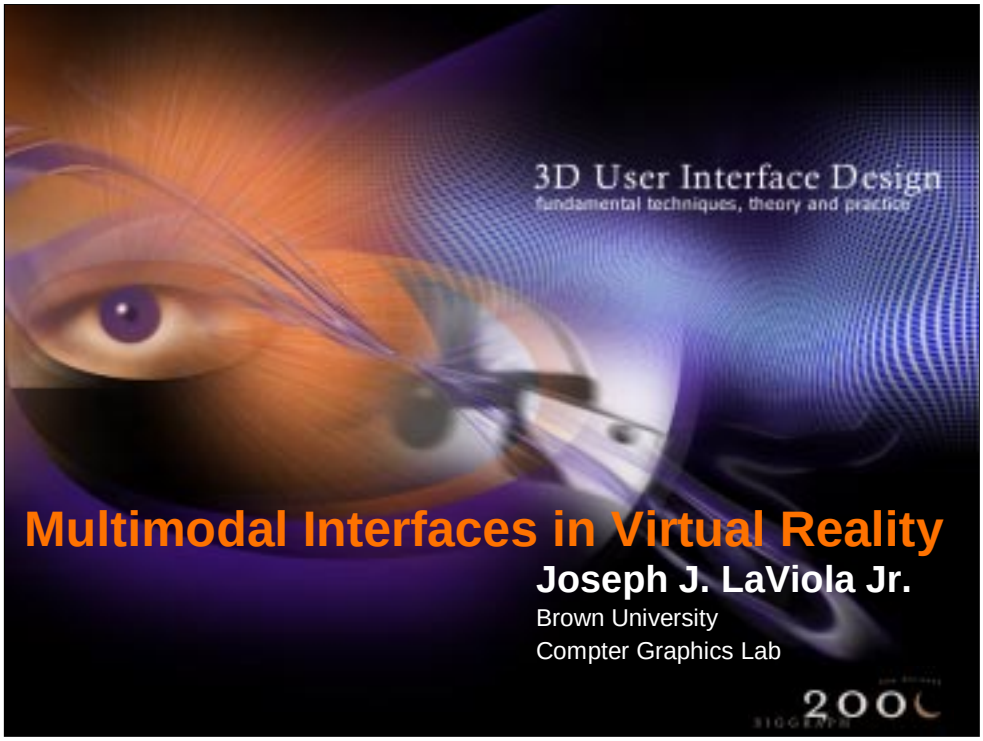

Multimodal Interfaces in Virtual Reality

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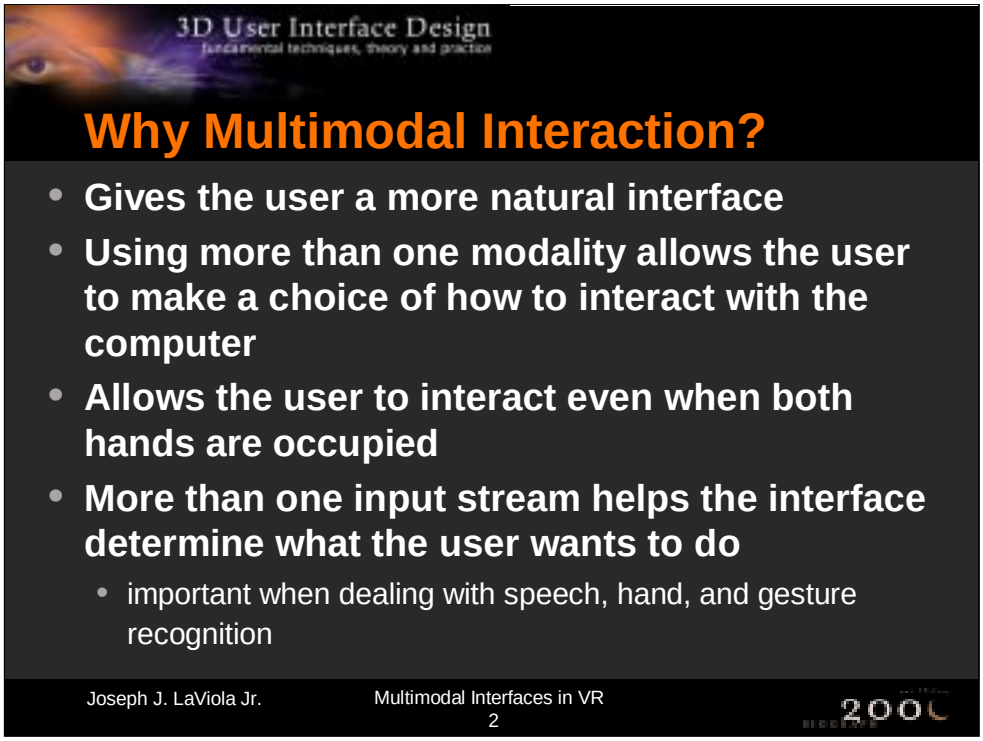


Multimodal interaction can be defined as the combination of multiple input modalities to provide the user with a richer set of interactions compared to traditional unimodal interfaces. The combination of input modalities can be divided into six basic types: complementarity, redundancy, equivalence, specialization, concurrency, and transfer.

Complementarity. Two or more input modalities complement each other when they combine to issue a single command.

