Talespaces: Narrative Landscapes

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Virtual worlds exist in a wide range of shapes and are accessible on various platforms: virtual shopping malls, the island of Myst, online casinos, the dungeons of Quake, cybermuseums, and chat rooms. The greater the speed of computer processors, the faster the images move and the deeper our involvement within them.

If the first stage of architectural engagement within this field has been purely representational (i.e. the combination of cinema and architectural design to make virtual reality presentations of buildings), the second stage is when VR becomes an imaginative place, like the movies themselves. In this case the VR architect creates both form and content at the same time. Some of the VR worlds that are currently available are based in real, predominantly commercial settings – like selling music, aeroplane tickets – or channelling a large amount of users in a portal page in order to sell them music, aeroplane tickets, later on.

Other worlds serve a very different purpose: creating experiences rather than deliver products. The reward is simply the time spent inside those places with other participants. Games transport the user to exciting places to do interesting things and meet fascinating characters - real or imagined ones. As users do not physically enter the virtual worlds some imaginative work is always necessary to step over the threshold into complete immersion within virtual realms. Usually this crucial step has to be made by the user (via interactivity). It has to be motivated and has to lead somewhere (forming narrative). And there has to be a "somewhere" (necessary space). All of these elements can be combined to narrative stories.

The game designer's tasks include creating central plot-lines, giving birth to believable characters, designing space for the story and the characters, and directing the unfolding event within this space. The final goal is to engage users who are not physically inside the VR to act either as if they were (during a NetMeeting) – or to make them act for someone who actually is (steering Lara Croft). If the design works neatly together then narrative, interactivity, and spatial design form a new field: computer generated environments that are flexible narrative landscapes.

There is no definite theory – yet – how to approach these environments and there are no final limitations – yet – as the technology is still evolving. We are in the middle of the next big jump in terms of interactive entertainment. Playstation 2 will hit the European market later this year, faster internet connections are becoming available and web-access is no longer limited to desk-top computers. Technology seems to evolve faster than our understanding of what to do with it.

Common Tales

This project was initiated by Maureen Thomas (Cambridge University Moving Image Studio) in mid-summer 1999, bringing together the National Film and Television School, Sony Computer Entertainment Europe, and CUMIS. It is a research project that aims to investigate the relation between spatial design, cinematic language, and interactive game design. Common Tales is an

interactive environment that offers several layers of design: interactive access to two different heroes within the narrative structure of a TV series that unfolds in a virtual three dimensional world using cinematic language. The goal is a simple but working demo on the original Playstation 1 console that will address some of the key features discovered during the one-year project.

It became clear right at the start, that none of the design-layers could be treated separately from one-another. Furthermore the original Playstation had a limited graphical and processor performance that had a profound influence on the design process. Common Tales is not driven by technology such as processing performances and transmission rates but addresses strictly the content of these new worlds.

To re-create the graphical realism of a TV series, (where the audience accepts the characters almost as their friends or neighbours), Common Tales uses digital photography to capture physiologically realistic human shapes for the characters and basic textures. The platform imposed certain limitation, e.g. sixteen colours per texture with a maximum resolution of 72x72 pixels, and approximately 320 polygons for each hero-character.

The artificiality and flexibility of the polygon world within these boundaries shaped the story line. It supported locations that did not have to use natural physics. For example, the size of some rooms of one building did not have to add up to a coherent outside structure. The doors could work like teleporters to distant places. Even the story line mirrored the dualism of fiction and fact as it introduces fictional characters in today's reality. Although the aging Playstation 1 technology did limit the design process, it offered a great deal of freedom within these limitations. But learning about them was a first hard lesson.

Form and fiction

The virtual spaces in Common Tales contain narrative conditions as part of their internal structure. Characters, encounters of other entities, lights, sounds, shapes, transformations, conditions, can be defined by the designer and are implemented in the spatial design (as well as in the code). This transforms space in VR space into an open canvas for any kind of narrative journeys: rescue a character, escape an evil traitor, or simply try to survive. Locations are 'stages' for these journeys. Three main 'stages' were created in Common Tales: a sinking ship's engine room, an exclusive gentlemen's club, and the sewers beneath that club. To enter the engine room, the player has to solve a puzzle and only then one hero character can enter the main room triggering the cinematic establishing sequence. Thus, the player encounters the virtual space as a cinematic representation, mirroring a film's narrative technique. The player's curiosity should be sparked by omitting a general overview of the main location. This should motivate the player to solve the access-puzzle. Once the puzzle is solved the threshold is crossed and the establishing shot functions as a narrative reward - only to catapult the player into more challenges. In addition to this scene there are more than half a dozen cameras and four staged scenes implemented in this location reacting to the hero's positions and actions.

Editing VR

The second scene, a chase through a sewer, uses even more complex camera work. It cuts to a parallel action in a different room. Here, Common Tales uses editing to create a closer connection between the two main heroes improving the narrative between them. The camera might cut from a spatially defined position to a narrative defined position (e.g. to a close up). This proved to be a tricky task.

In contrast to film sets, a virtual space has to be completely accessible to the audience. VR has to appear as continuous space and any interruption of the spatial continuum will threaten the user's immersion. Film editing fragments space and time to form a new narrative, but editing in VR often threatens the orientation within the virtual world and leads to confusion. A fragmentation of VR space is hard to establish, not technically but in terms of readablity.

Common Tales connects each cut to clear narrative as well as interactive and spatial conditions. For example, the cut to the mentioned establishing shot is motivated in space, as one hero enters a new location; and in narrative, as a result of a solved puzzle; and in interactive ways, as the controls switch towards the hero who enters the new location.

One possible alternative to cinematic editing could be a multi-layered presentation. Common Tales provides this by offering a separate, primitive, inlay window as a second active presentation. Comparable to multitasking during a computer session, this additional layer can tell its own stories establishing a narrative string that can, but does not have to, relate to the events on the bigger screen. This leads to a fragmentation of the main picture but not of the space itself.

Common Tales is still far from finished and even when it is completed it will be a first step in a new, wide-open field. It will test VR's potential, looking towards the creation of future environments, which will form new arenas for interactive social experiences.