

Cyrillic Riddle Solved

Amateur cryptographers have deciphered an unusual code. It reads like a snippet of a KGB training manual, but it is actually inscribed in a luminous sculpture on the University of North Carolina, Charlotte, campus.

The "Cyrillic Projector" (above) is one of a number of code-bearing sculptures created by Washington, D.C., artist James Sanborn. The most famous, Kryptos, at the CIA headquarters in Langley, Virginia, made the news in 1999 when code breakers decoded three-quarters of the secret message.

When Sanborn enthusiasts posted transcripts of the Cyrillic Projector's text on the Web in June, computer programmers Mike Bales in Michigan and Frank Corr in North Carolina set out to crack it. "I hoped it could shed light on the last part of Kryptos," says Bales. By analyzing the statistical characteristics of the encrypted text, the two independently discovered that the code was a variant of a well-known scheme known as a Vignère cipher. But the resulting text was Russian. "I went out and bought a Russian dictionary; then I went out and bought a better dictionary," says Corr. "It's really pretty gruesome if you don't know the language," because the words have errors in them and are all stuck together without punctuation.

Nevertheless, by mid-September, game designer and amateur code breaker Elonka Dunin, keeper of a Kryptos Web



site, had the Russian translated. It appears to be a fragment of a KGB document about the morality of spying and part of a speech by dissident Andrei Sakharov. "When we were first translating, we thought, 'Ooh. Heavy stuff,'" says Dunin. "It was very exciting." Sanborn fans still have something to chew on: The uncracked section of Kryptos remains a mystery.

Meteor Raises a Stir in India

A giant fireball believed to be caused by a large meteorite spread panic in eastern India last month. Around 6:30 p.m. on 27 September, people in large parts of the coastal state of Orissa reported a huge fireball and a thunderous cracking sound in the sky. The area appeared to be lit up for several seconds by "a giant greenish-blue floodlight," says geologist B. K. Mohanty of the Geological Survey of India, who spoke with eyewitnesses. Some onlookers reportedly collapsed from the shock of the spectacle, and one, a 55-year-old man, was taken to a hospital, where he died 2 days later. In one vil-

RANDOM SAMPLES

edited by Constance Holden

FAITH-BASED PHYSICS

"I still believe in $E = mc^2$, but I can't believe that in all of human history, we'll never ever be able to go beyond the speed of light to reach where we want to go. ... I've argued with physicists about it, I've argued with friends about it. I just have to believe it. It's my only faith-based initiative."

**U.S. presidential candidate
Wesley Clark**

at a 30 September fundraising party
in New Hampshire

lage, residents say debris set fire to a thatched-roof house, injuring three people inside. So far, only two meteorite pieces have been found.

The fatality appears to be the first linked to a recent meteorite fall, says Ralph P. Harvey, a geologist at Case Western Reserve University in Cleveland, Ohio. But he's skeptical that a meteorite would be hot enough to start a fire.



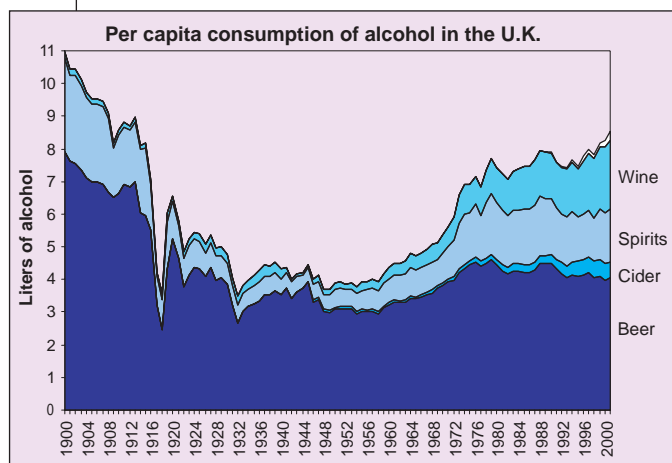
Walk the Dog

This photo—"Untitled (walk the dog)"—is part of an exhibit on "Complexity" running through 28 November at the Federal Reserve Board in Washington, D.C. Just as complexity can emerge unpredictably from simple rules, "the ice crystals grow in beautiful, related but unpredictable substructures," says photographer David Golde.

Winos on the Rise in Britain

At the rate people are now consuming alcohol in the United Kingdom, they should be in the top ranks of Euro-drinkers within a decade, according to a new report from the government's "strategy unit alcohol harm reduction project." The U.K. is now in the middle range—ahead of the United States but behind top tipplers including Ireland, France, and Germany.

