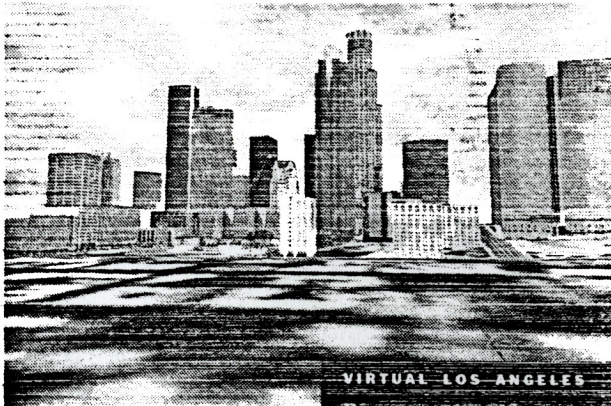


PUBLIC EYE

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Urban Simulation Team at U.C.L.A.

VIRTUAL LOS ANGELES
Programmers, architects and urban designers are building cities in cyberspace.

“FOUND Rome in brick,” Emperor Augustus boasted late in his life, “and I leave it to you in marble.” From about 50 B.C. to A.D. 15, Augustus rebuilt the city, not in a day, to be sure, but pretty quickly: he slapped up new temples at the rate of 80 in one year.

Now, Rome is being rebuilt again. The “Rome Reborn” project, involving computer scientists and archeologists at the University of California at Los Angeles, is designing a model of the ancient city in cyberspace. “Rome Reborn” will show how Rome looked at each stage of its construction, what Hadrian and Trajan added and Nero destroyed.

Mattel, Warner Brothers, Silicon Graphics and Disney Interactive are lending technical expertise. The project team found Rome in pieces; they are leaving it to us in bits and bytes. Eventually, plans are to bring Rome home via the World Wide Web.

Another virtual-reality reconstruction created by scholars from the Getty Museum and a company in Rome called Infobyte shows the Forum of Trajan. It is featured in a video tour installed at the new Getty in Los

modeled cities will allow you to move cinematically through streets and plazas. You will be able to move through time as well, seeing the same spot in a succession of years.

U.C.L.A.’s Rome is flat-planed, humming with computer bits and vectors. For nearly a decade, a team headed by William Jepson and based at U.C.L.A.’s architecture and urban design department has been working on a virtual-reality model of Los Angeles. This virtual Los Angeles, which will someday offer a terabyte’s worth of information, has a similar look. Visitors will be offered views, from the satellite level down to the graffiti on overpasses.

Such views of virtual cities must be scripted and framed just like a movie. And to obtain financing, the project must have an educational purpose. In “Rome Reborn,” virtual guides will greet Latin students in either Latin or English.

Bernard Frischer, a classics professor at U.C.L.A., argues that virtual reality “can effect curiosity arousal when the student is viewed as an adventurer traveling through a virtual world.” Then again, Ben Hur-style chariot races through the streets would also be really cool.

“Rome Reborn” will take more than a day to finish. The planned “time tour” from the ninth century B.C. to the fourth century A.D. will not be complete until 2020.

Nonetheless, other cities cry out for rebuilding in cyberspace. We could see New York in the gaslight days, with a reservoir where the public library now stands on Fifth Avenue. Watching the evolution of Bryant Park could prove as attractive as reading recent historic novels by Caleb Carr and E. L. Doctorow. But the colors of virtual Los Angeles would seem the wrong way to recreate the New York of a century or more ago; most of us envision Old New York in sepia.

The Los Angeles project includes buildings that were planned but never built, suggesting how the model could be used by developers and planning boards to test the visual impact of an architect’s design. It also offers an experience hard to get in the real city. The creators promise that, in the finished Los Angeles cyber model, visitors will be able to fly, drive or even walk.

Glimpses of the works in progress are available on the World Wide Web, at www.gsau.ucla.edu/bill/LA.html and at www.aud.ucla.edu/~dabernat/rome/index.html.

Reconstructing city histories with bits and bytes.

Angeles, beside pieces of Roman statuary from the area.

In the current issue of *Archaeology* magazine, James E. Packer, a classics professor at Northwestern University, explains that the Forum of Trajan was designed as political propaganda. Its marble floors, rendered in the cyber model in colorful detail, reflected the distant corners of the empire from which the marble had been quarried, and thus celebrated imperial triumphs.

The virtual-reality Forum of Trajan shows off this marble — from the purple pavonazzetto and the violet and black africano, both from Turkey, to the golden giallo antico from North Africa — with as much pride in the power of computing as Trajan had in his empire.

Designing a city for cyberspace is not as straightforward as it may seem. The computer program *Sim City* lets you design cities from scratch or modify Atlanta or Houston to your taste. But using Virtual Reality Modeling Language, a standard for the World Wide Web, future