

The Map-Environment Interface:  
Surrogate Travel by Videodisc

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The videodisc is an exciting advance in the realm of data storage. Capable of storing up to 108,000 still frame images on a single disk, the videodisc allows random access to each image, from each image, in under three seconds. As such, a new field known as videodisc surrogate travel has evolved in which users are in control of their movements through a simulated or geographic environment. Views of the surroundings are displayed on a color monitor by the videodisc. Within cartography, various projects have begun to use existing discs, and occasionally to create disks as map storage devices. This project deals with a computer aided instructional package with videodisc and microcomputer to teach map reading skills. A system is being designed in which a student must use sets of still photographs to locate his position on a map, and to move through the environment and complete a prescribed course in a minimal amount of time. This simulation of the sport of orienteering is a valuable resource in teaching map-land relationships, and in sharpening visual skills such as inspection and resection. In addition, the system is a valuable research tool for studying the methods by which these skills are learned.