DIGITAL ART

age since it outlines the basic concepts of information space and architecture. The idea of an 'information space' dates back centuries and is closely connected to the ancient concepts of the memory palace and mnemonic techniques developed in rhetorics. In the second century BCE, the Roman orator Cicero imagined inscribing the themes of a speech on a suite of rooms in a villa, and then delivering that speech by mentally walking from space to space. At the basis of this technique is the realization that our memory works in a spatial way. In the sixteenth century, the images and techniques used in memory systems were further developed into sign systems and physical structures that were supposed to function as portals to a transcendental knowledge of the world. Extrapolating the idea of the memory palace, Giulio Camillo (1480–1544) constructed a memory theatre, a wooden structure that was displayed in Venice and Paris. The structure consisted of pillars inscribed with images, figures, and ornaments that supposedly contained the knowledge of the universe and were intended to enable visitors to converse on any subject no less fluently than Cicero. Hegedüs's *Memory Theater VR* combines these and other precedents of imagined space into a reflection on the history of 'virtual reality'.

As well as immersive VR environments, there is also a category of work that creates complex three-dimensional worlds that do not necessarily make use of a specially constructed environment but take the form of a more traditional screen projection. *Beyond Manzanar* (2000) by American Tamiko Thiel and Iranian-American Zara Houshmand is an interactive 3D world based on the actual location of Manzanar, the first of more than ten internment camps built to incarcerate Japanese-Americans during World War II. The life-size image of the 3D space is projected onto a wall within a darkened space, and viewers navigate and change the viewpoint by means of a joystick on a pedestal. Archival photographs from the internment camp are juxtaposed with Japanese scrolls and paintings in a constantly shifting environment that – reacting to the viewers' presence – illustrates a chasm of cultural identity, contrasting a dream world of cultural heritage with a reality of political injustice. The juxtaposition of simulated worlds in a political context also becomes a core element in Peter D'Agostino's *VR/RV: A Recreational Vehicle in Virtual Reality* (1993). D'Agostino has been working in video and interactive multimedia for decades and created numerous works addressing issues of politics and identity. *VR/RV* is a projection of a 3D world that simulates a travel along the electronic

113. **Tamiko Thiel and Zara Houshmand**, *Beyond Manzanar*, 2000. Not a photorealistic environment, this work combines the aesthetics of computer games with the techniques of stage design. Viewers move through a landscape consisting of shifting layers and creating alternate realities: opening the door in a building of the camp, they may find themselves in a Japanese paradise garden that suddenly disappears if they try to enter; following a road, they may find their way blocked by barbed wire.