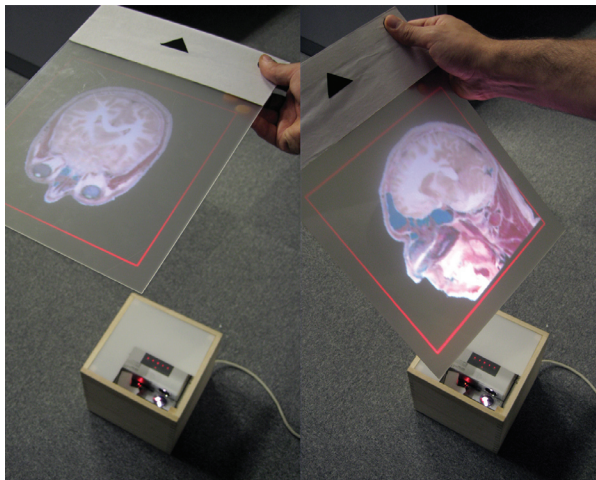


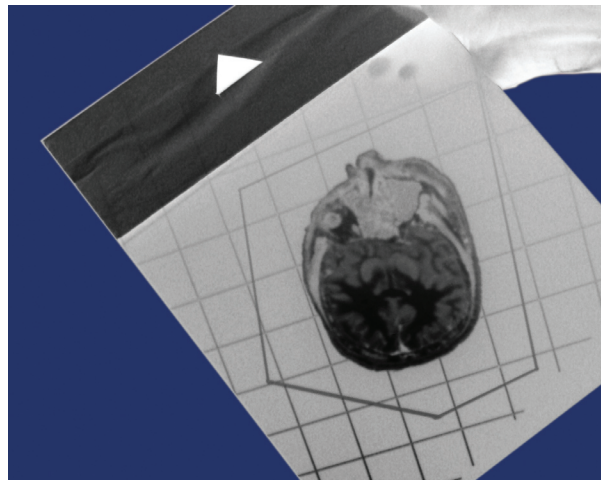
Volume Slicing Display

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The Volume Slicing Display enables interactive exploration of volumetric data (for example, medical images) using a piece of plexiglass (or paper) that functions both as a control interface and a passive, untethered projection screen.

This experimental interface may one day enable teams of experts (surgeons, geologists, designers, architects) to explore 3D virtual objects as if they co-exist in the physical space, and explore them interactively using simple pieces of paper. With the Volume Slicing Display, radiologists would be able to retrieve a certain amount of three-dimensionality from a flat X-ray plate at any time, by just touching certain portions of the passive, untethered screen and



freely manipulating it above a calibrated projector. The interface could also solve another important issue: medical record confidentiality. Without the machine, the piece of paper will only show an undecipherable barcode.

This project highlights several interesting possibilities, including development of an “origami-like” user interface, in which the shapes and folds of the flexible screen are interpreted by the machine as specific display commands. In the near future, the system will include finger tracking over the surface, which could enable annotation and trajectory tracing (surgical paths, for example) in space.