

Caesar Slept Here

A 3-D re-creation at UCLA lets you roam ancient Rome

BY ANDREW MURR

IT'S A SUNNY MORNING, PERFECT FOR a leisurely stroll. The date: A.D. 400. You walk up the steps of the Temple of Vesta, where inside, six virgins tend an eternal flame (and risk being buried alive if they, well, you know). Crossing the plaza, you duck between the columns of the law courts, then pop into the cramped Senate building to see the marble-lined walls. Back outside, you peer up at bas-reliefs on the Arch of Septimius Severus, 30 feet overhead. Can't make out the doleful faces of vanquished Parthians paying obeisance to the emperor? Go ahead, levitate up for a closer look. Why not? It's a virtual world.

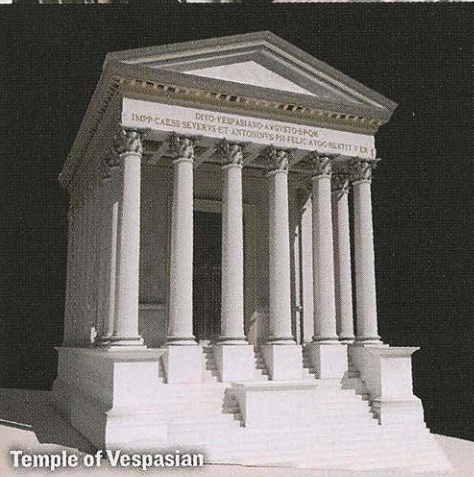
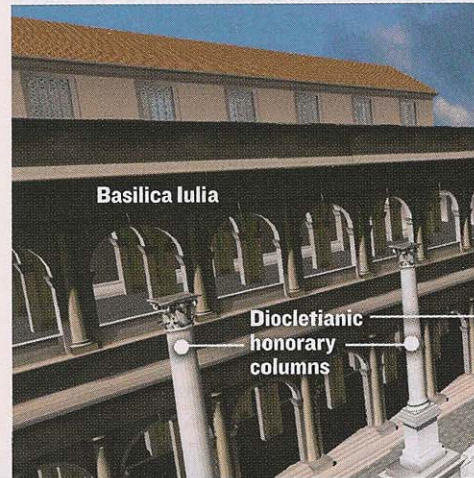
A funny thing happened to the Forum: it went digital. Thanks to a team of UCLA scholars, the world now has a 3-D interactive reconstruction of the heart of imperial Rome. Using PCs and off-the-shelf modeling software, UCLA's Cultural Virtual

Reality Lab re-created 22 temples, courts and monuments—perhaps the most complex historical VR re-creation ever attempted. Loaded onto a SGI supercomputer and projected on a special spherical screen that fills your field of vision, the model creates a simulated journey through the ancient cityscape. The computer operator can take you anywhere you want to go. “This is a kind of

time machine,” says Bernard Frischer, a classics professor who heads the VR lab.

Making each building historically accurate required serious detective work. The team used descriptions in ancient texts, modern scholarship and even images on Roman coins, says Dean Abernathy, the grad student in charge of assembling the models, which not only aid in teaching but may also spur new scholarship. A lighting study of the building Julius Caesar commissioned for the Senate shows that the interior was unusually dim, even on the brightest day of the year. Did Caesar, who hated the senators, deliberately keep them in the dark?

The Forum may even fill up with people again. Alan Kay, the computer guru who helped pioneer computer graphics at Xerox PARC and Apple, thinks “many, many things will come from this.” His first idea: turn the Forum into a sort of tourist version of the popular fantasy game EverQuest. Soon avatars of online tourists may be poking around the Forum, interacting with each other. See you in Rome. ■



TIME MACHINE: To create the Virtual Roman Forum, the UCLA team used historical accounts to make 3-D computer models of buildings and courtyards. Here's how one section of the re-creation of the ancient city matches up with the ruins that remain today (top).