"Historically the heaviest-drinking countries have been the wine producers," says the report. But wine is now driving the drinking increase in Britain. British teens, along with those in Ireland and Denmark, are among the heaviest-drinking adolescents in Europe, with those under 16 consuming twice as much as they were 10 years ago. Earlier drinking is reflected in the peak age range for alcohol mortality, which has dropped from about age 70 to about age 60.



AWARDS

Homegrown. Erik Demaine, 22, doesn't stand out in a graduate computer science class at the Massachusetts Institute of Technology—until you realize that he's an assistant professor who's teaching, not taking, the course.



A computer scientist with a special interest in computational geometry, Demaine added one

more feather to his precocious cap this week by winning a John D. and Catherine T. MacArthur Foundation fellowship, the so-called genius award. Among the 23 other winners are those two generations older than he.

The Canadian-born Demaine, homeschooled by his father before entering college at 12 and earning his Ph.D. from the University of Waterloo in 2001, doesn't think his relative youth is "such a big deal." Many students could start a research career earlier in life if they avoided formal schooling, he says: "A lot of grade school and high school is wasted time."

Others awarded the \$500,000 fellowship include eight scientists and two physicians (www.macfound.org).



JOBS

New *Cell* editor. Emilie Marcus has been appointed editor of *Cell*, one of the world's top 10 most cited scientific journals. The Boston-based title is the flagship of eight journals published by a division of Elsevier. Marcus, 43, is currently editor of a sister journal, *Neuron*, which she joined in 1998.

"I'd like to move *Cell* beyond its traditional focus on mechanistic insights into work that addresses new phenomenology. That's where the excitement is," says Marcus, who earned her Ph.D. in neurobiology from Yale University. She's also looking closely at the free-access journal movement. "I think it's an interesting business model," she says, "but I have concerns about the conflicting commercial and scientific interests" for journals that charge publication fees.

Marcus takes up her new duties 1 November. She suc-

ceeds Vivian Siegel, who is now executive director of the Public Library of Science, a nonprofit open-access competitor to *Cell*.

From these parts. Atmospheric scientist Sixto Gonzalez has been named head of the National Science Foundation's Arecibo Observatory in Puerto Rico, home of the world's largest single-dish radio telescope. Gonzalez, 38, is the first native-born Puerto Rican to head the observatory, which he first visited as a student in 1988. He returned in 1993 as a research associate, and since 2001 he has led the facility's space and atmospheric sciences group. The offer of directorship was a "bit of a surprise," says Gonzalez, "but I guess I was at the right place at the right time." He succeeds Daniel Altschuler, an astronomer and popular writer who is filling a new post as director of the observatory's Office for the Public Understanding of Science.

"Sixto may be young, but he has a world of experience and is widely respected," says



RANDOM SAMPLES PEOPLE

edited by Yudhijit Bhattacharjee

Robert Brown, director of the National Astronomy and Ionosphere Center (NAIC) at Cornell University in Ithaca, New York, which manages the observatory. Gonzalez says community outreach is a

priority for Arecibo, and "it certainly doesn't hurt that I am a Puerto Rican."

ON CAMPUS

Baghdad battle. The future of Iraq's largest university is under a cloud following a clash between its president and the country's top education official.

In May the faculty of Baghdad University elected biochemist Sami al-Mudhafar as its president. Last week they took to the streets to protest his removal by higher education minister Zayad Abdul-Razzaq Mohammed Aswad, a former Baghdad U. engineering professor. The ministry asserts that al-Mudhafar was too slow in ousting members of former President Saddam Hussein's Baath Party from the university. Al-Mudhafar's supporters, who were repelled with tear gas and gunshots fired over their heads, say that he was democratically chosen and should be allowed to continue.

Classes in Iraq, including at the university, opened on 1 October. No word yet on who Aswad wants to replace al-Mudhafar, who remains a popular man on campus.

Got any tips for this page? E-mail people@aaaas.org

Analyze this. Why do so many U.S. students avoid science? Part of the answer could be a deep dislike for the subject by authors of some of the most popular children's books.

Sharon Creech, who wrote *Granny Torrelli Makes Soup*, loathed geometry so much that she "accidentally lost the text many, many times," she told *The Washington Post* on the eve of last week's National Book Festival in Washington, D.C. The thought of algebra, says writer-illustrator Steven Kellogg, author of *Jimmy's Boa* and the *Bungee Jump Slam Dunk*, "still causes me to lapse into a coma."

Of the seven writers interviewed, four named math as their worst subject in school and two fingered chemistry. Not surprisingly, the overwhelming favorite was English.



TWO CULTURES