

Spider Carpet



A million female Madagascar golden orb spiders contributed their golden silk to this one-of-a-kind textile that went on display last month at the American Museum of Natural History in New York City. More than 80 people spent 4 years on the work, collecting spiders in the wild, drawing silk from immobilized (and later freed) arachnids with hand-powered machines, and twisting hundreds of spider lines to make each thread. The 3.4-by-1.2-meter tapestry is on loan from Simon Peers and Nicholas Godley, who founded Lamba, a weaving enterprise in Madagascar.

Shrinking the Shrinks

Many training programs for clinical psychologists in the United States should be scrapped, an organization of psychologists says. In a report to be released this month, the Association for Psychological Science (APS) calls for more scientific rigor in psychotherapy. "Clinical psychology resembles medicine at a point in its history when practitioners were operating in a largely prescientific manner," it says. Therapists' "lack of adequate science training ... leads them to value personal clinical experience over research evidence." The report lambastes the American Psychological Association (APA)—which comprises mainly clinical psychologists—for lax accreditation standards and proposes a new mechanism for certifying Ph.D. training programs.

Psychologist Scott Lilienfeld of Emory University in Atlanta praises the report, saying, "Far too many practitioners are administering unsubstantiated or untested intervention." But he worries that its proposals would freeze out Psy.D. programs, nonresearch degrees begun in the 1970s, which now turn out about half of the nation's clinical psychologists.

Jeffrey Zeig, a clinical psychologist and director of the Milton H. Erikson Foundation in Phoenix, says psychotherapy is much too diverse to be constrained by APS definitions. "There are more than 1,000,000 therapists in the U.S., and only a fraction" have Ph.D.s, says Zeig, who pre-

dicts the report "will have as much effect as a breeze has on a leaf."

But report co-author Timothy Baker of the University of Wisconsin School of Medicine and Public Health in Madison predicts that it "will ultimately reshape clinical psychology just as the [1910] Flexner Report reshaped medicine," leading to the closure of almost half the nation's medical schools.

Over the Top

Henry Hudson and others who searched for trade routes across the top of the world would be envious. Last month, with sea ice at its third-lowest extent ever, two German vessels made the first commercial transit all the way across the Arctic Ocean, carrying power plant components from South Korea to Novyy Port in Siberia and continuing on to Rotterdam, the Netherlands.



Bremen, Germany-based Beluga Shipping says it could have as many as six vessels making the trip in 2010, saving up to \$800,000 per trip. The route is only two-thirds as long as that through the Suez Canal.

With global warming, the Arctic "seems to be beckoning mariners," says Mead Treadwell, chair of the U.S. Arctic Research Commission. The Northern Sea Route skirting Russia and the fabled Northwest Passage over Canada have become increasingly navigable in recent summers, and traffic is growing. Treadwell says a 2004 study found more than 5000 vessels operating in or near the Arctic Ocean.

The melting sea ice is "an urgent wakeup call" about climate change, says Greenpeace spokesperson Melanie Duchin. Greenpeace has called for a moratorium on commercial activity to protect the area historically covered by sea ice year-round.

Mummy Recipe Hard to Follow

Frank Rühli wants to know just how the Egyptians did it. So he is trying to mummify human legs.

Rühli, a physician and head of the Swiss Mummy Project at the University of Zurich, and his collaborators severed the legs from a female donor body. One, the "control leg," was kept in an oven at 40°C and low humidity to replicate "natural mummification" in the Egyptian desert. The other leg, as described in ancient Egyptian records, was put on a pine board and covered with natron, a blend of four sodium compounds that pulls moisture out of the tissue. The researchers left it at 23°C to see what natron would do in the Swiss environment.

Other researchers have tried mummifying human remains. But the Swiss group is using advanced imaging technology, biopsies, and tests of DNA degradation for moment-by-moment analysis of the mummification process.

So far, the researchers have found that mummification in Zurich takes longer than expected: After 3 months, scans showed that the natron leg still had pockets of humidity, Rühli says. They have also discovered that storing an untreated leg in the heat doesn't work well. The control leg failed to dry out and started to decompose after a week. Rühli plans to repeat the experiment, this time encasing the control leg in hot sand.

