Copernicus

Copernicus is a 3D Virtual Encyclopaedia. It was built to resemble Wikipedia. However, in comparison to a classic wiki page, the background in Copernicus is a 3D visualization of the place/object described in the article. Wikipedia emerged in January 2001; it currently ranks among the top ten most-visited websites worldwide. As of December 2007, Wikipedia had approximately 9.25 million articles in 253 languages. Questions arise: Can Wikipedia be improved? Can it offer a better user experience? Can it magnetize even stronger? Some web designers dream about building interfaces that approach the richness of 3D reality. Nevertheless, user studies proved that complex and disorienting navigation and annoying occlusions can slow performance in 3D interfaces.

2LIP - A New Technology

Our answer to this problem is 2-Layer Interface Paradigm (2LIP), which assumes that building graphical user interfaces involves the integration of two layers: The first layer is a 3D scene, which a user cannot directly interact with. The second layer, above the 3D view, is HTML content. Only taking actions on this content (e.g. pressing a hyperlink, scrolling a page) can affect the 3D scene. Our approach builds upon well established hypertext model, it does not rapidly change the style of interaction, from the one users were used to in classic HTML pages. We decided to use 2LIP to bring Wikipedia into the third dimension.

While reading an article the user can be presented with details from the 3D scene; clicking on the hyperlinks, or scrolling the text of the article, can trigger a predefined camera movement. For example clicking the “skull” link in the “Temple of Kukulcan” page the camera will smoothly move over the 3D scene and stop at the top of the pyramid showing this historical artefact.

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