith"

- 3D-objects: house of the blacksmith
- 3D-sounds: hammering
- Additional images: images and drawings of metal works

When leaving the aren the scene gets unloaded: the 3D-elements disappear fast in the thematic groups they first appeared before. The sound volume gets down afterwards together with the life-video image that gets the normal colors again.



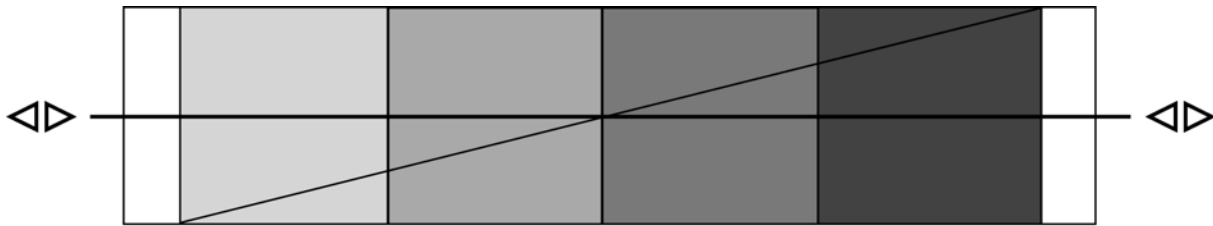
Interaction:

When walking through the interaction fields the scene slowly builds up and when leaving the scene quickly disappears. In each interaction field a new theme will be loaded and merged with the existing ones until the scene has come to its full extend.

With the CLICKER the following changes of the appearance and additional information can be activated:

- The ground floor plan can be put onto the floor to show the full extend of the village (on/off)

- The topographic landscape around the village (that normally only appears in the end of the scene with the last loaded theme) can be turned on/off even when not being at the end
- Additional images can be shown (on/off) like the "studentworks" in LR2 in front of the users eye like a automotive slideshow, disappearing again after the last image was shown or when pressing the key again. The images change according to the theme the user is walking in.



- The scene gets built up according to the walking direction. If there were elements loaded before the scene gets unloaded here. If this is the first field the visitor walks in, atmo-sound ist getting played.
- Theme „Privacy“ (3D-models and sound of this theme get merged with rest of themes)
- Thema „Pottery“ (3D-models and sound of this theme get merged with rest of themes)
- Thema „Trade“ (3D-models and sound of this theme get merged with rest of themes)
- Thema „Blacksmith“ (3D-models and sound of this theme get merged with rest of themes)

Additional Informationa and design approaches can be triggered with the CLICKER.

Interaction fields scenario „Celtic viillage“

Scenario 2: CAMPUS (NOVARTIS)

Script:

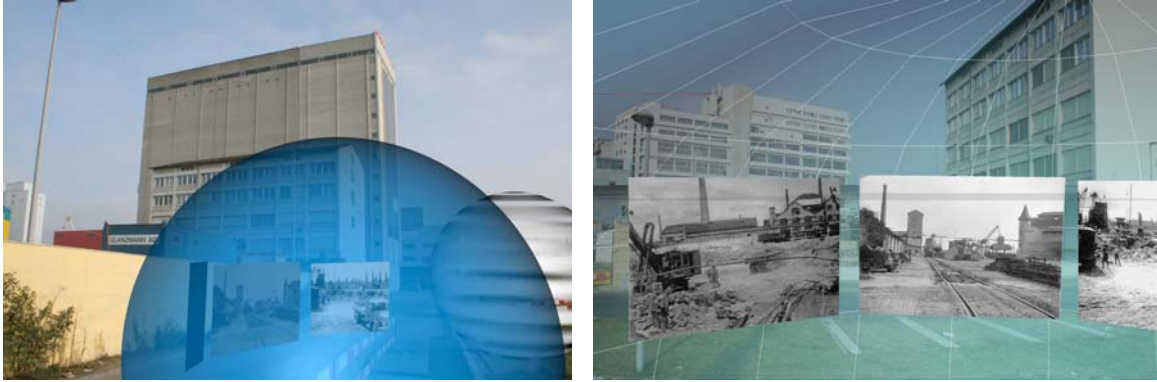
In the area of the tram station in front of the Novartis Campus the second scenario is positioned. The visitor gets aware of the scenario when discovering 3 semi-transparent bubbles and the images of the second bubble appearing positioned in the landscape (the exact positions still have to be discussed because we don't know were the stands of the parts are). When entering the bubbles the speakers will be played. When entering the semi-transparent bubbles they colour the video image (both-sided texture) or not (just outside texture) and 3D-images get displayed around the second small bubble.

Three spoken text documents are the main content of this scenario:

- A:** article of the newspaper 1897
- B:** description of the former worker Mr. Zimmerli
- C:** text of the Novartis boss "Why the Campus" (NEW!)

The three bubbles display the information in different mediated ways:

