

WORDWATCH

Embiggen

In a case of theoretical physics imitating art, 'embiggen', first coined by *The Simpsons* character Jebediah Springfield, has now been used in a paper on string theory by Stanford University's Shamit Kachru. In case you need a definition, it means 'to grow or expand'. Obviously.

SCORECARD



Regret-free tattoos

The pain of removing that no-longer-hip tattoo could soon be a thing of the past, with the advent of ink-filled polymer capsules that can be injected under the skin, and later ruptured to disperse the ink.



Virtual gambling

Administrators of the booming virtual world Second Life have forbidden all casino games, in line with the US blanket ban on online gambling.

ZOO NEWS

Bear minimum

To feed the public's (and our) obsession with Knut, keepers at Berlin Zoo have announced that they are putting the cub on a diet. Bizarrely, the world's most famous polar bear was previously allowed to eat croissants, but not any more — he's looking quite chubby at around 60 kilograms.



JEAN-LUC

3 GOOD REASONS...

...to have sex

According to research in this month's *Archives of Sexual Behavior*, there are a staggering 237 reasons why people might choose to mate. Here is a brief selection.

- 1 The most common: "I was attracted to the person."
- 2 The prosaic: "It seemed like good exercise."
- 3 And the refreshingly honest: "The opportunity presented itself."

Sources: *Scientific American*, *The Guardian*, *The Times*, *Der Spiegel*, *New York Times*

Academic accused of living on borrowed lines

A shockwave could be about to hit the normally tranquil waters of social science. A German economist, specializing in environmental science and technology, has allegedly committed serial plagiarism and invented academic affiliations going back decades. The case should act as a warning sign to editors about how widespread plagiarism and deception may be, experts say.

Events may only now be catching up with Hans Werner Gottinger, 63, who is drifting into retirement in the town of Ingolstadt, Germany. This week the journal *Research Policy* is set to retract a 1993 paper by Gottinger, which analysed demand for spin-off technologies from Ronald Reagan's Strategic Defense Initiative. An accompanying editorial explains that two referees concluded that the article substantially plagiarized a paper published in 1980 in the *Journal of Business* by Frank Bass, then an economist at Purdue University in West Lafayette, Indiana. The editorial also profiles other cases of plagiarism.

Gottinger claims that he has "only scant recollection" of events so long in the past, but insists that he did not intend to plagiarize. He adds that he has "sincerely apologized" for any misunderstandings.

Problems with his paper came to the journal editors' attention in June, when a student noted that whole paragraphs and strings of complex mathematical equations in the Bass paper — which analysed demand for consumer-durable technologies — had been repeated almost exactly in Gottinger's paper. Gottinger did not acknowledge the Bass paper in his work.

Further investigations by one of the journal editors, Ben Martin, an expert in science policy at the University of Sussex in Brighton, UK, revealed that this was not the first such case. In 1999, the editors of the economics journal *Kyklos* had withdrawn a 1996 paper by Gottinger after finding that it had plagiarized a 1992 paper in the journal *Economics of Innovation and New Technology*. And by googling various strings of text from half a dozen other Gottinger papers, Martin identified yet another case — a 2002 paper by Gottinger about an economic model of global warming in the *International Journal of Global Energy Issues*, in which whole sections were remarkably similar to a 1997 article in the *Journal of Environmental Economics and Management*,

by economist Zhiqi Chen of Carleton University in Ottawa, Canada.

"I was shocked and saddened that someone in my profession could do something like that," Chen says. For his part, Gottinger says that the papers were "clearly designed as review papers and did not claim any novel ideas".

Martin then contacted Gottinger's supposed employer, Maastricht University in the Netherlands, about the cases. But the university says that Gottinger has never been appointed or affiliated with it in any capacity. "We have written to Gottinger and asked him to remove from the web all reference to an affiliation with our university," says university spokeswoman Jeanine Hermans. Gottinger told *Nature* that the affiliation was a "misguided muddling" of

"Plagiarism may be much more common than we previously thought."

other institutes in Maastricht with which he claims to have been affiliated, and says he has contacted all the web pages he can think of to correct matters.

Nature has checked other claims made by Gottinger, including membership of professional societies and editorships of several influential journals. We failed to confirm membership of any of the societies, and some of the journals deny he was ever an editor with them. He was, however, removed from the advisory board of *Technology Forecasting and Social Change* in 2003, after the journal became aware of the issue of the *Kyklos* plagiarism.

A chequered career

Gottinger started out in 1973 as a faculty member at the University of Bielefeld in northern Germany, until his resignation in 1980. His co-worker Peter Weingart remembers him as someone strongly orientated towards mathematical approaches, which was unusual in a sociology department. "He was considered highly intelligent but reserved," Weingart says.

In 1979, Gottinger was sacked from the GSF national research centre in Munich because of deception relating to a European Union grant application. From the mid-1980s on, he started to list Maastricht University as his academic affiliation on papers. In 1988 he was appointed as director of the Fraunhofer Institute for Technological Trend Analysis in Euskirchen near Bonn. He says he left over professional differences of opinion; current director Uwe Wiemken says the appointment "didn't end peacefully".