

A special sensor-equipped glove permits manipulation of simulated objects in a computer generated world of "virtual reality."

"Virtual Reality" Gets Wheels

The Computer Museum has received initial support from The Kapor Family Foundation for "Reality on Wheels," a vehicle that will tour the country providing access and information about the new phenomenon of "virtual reality."

The essence of virtual reality is stereo vision of an environment that an individual can explore in all dimensions. The ultimate systems require head-mounted "eyephones," surround-sound and gloves. Other systems use stereo glasses and flying mice.

Virtual reality technology allows people to explore an environment in a multidimensional computer-generated universe. Exploiting the latest advances in computer power, display technology, and force and motion sensing, the technology gives people new ways to climb into and interact with simulated and imaginary environments.

As with many new phenomena, conceptual thinking about this new technology's potential exceeds the present systems' actual capability. Yet this makes it even more challenging and exciting for exhibition—because it will give the public access to "work in progress."

Research and development are taking place to create better programming environments, human interfaces, and graphics processors. Many corporations, universities and institutes are putting major efforts into this arena. The Museum is working with VPL Research Inc. founder Jaron Lanier, Scott Fisher, Michael Naimark, and Howard Rheingold to present this technology.

According to Mitchell Kapor, Chairman of On Technology, Inc. and a member of the Museum's Board of Directors, "Virtual reality is a technology of profound importance for society. It creates an entirely new way to experience the digital domain by placing the user inside an interactive, computer-generated, three-dimensional environment. Beyond obvious applications to the entertainment field, it has extraordinary possibilities—from the training of surgeons to the hands-on assembly, one molecule at a

time, of cancer-fighting drugs."

"Virtual Reality environments could also be used to design habitats, teach physics, history or geography, and create exciting new art and entertainment forms," says Museum Director Dr. Oliver Strimpel. "It is important that the general public understand what advanced technologies such as virtual reality are and how exciting and useful they can be. By offering such exhibits, the Museum remains a leader in presenting the cutting edge of technology."

Expected to begin touring in late 1991, the exhibit would bring the experience of virtual reality to schools, public agencies, and a wide variety of people across the country.

Reality on Wheels is the third in a series of traveling exhibits which the Museum has mounted since 1988. "Computers in Your Pocket: The History of Hand-held Calculators" and "Terra Firma in Focus" on digital satellite imaging continue to tour the country extending the Museum's reach. The Computer Museum also exports its most popular exhibits to other museums and technology centers around the world by means of an Exhibit Kits Program.