

SCORECARD

**Energy-saving boat**

A boat propelled solely by the up-and-down motion of waves is about to set sail on a three-month voyage from Hawaii to Japan.

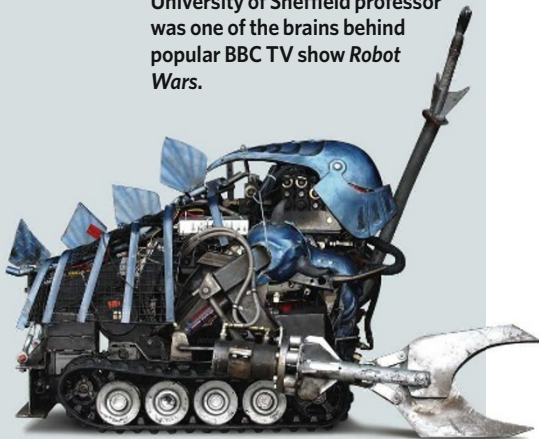
**Energy-sapping day**

Britons used more power (0.1%) in a day than average during the nation's first Energy Saving Day, when people were encouraged to switch off unnecessary electric devices. UK officials blamed the disappointing outcome on the cold weather — this was perhaps unsurprising for 27 February...

ROBOT NEWS

Unthinking slaughter?

Artificial-intelligence expert Noel Sharkey has declared himself “really scared” of potential developments in military robots over the coming decade. Worrying, given that the University of Sheffield professor was one of the brains behind popular BBC TV show *Robot Wars*.



WORDWATCH

Planetary pedantry

Ten-year-old Montana schoolgirl Maryn Smith has won a *National Geographic* competition to come up with a mnemonic for the names of the 11 recognized planets in the Solar System, in order of orbital radius. Her effort, ‘My Very Exciting Magic Carpet Just Sailed Under Nine Palace Elephants’, will now be immortalized in song, although being a pedant, Sidelines would point out that the Solar System has only eight proper planets (the other three being the dwarf planets Ceres, Pluto and Eris).

Sources: *Daily Telegraph*, *popsci.com*, *BBC*, *Associated Press*

Hobbit was ‘a cretin’

The ‘hobbit’ could be a cretin, Australian scientists say. But this latest assertion in the ongoing row over the identity of the small human skeleton found on the island of Flores in Indonesia is already being challenged — not least because the Australians used only cast images and never examined the actual skeleton. And they misinterpret a crucial skull component, according to three researchers who created casts of the remains.

Peter Obendorf of RMIT University in Melbourne and his colleagues say¹ that the cast shows an impression (called a fossa) of an enlarged pituitary gland at the base of the skull behind the nasal region. This, they say, is evidence that the skeleton is not from a new species (called *Homo floresiensis*) but from a *H. sapiens* with cretinism — a condition in which a person is born with a deficient thyroid gland. Untreated, such people often have an enlarged pituitary gland as well as severely stunted growth and a small brain.

The Australians call their idea “a tentative hypothesis”, although Obendorf says he thinks they “are on the right track”. They now are seeking access to the original specimen.

But Dean Falk, an anthropologist at Florida State University in Tallahassee who was the lead author on the first analysis of the skull cast², says that the pituitary fossa is small. “There is no way they can reach the conclusions they did,” she argues. And Ralph Holloway, a neuroanatomist at Columbia University in New York who has a cast created from data from the original skull, says that his model also shows a small pituitary.

The disagreement highlights an often criticized practice whereby anthropologists examine secondary sources and publish conflicting reports, which many think clouds the course to verifiable results.

Since the discovery³ in 2003 of the skull and partial skeleton of *H. floresiensis*, the anthropology community has sprouted numerous theories to explain its characteristics. Just over 1 metre tall, the 18,000-year-old creature had a brain one-quarter the size of modern humans and primitive skeletal features similar to those of earlier human relatives. Stone tools have also been found in the same cave.

Indonesia’s leading palaeoanthropologist, Teuku Jacob, then of the University of Gadjara Mada in Yogyakarta, and his colleagues initially analysed the bones and decided that the creature, known as ‘the hobbit’, was in fact a human who had a developmental disorder



The stunted growth seen in cretinism may offer clues to the nature of the ‘hobbit’ remains.

called microcephaly, in which the head is smaller than usual⁴.

Palaeoanthropologist Peter Brown and archaeologist Michael Morwood, both of the University of New England in Armidale, Australia, stand by their proposal that the skeleton is a new species. Morwood notes that bones from 12 separate hobbits had been unearthed in the original Liang Bua cave, although so far only the one skull has been found. Brown is critical of the cretin theory. “I am the only person on the planet to have seen what’s left of the pituitary fossa,” he declares. “It is very poorly preserved and not capable of meaningful measurement.”

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Last year, an Israeli team⁵ published a report proposing that the hobbit had a growth disorder called Laron syndrome. Those authors also never examined the original skeleton and their report was branded “a joke” by Falk, who is preparing a rebuttal for presentation at the annual meeting of the American Association of Physical Anthropologists on 9–12 April in Columbus, Ohio.

With just one skull, the row over whether the creature was a human with a congenital abnormality or a new species will probably continue for some time.

Rex Dalton

1. Obendorf, P. et al. *Proc. R. Soc. B* doi:10.1098/rspb.2007.1488 (2008).
2. Falk, D. et al. *Science* **308**, 242–245 (2005).
3. Brown, P. et al. *Nature* **431**, 1055–1061 (2004).
4. Jacob, T. et al. *Proc. Natl Acad. Sci. USA* **103**, 13421–13426 (2006).
5. Hershkovitz, I., Kornreich, L. & Laron, Z. *Am. J. Phys. Anthropol.* **134**, 198–208 (2007).

J. P. KAY/PETER ARNOLD INC./SPL