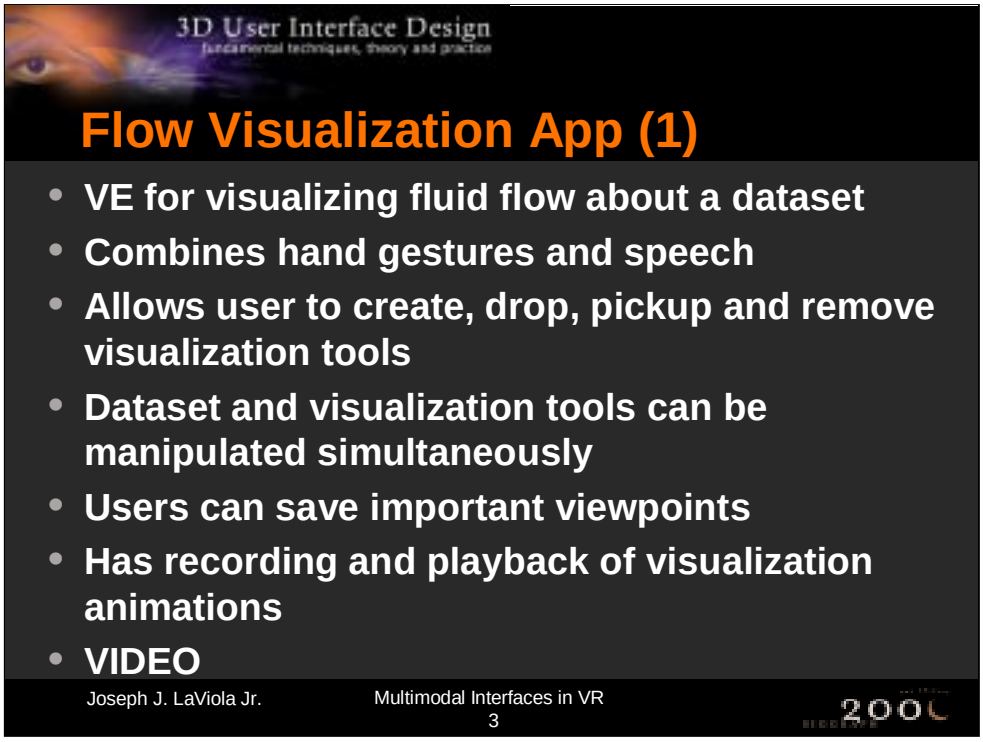
Redundancy. Two or more input modalities are redundant when they simultaneously send information to the application.

Equivalence. Two or more input modalities are equivalent when the user has a choice of which modality to use.

Specialization. A particular modality is specialized when it is always used for a specific task because it is more appropriate and/or natural for that task.

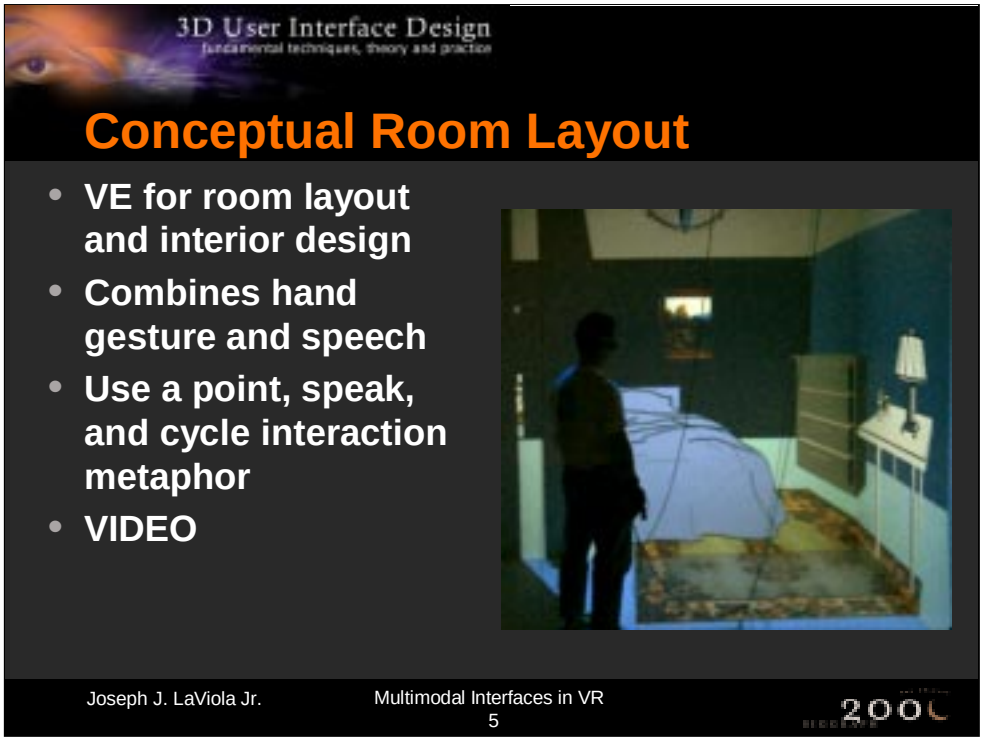
Concurrency. Two or more input modalities are concurrent when they issue different commands that overlap in time..

Transfer. Two input modalities transfer information when one receives information from another and uses this information to complete a given task.



This slide describes MSVT, the Multimodal Scientifiic Visualization Tool. For more information, see the MSVT paper in the papers section of the course notes.

This slide describes the Artery Visualization System.



This slide describes Room Designer, an application for conceptual room layout and interior design. For more information see the note in the papers section of the course notes.