



Memory Map : An Interactive Installation That Maps Memory Space to Physical Space

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ABSTRACT

Memory Map is an interactive installation in which the memories, reflections, and anticipations of visitors become critical aesthetic elements. The physical space of a hall becomes a metaphor for the collective memory space of those who have visited the installation- for example, with the voices of those older than the present viewer coming from in front and those younger coming from behind.. The installation explores interface issues of 3-D sound and the mapping of conceptual abstractions to physical space.

KEYWORDS: 3-D sound, visualization, mapping of conceptual space

INSTALLATION EXPERIENCE

A computer asks viewers to speak short reflections and anticipations related to questions about critical life stages and events — for example, first significant accomplishment, first love, this week's most memorable moment of closeness, future hopes. It also asks for personal background information such as age and sex. The computer digitizes the spoken words and stores everything that different people have answered during the period of the installation. Via network connections it transmits these sounds to the computer controlling the sound space.

Using several speakers strategically placed in the hall-like space, the computer directs an electronic choreography in

which the digitized voices of current and past viewers and other sounds are moved physically among the speakers in different rhythms and spatial patterns that explore the relative ages and sexes of those who have spoken.

The program controlling the installation's sound space incorporates several subevents, which explore the relationship of memory space to physical space. For example, in one event each speaker location gets associated with a particular life stage so that visitors begin to think of one space as the place of mortality and another as the place of first love. In another subevent the computer places women's memories on one side of the space and men's memories on the other side. The computer selectively applies sound processing to its playing of the spoken voices to highlight the focus of an event and to explore the poetic sonic qualities of spoken voice — for example, by controlling sound speed, frequency, length, and volume of the sounds.

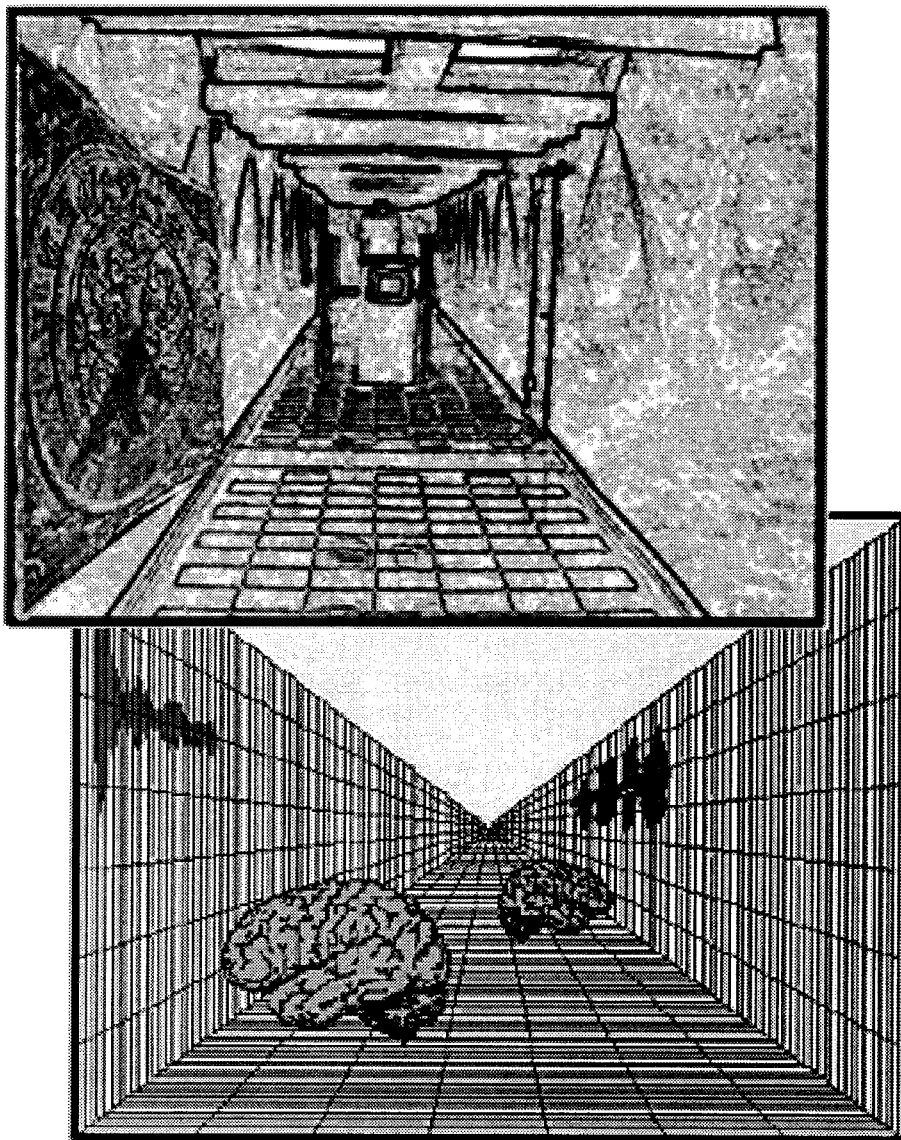
Digital video of processes that unfold in time are projected on the wall of the space. The architectural metaphor of the visual interface on the computer plays conceptually with the actual physical space in which the sounds and visitors move.

SUMMARY

Memory Map is a kind of an electronic dance in which spoken memories and their movement in physical space become the principal performers. It explores issues of the physical mapping of conceptual space and the use of 3-D sound which should be of interest both to the art and interface research communities.

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CHI94 Companion-4/94 Boston, Massachusetts USA
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Stephen Wilson, Memory Map. The spoken memories and anticipations of an audience are mapped to a physical space based on relative age. The comments of those older than the current participant come from in front and the comments of those younger come from behind.