Virtual Paper on a Real Desk

Mark Ashdown



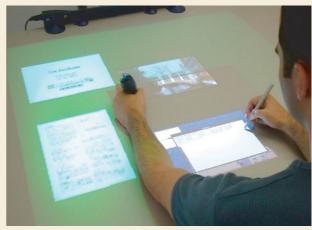
The personal computer with graphical display brought with it predictions of the paperless office, but today more paper is used than ever before. We have created the *Escritoire* – an interface that allows a person to interact with information such as documents, images, and conventional computer displays, as if they are sheets of paper on a desk.

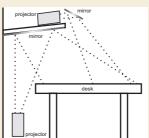
Rather than a monitor with an area of 1 square foot, multiple projectors are used to form a 12 square foot display. Distortion of the projected images is corrected via continuous warping implemented on commodity graphics hardware.

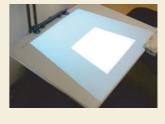
















Pens in both hands are used to arrange and manipulate the items on the desk. A stateless, hardware-dependent client program handles the desk, while a separate server manages the desk contents. Multiple clients augment the 'person space' of a conventional video conference with a 'task space' that the participants share.

