

Olympic Archaeology

For more than 3 years, archaeologists in Beijing have been following the bulldozers as they tear into the land to make way for Olympic venues.

Last year, the bulldozers uncovered a particularly striking find: an ancient burial ground dating as far back as 1000 years that holds the



largest group of eunuch tombs ever unearthed in China. The 163 tombs of late Ming Dynasty (circa 1600) eunuchs came to light as workers were renovating the Clay Target Field of the Olympic Shooting Range.

Historian Leung Siu-kit of the University of Hong Kong calls the finds “exciting.” Some Ming eunuchs were wealthy and high-ranking, and they carried great influence in the political intrigues of the day. Leung notes that “the epitaphs discovered in the tombs should provide more comprehensive information on eunuchs’ careers and participation in the government” than has recorded history, which tends to focus

on their misdeeds. Plans are to reconstruct the most elaborate tomb (see photo, left) at the Beijing Eunuch Culture Museum and open it in time for Olympic visitors.

Divorce Is Like an SUV

Divorce can be a headache—for Earth and not just the unhappy couple. The global surge in divorce rates adds up to more small and thus environmentally inefficient households, according to a study published online this week in the *Proceedings of the National Academy of Sciences*.

The proportion of U.S. families headed by divorced persons jumped from 5% to 15% between 1970 and 2000. According to the study, such households spent 46% more on electricity and 56% more on water per person. In addition, data from 12 countries indicate that divorcé(e)-headed households hold about one-third fewer people but occupy 33% to 95% more rooms per capita—38 million more rooms just in the United States.

“A lot of people ... assume that human impact on the environment will ... decline” with population declines, says co-author Jianguo Liu, an ecologist at Michigan State University in East Lansing. But “[with] decreasing household size, environmental impact may continue to increase.” Sustainability researcher Manfred Lenzen of the University of Sydney, Australia, agrees that divorce can dramatically increase resource use but notes that some of that increase might result from higher divorce rates among the rich.



VIVE LE HOBBIT

A life-sized reconstruction of *Homo floresiensis*, a.k.a. the hobbit, will go on display on 11 December at the Musée de l’Homme in Paris. The model of the 18,000-year-old female, whose bones were discovered in 2003 on the Indonesian island of Flores, was created by French anthropological sculptor Elisabeth Daynès, aided by three anthropologists. The team relied on a three-dimensional stereolithograph of the hobbit’s skull as well as publications on the skeleton.

Anthropologist William Jungers of Stony Brook University School of Medicine in New York state says that the model is “very impressive and visually arresting.” Nevertheless, Jungers and Stony Brook anatomist Susan Larson say the reconstruction fails to capture new data on the hobbit’s peculiar shoulder anatomy (*Science*, 19 May 2006, p. 983). Larson says her work on the hobbit suggests that the shoulder blades were “positioned more on the sides of the rib cage than on the back,” as they are in modern humans. Thus, the model’s shoulders should have been more hunched, *H. erectus*-like. Daynès says that she was not aware of this work when she sculpted the hobbit in July but will include the data in any future reconstructions.

When Worlds Collide >>

Our solar system may have plenty of cosmic cousins. Scientists studying archived data have spotted an adolescent sunlike star with a dusty belt that shows evidence of the creation and violent destruction of baby planets. “There is no doubt that they are detecting the dusty debris of rocky [Earth-like] planet formation,” says Scott Kenyon of the Harvard-Smithsonian Center for Astrophysics. A report of the find, by a team headed by Joseph Rhee of the University of California, Los Angeles, is in press at *The Astrophysical Journal*.

Until 2005, astronomers had observed only very young possible planet-forming systems. Then data from the retired Infrared Astronomy Satellite revealed a more mature system, bolstering predictions that collisions continue well after planets form. The latest observation, from a star called HD 23514 in the Pleiades cluster, should “help generalize the model of planetary formation,” says David Trilling of the University of Arizona in Tucson. Combined, the two discoveries allowed the team to estimate that about 1 in 1000 stellar systems share our system’s turbulent past—and could share its present architecture.



Artist’s concept of how Earth-sized planets might collide in their formative years around a star.