

**BY THE NUMBERS**

**1 billion tons** Amount of extra food that that could be grown on agricultural lands now devoted to animal feed and biofuel production, according to an analysis in this week's *Nature*.

**200,000 amps** Maximum power generated by a new airplane industry-sponsored lab at Cardiff University that studies the effects of lightning on materials. An average lightning strike generates 10,000 to 30,000 amps.

### Cute TV Chimps May Harm Wild Brethren

Some entertainment industry moguls claim that chimpanzees dressed in clothes and clowning around fosters sympathy for the species. But a study published 12 October in *PLoS ONE* suggests the opposite: People who watch such shows or ads decide chimpanzees are abundant in the wild and don't need further protection.

Evolutionary anthropologist Brian Hare at Duke University in Durham, North Carolina, and colleagues asked 165 people to answer a questionnaire about the status of chimpanzees in the wild after watching television ads for products such as toothpaste and soft drinks. Mixed in with the ads was one of three short films about chimpanzees. One showed Jane Goodall urging for their protection; another showed footage of chimpanzees in the wild; and the third showed chimpanzees "acting" in ads.

The results suggested absolutely "no support for the familiarity hypothesis,"



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**Random Sample****The Story Is Dead. Long Live the Story.**

Artist and self-styled experimental philosopher Jonathon Keats is hoping to persuade the art world to join scientists in the Copernican Revolution—nearly 5 centuries late. In 1543, Nicolaus Copernicus made the humbling observation that the Earth revolves around the sun. Modern physicists often cite the "Copernican principle" that, as nature's rules are the same everywhere, the human viewpoint isn't unique.

But the art world, Keats says, is still stubbornly Ptolemaic, in that it emphasizes the "exceptionalism" of humans and centers on stories about ourselves. So, in "The First Copernican Art Manifesto," an exhibit that opened Thursday at the Modernism gallery in San Francisco, California, Keats will feature art that reflects banal, average truths about the universe.

The pieces don't assume a human audience or viewpoint—and they don't aim to appeal to us, either. One canvas is painted a bland tan, the average color of the starlight of all stars measured by astronomers. Hydrogen gas released from glassware suspended above otherwise empty pedestals assumes a form invisible to human eyes. A quarter of the notes in a once-orderly Bach composition are rearranged—reflecting the increasing entropy of the universe since its tidy, pre-big bang singularity.

Although not for humans, the exhibition *is* aimed at a particular demographic, in a way. "Were the aliens to land and see our show, they wouldn't say, 'Now I understand humanity,'" Keats says. "They'd say, 'Now I have a better understanding of the universe.'" The exhibit runs through the end of November.



Hare says. More than 35% of those who watched the humorous ads thought individuals should have the right to own a chimpanzee as a pet, compared with only 10% of those who watched the two other films. Those who watched the entertainment chimps were also least likely to donate to a conservation charity.

<http://scim.ag/chimpads>

### Black Death Spawned Modern Plague

These skeletons—excavated in the 1980s from a 14th century graveyard in London—belonged to six of the estimated 30 million people who died from the Black Death, the plague epidemic that swept Europe between 1347 and 1351. Researchers used teeth from the same graveyard—home to 2500 plague victims—to reconstruct 99% of the genome of *Yersinia pestis*, the bacterium that causes plague. An analysis of that microbial DNA published online 12 October in *Nature* sug-



gests that *Y. pestis* strains currently circulating around the world are all descendants of the medieval strain believed to have killed 30% to 60% of Europe's population. The 14th century genome closely resembled those of modern strains and did not have any obvious unique mutations that might explain its unprecedented virulence. Other factors—such as the population's susceptibility or the ecology of rodents and fleas, which help spread the disease—were probably responsible for the medieval calamity, the team concludes.