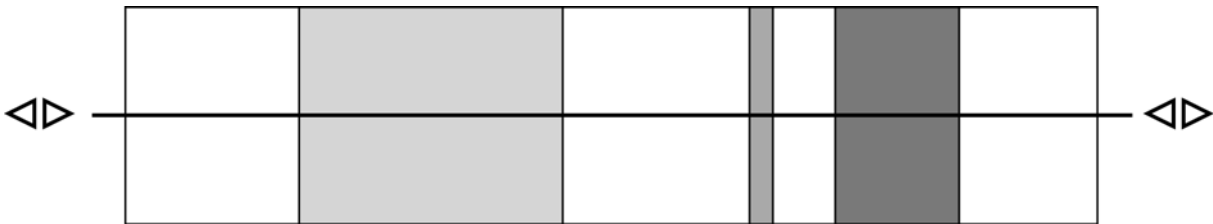
- A:** After entering the bubble the text starts and images get displayed within the bubble. The life-camera gets coloured by the bubble from inside (both-sided texture).
- B:** Images are displayed already outside the small bubble in a row like at the wall of an exhibition showing images of the building phases of the Novartis area (the visitor follows them when walking along the street). When the images of the description of Mr. Zimmerli come the small but long bubble is placed in front of them. When walking inside the bubble the spoken text is played but the bubble not visible anymore. When walking out the text stops but the images stay until the end of the scenario.
- C:** After entering the bubble the scene changes the colour/texture (both sided bubble texture) the spoken text starts and and the animated 3D-model of the building phases starts to loop at its correct position in the "old city model" with a 3D-number of the year of the building phase within the bubble. Then the "bubble (camera)-escalator" comes into action: the subjective view of the visitor's camera lifts up like an escalator to the "birds perspective". The video image fades into black and the "old city model" gets visible. The user can see the building phases from the sky and still change the angle according to the look-at-direction.



Interaction:

With the CLICKER the following changes of the appearance and additional information can be activated:

- Shadow mode: with/without shadows on the ground (zBuffer on not visible "old city model")
- Transparency mode: different grades of transparency of the bubbles: 80%, 50%, 20%
- on/off speaker's voice
- on/off photos



- When entering, the bubbles and photos get visible. When the visitor leaves the scenario the bubbles, photos and sounds disappear.
 - When entering the bubble A the sound of the speaker gets played and the photos positioned. After leaving the bubble the sound stops and the bubble stays visible.
 - When entering the bubble B the sound of the speaker gets played and the bubble disappears. After leaving, the bubble is visible again and the speaker fades out.
 - When entering the bubble C the sound of the speaker gets played, the 3D-model displayed and the subjective camera slowly rises to the sky, the video fades out, the „old city model“ in. When leaving the bubble, the camera jumps back to the subjective perspective and the video turns back as a backdrop.
- For all bubbles different design approaches and additional information can be activated.

Interaction fields of the 2. scenario

Scenario 3: Urbanist projects for the re-design of the old harbour

Script:

The scenario at the bridge head is visible from far away. The 3 projects get shown alternating in a loop (one after the other fading in and out) which lasts 10 seconds for each project. By getting closer to the centre of the scenario the amount of opacity gets higher: 0-20/0-40/0-60%. By semi-transparency the context to the actual urbanist situation is shown. The 3D-models are uni-coloured in different colours for each: red, green and blue. When the models get to the peak of opacity there is a dull sound to hear. It gets louder when the visitor is getting closer to the centre.

When the visitor gets into the centre of the scenario the alternating fade goes from 0-100%. Each model has its own atmo-sound that fades in and out with the 3D-model.

When leaving the area the scene fades out as it faded in.

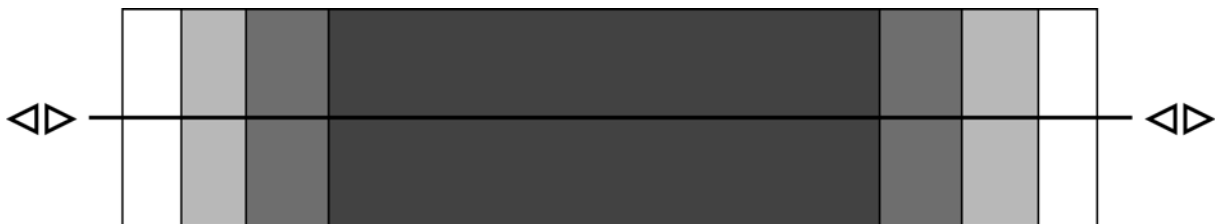


Interaction:

The scene builds up when the visitor is getting closer to the centre of the scenario. It disappears stepwise like it appeared when leaving the area.

With the CLICKER the following changes of the appearance and additional information can be activated:

- Mode: stop autochange: The alternating rhythm can be stopped and the 3 projects can be seen at 75% transparency, clicking to the next one in a loop
- Meta-Mode: The meta-info of the projects can be put on/off as 3D-Text in the field of view
- The 3D-models appear in wireframe mode
- The 3D-model appears in Frontal-Mapping mode
- The life-camera image gets coloured: grey, red, blue, green



- 0-20% alternating with sound when peak of apacity
- 0-40% alternating with sound when peak of apacity
- 0-60% alternating with sound when peak of apacity
- 0-100% alternating with atmo-sound for each project, with options for design approach and additional information

Interaction fields of the 3. scenario

Scenario 4: InfoViz

Script:

The scenario on the bridge attracts with a "door of transition"-image that gets displayed already when

the user is at the position of scenario 3. It is a big image that is positioned in a right angle to the bridge and reaches from one side to the other, one meter above the bridge. It shows semi-transparent waves that colour the life-video image behind it and bring it into wavy motion. It is like looking through a window into another world (if possible the waves are 3D already behind the window). When crossing the image plane the visitor enters the waves around him.

The scenario can be left by going back through the "door of transition". When getting closer to the exit the big image appears and now shows the lifeVideo at the right position with no effects.



Interaction:

By user position the scenario gets activated.

With the CLICKER two other scenes can be activated:

- InfoViz for the import/export with the Rhine transports: globes of different size and colour and transparency travel up and down the Rhine (with shadows on the Rhine (zBuffer))
- The borders of the quarters of Basle get extruded into the sky like 3D-bar-charts. They are semi-transparent and their height is going up and down a bit. The movements have sounds.
- Audiovisual waves on top of the whole city



- „door of transition“ gets visible and can be heard on half volume
- 3 different infoViz-models can be selected

Interaction fields of the 4. scenario