## **Time Travels in Virtual** Landscapes

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Imagine wandering through tBerlin in the 19th century, discovering old streets and places, having a coffee break at a traditional cafe, reading the newspaper of the day, and later on having a look into the windows of a shop nearby. While exploring the city, you come across people dressed in contemporary clothes, and you see objects from former times in their historical environment.

What did Berlin look like? What was the atmosphere? What was the talk of the day?

This sketch presents a project that aims at development of a four-dimensional online information system that enables the user to find answers to these questions. The system is fourdimensional, because users can not only explore a threedimensional cityscape, but they can also observe its changes over the course of two centuries. The main emphasis of the system is the presentation of historical information in an interactive and immersive way, so users will be encouraged to discover history rather than merely gather and consume information.

The cityscape shown is a digital reconstruction of Friedrichswerder, a central quarter of the city of Berlin. The scenery, its buildings, and objects are realized in VRML97. The architectural models were reconstructed with the use of a CAAD program and then converted to VRML97. Additional scene objects like vehicles, goods in window displays, or advertising posters are modeled in VRML with textures generated from old illustrations or photographs of the original historical objects. The time-traveling functionality and the city map navigation tool are realized in Java.

Objects exhibited in the scenery were made available by museums and libraries cooperating with the project. Contemporary radio and television broadcasts are provided by radio archives. A database connected with the virtual scenery contains further detailed historical information on each object, image, or broadcast shown. This database not only offers the opportunity to search for additional material not displayed in the virtual landscape. It also allows the user to follow a certain string of cultural history (for example, media history).

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