Rockefeller Finances Circle Survey

Chalk it up to millennium madness: Crop circles, like bell-bottoms, are back in fashion. Billionaire Laurance Rockefeller is financing a survey to get to the bottom of crop circles.

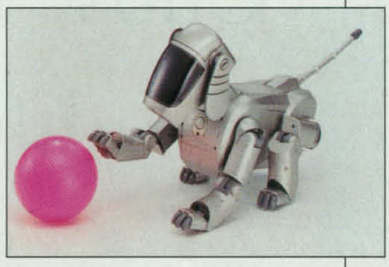
Since 1978, patterns of matted-down cornstalks, rapeseed, and other crops have been appearing in English fields. Enthusiasts attributed the so-called crop circles to UFO landings. Then, in 1991, two local artists owned up to having created the circles. Since then others have gotten into the act (see www.head-space.com/circlemakers), and the patterns have become ever more elaborate—turning into fractals, complex geometric figures, and ancient symbols. Although it's clear that many are the creation of hoaxsters, a lot of people still believe that some of the patterns, because of the speed of their appearance and their exquisite execution, must have a nonhuman origin.

Part of this spring's bumper crop.

Last week, longtime crop circle researcher Colin Andrews, a former local official in Hampshire who is now based in Connecticut, announced that Rockefeller, 89, has ponied up funds for an aerial survey of Wiltshire and Hampshire next month. He said global positioning technology has been used to help locate circles, which will be subjected to various measurements including magnetometer readings. He added that he has already discovered that some circles have a "magnetic fingerprint" in the shape of a snowflake.

Rockefeller, who also supports UFO research, has given "thousands" of dollars to Andrews, admits Fraser Seitel, his spokesperson. But Seitel insists that such fringy concerns are not a "primary contribution thrust" in Rockefeller's charity portfolio.

No Flea Collars Necessary



Aibo plays ball.

It sits, it barks, it wags its tail. It can chase a ball, but it never leaves messes (although it does pretend to piddle). It's what Sony calls the world's first entertainment robot capable of autonomous behavior.

About the size of a toy poodle, Aibo is stuffed with sensors and actuators. Switch it on and the battery-powered animal will scratch, yawn, explore its environment, or play with a bright pink ball. It will also sit or lie down in response to patterns of tones from a handheld remote controller. Aibo can't recognize voice commands but he can learn, thanks to artificial intelligence software that enables his behavior to evolve over time. Slap the top of its head after it piddles, and it will do so less often. Pat it after it sits and wags its tail, and it will be progressively inclined to sit and wag. The electronic dog maintains its balance using feedback from an accelerometer, a gyroscope, and pressure sensors in its paws. Legs are assemblies of gears that allow Aibo to mimic a real dog's crouching, walking, and scratching with amazing fidelity.

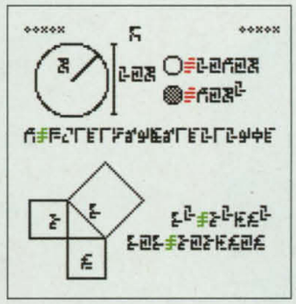
It won't be long before robots become "bigger than the computer industry," predicts Toshitada Doi, head of Sony's Digital Creatures Laboratory. Sony says the Aibo Web site is already being accessed by about 74,000 people a day. The company is preparing to unleash 5000 Aibos for $2500 each, available over the Internet as of 1 June.

To Err Is Human

What is 370,967 data bits long, might be read by aliens, and contains two typos? It's a message scheduled to be beamed to the stars this week by a radio dish in Ukraine.

The cosmic call was organized by Charles Chafer, director of Encounter 2001, a private venture that aims to launch a human DNA-bearing interstellar space probe in 2001. Astronomers Yvan Dutil and Stéphane Dumas, of the Defence Research Establishment Valcartier in Canada, spent months creating the message, compiling 23 pages of information on the solar system, life on Earth, mathematics, and physics and putting it all in alien-friendly code. It was to be beamed at four sunlike stars about 60 light-years from Earth from the Evpatoriya Radio Observatory in Ukraine.

But on 13 May, computer game programmer Paul Houx, of Utrecht, spotted two minor errors—incorrect representations of an equals sign—in a page reprinted in a Dutch magazine. Houx informed Dutil, who says "I didn't sleep for a couple of nights." It was impossible to reprogram the message in time for Monday's transmission, says Dutil, as the observatory has no Internet connection. Says Houx: "I'm afraid we might be judged as a sloppy species by the League of Galactic Civilizations."



Green symbols represent the equals sign; errors are in red.

Hyperdrive or Hyperhype?

Why go see intergalactic travel in the movies when the real thing could be just around the corner? In an 18 May press release, NASA's Marshall Space Flight Center in Huntsville, Alabama, talks up its own research on propulsion technologies—"closely akin to the 'hyperdrives' of *Star Wars* fame," it says—that could someday make planet-hopping a reality.

NASA scientists are quoted to the effect that they are experimenting with "laser propulsion and antimatter ... as viable options for space travel." And "we're convinced that ... these technologies will likely transform the space travel seen in sci-fi movies into real-life experience."

The press release dutifully notes that traveling faster than light "will ... require overcoming the physical limitations of space itself." Nonetheless, the statement, nicely timed with the 19 May release of *Star Wars Episode 1: The Phantom Menace*, scored a PR bull's eye. Officials say numerous TV and print outlets have picked up the nonstory.

CREDITS: (LEFT) LUCY PRINGLE (RIGHT) SONY CORP.