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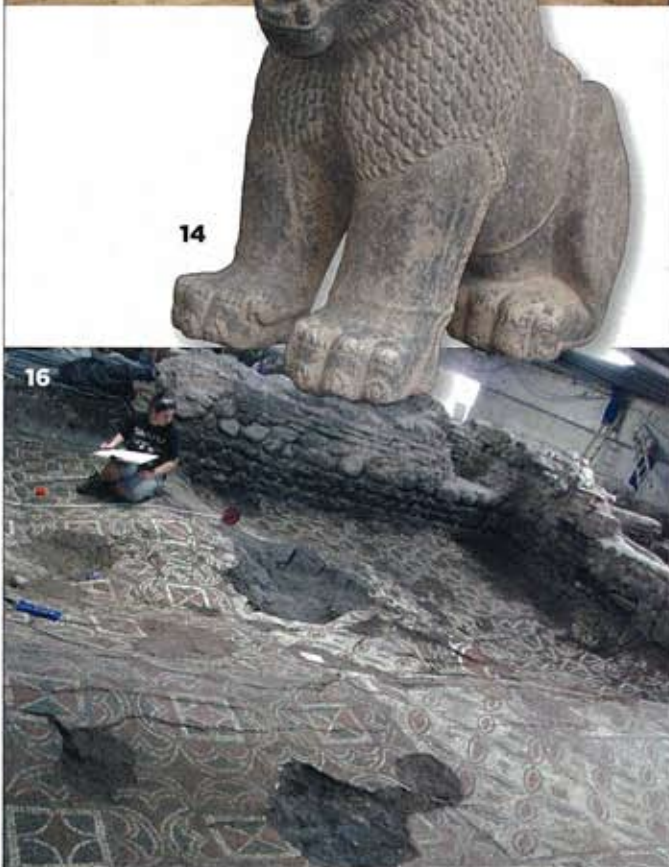
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- **Interactive Digs** Read about the latest discoveries at the Minoan site of Zominthos in central Crete, at Johnson's Island, a Civil War site in Ohio, and at El Carrizal, in Veracruz.

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## Lion in Wait

Looking a bit angry—perhaps because he’s being unceremoniously hoisted aboveground by a crane—this 3,000-year-old stone lion has much to tell archaeologists about the Iron Age in the eastern Mediterranean (1200–550 B.C.) The sculpture was probably originally buried by the destruction of the monumental gate on which he sat guarding the citadel of Kunulua, the capital of the Hittite Kingdom of Patina, in 738 B.C.

According to Timothy Harrison, director the University of Toronto’s Tayinat Archaeological Project, the lion and the site in southeastern Turkey where he was found will provide valuable new insights into the character and cultural sophistication of the small states that emerged in the eastern Mediterranean following the collapse of the great Bronze Age powers at the end of the second millennium B.C.

—JARRETT A. LOBELL



## 3-D Scanning on the Cheap

A technological marriage between archaeology and video gaming may beget crisp, 3-D virtual renderings from ancient excavation sites that will one

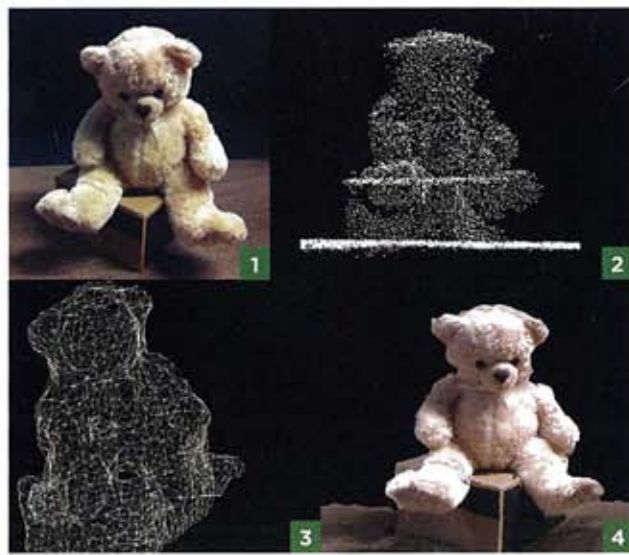
day help archaeologists better track the progression of digs, record the locations of artifacts, and even beam images to remote researchers who can consult on fieldwork.

Researchers at the University of California, San Diego (UCSD), hacked a Microsoft Xbox 360 Kinect to create a low-cost 3-D scanner that can be used in the field. Ordinarily, the Kinect peripheral tracks the motion of game players by following infrared dots it projects onto them, allowing online ava-

tars in games to be controlled by movement alone—no controller required. The UCSD team turned the device into a hand-held scanner that, when passed over every inch of an area or object (researchers liken the process to spray painting), can collect depth, surface texture, and color data. This information can then be combined to create a virtual representation of an artifact or a dig site.

Currently the ArKinect, as it’s called, requires a separate video tracking system that allows users to properly orient the scanner. The researchers, however, hope to have an untethered prototype that they can use in the field on an upcoming dig in Jordan. The ArKinect offers a far cheaper, more portable alternative for creating 3-D renderings than light detection and ranging (LiDAR), which, because of the system’s size, isn’t as flexible for capturing all the contours of a large site or artifact.

—NIKHIL SWAMINATHAN



When the ArKinect scans an object (1), it collects surface data (2) and depth data (3), and combines them into a 3-D rendering (4).