

Virtual Reality

The Cyberpunk Project

Virtual Reality (VR), also known as artificial reality, artificial worlds, virtual worlds, virtualities, is a fully-immersive, absorbing, interactive experience of an alternate reality through the use of a computer structure in which a person perceives a synthetic (i.e., simulated) environment by means of special human-computer interface equipment and interacts with simulated objects in that environment as if they were real. Several persons can see one another and interact in a shared synthetic environment.

VR can be considered as a visual form of cyberspace.

VR represents computer interface technology that is designed to leverage our natural human capabilities. Today's familiar interfaces - the keyboard, mouse, monitor, and GUI - force us to adapt to working within tight, unnatural, two-dimensional constraints. VR changes that. VR technologies let you interact with real-time 3D graphics in a more intuitive, natural manner. This approach enhances your ability to understand, analyze, create and communicate.

A VR system lets you experience data directly. For example, today's advanced interfaces let you look and move around inside a virtual model or environment, drive through it, lift items, hear things, feel things, and in other ways experience graphical objects and scenes much as you might experience objects and places in the physical world.

As a result, VR serves as a problem-solving tool that lets us accomplish what was previously impossible. It's also a communications medium, and, ultimately, an artistic tool/medium.

The concept of VR has become in many ways a repository for our culture's dreams of disembodiment, of escape from the limitations of the material body. VR may one day make possible the long list of physically impracticable dreams including : "experiencing an expansion of our physical and sensory powers; getting out of the body and seeing ourselves from the outside; adopting a new identity; apprehending immaterial objects... being able to modify the environment through either verbal commands or physical gestures; seeing creative thoughts instantly realized". While the actual technology has not yet been able to fulfill these desires, the dreamed of possibilities have clearly established a life of their own within our present cultural imagination.

We may not use the phrase "virtual reality" in ten years, but by then, everybody working with 3D graphics will do so with these intuitive interfaces.

Used today in architecture, engineering and design, tomorrow in mass-market entertainment, surrogate travel, virtual surgery and cybersex, by the next century 'VR' will have transformed our lives.

-- Howard Rheingold (in *Virtual Reality*, 1991).

Virtual Reality won't merely replace TV. It will eat it alive.

-- Arthur C. Clarke

A VR is a computer world that tricks the senses or mind. A virtual glove might give you the feel of holding your hand in water or mud or honey. A VR cybersuit might make you feel as if you swam through water or mud or honey. VR grew out of cockpit simulators used to train pilots and may shape the home and office multimedia systems of the future. The idea of advanced VR systems as future substitutes for sex and drugs and classroom training is the stock and trade of modern science fiction or "cyberpunk" writing.

-- Bart Kosko (in *Fuzzy Thinking*, 1993)

The whole thing with Virtual Reality is that you're breeding reality with other people. You're making shared cooperative dreams all the time.... Eventually, you make your imagination external and it blends with other people's. Then you make the world together as a form of communication.

-- Jaron Lanier (in "Scratching Your Eyes Back In: John Perry Barlow Interviews Jaron Lanier", *Mondo* 2000, Issue 2, 1990)

This will represent the greatest event in human evolution. For the first time, mankind will be able to deny reality and substitute its own preferred version.

-- J.G. Ballard

References

[Reality for Cybernauts](#)

[The Promise of Virtual Reality](#)