

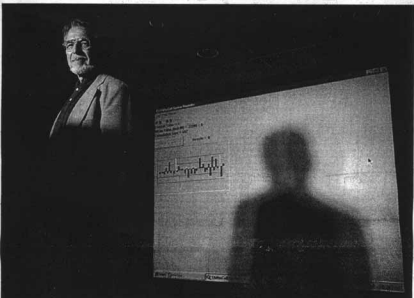
TODAY'S QUOTE

► "I believe it is better to tell the truth than to lie. I believe it is better to be free than to be a slave. And I believe it is better to know than to be ignorant." — *J.L. Menck*

StarTribune

Biophysicist **John Haaland** says his inventions challenge users to develop new ways to express thoughts and emotions. Skeptics say his theories — like Einstein's — require more than a quantum leap in scientific understanding.

Brainpower



Star Tribune photo by Jeff Wiesner
The green lines on the chart show biophysicist John Haaland's mental manipulation of images produced by his ShifterCell. His company, MindSong Inc., makes the device.

By Sari Gordon

John Haaland, 62, is a Ph.D. in biophysics who says he can break boards with only the power of concentration. If this sounds like the old spoon-bending craze, he does that, too. He also hopes to make quite a lot of money with various brain-powered devices he has patented. Even if he can't convince people he can bend spoons, he and other scientists and business leaders are gambling that they have the power to influence consumers to buy psychic computer products from their company, MindSong. MindSong already has sold 1,000 copies of software that Haaland claims users could control with their minds. Marketed under the name ShapeChanger, the software was a simple game that players controlled without use of a mouse, joystick, keyboard or any physical device. The user sees two superimposed images

and by focusing on one tries to make it dominate the screen. During this process, the pictures are alternately fading in and out. The game reports your score and rates your success based on how much of your image is showing at the end. A few rounds of the game left this user feeling strangely powerful and somehow connected to the computer itself. Though ShapeChanger is no longer available for sale, Haaland and his partners are now poised to begin marketing a much more remarkable hardware version of the game, called ShifterCell. Haaland's office is above the Rice Street Taekwondo Center in St. Paul. He operates the center. Before beginning a recent interview there, Haaland indicated that a light in the corner of the office would be going on and off, according to his thoughts. While the light was on continuously before a reporter's arrival, Haaland said it started to flicker and remain

dark as he became more anxious and guarded. During the interview, it mysteriously blinked on occasionally — moments, Haaland said, when he was talking about the things he cared most passionately about: taekwondo, physics, research. The light was reacting this way, Haaland claimed, because it was plugged into ShifterCell. While ShapeChanger was just a game, ShifterCell, said Haaland, is hardware that one day will be the envy of the military. It is a patented technology that he says can be used to help heart patients who want to monitor their own unsteady heartbeats. It would replace TV controls and computer mice, he says. Like a snapping dog whose ears perk up when it hears its name, the light blinks on when Haaland talks about it.

Turn to **BRANPOWER** on E7

BRAINPOWER from E1*As a scientist for Honeywell, he worked on Apollo missions*

In the summer of 1969, the year that thousands were "expanding consciousness" with drugs, meditation and trips to India, Hasland was in Paris, studying the effects of lasers on cells. As a scientist working for Honeywell, Hasland had helped design vehicles, space suits and control panels for Apollo missions. After his trip to Paris, however, he moved to New York, where he worked for a firm that designed a systematic way to provide health examinations.

In 1973, Hasland moved back to the Twin Cities and became Pillsbury's director of environmental systems. After steadily rising in the hierarchy, Hasland was given a dream job in 1981: As part of Pillsbury's "Project Galaxy," Hasland had 12 months to predict what the year 2000 would hold for the company. His goal was to concoct possible scenarios of Pillsbury's future.

"That's where I got into looking at consciousness," says Hasland. He decided to focus his research on new technologies: microprocessors, renewable energy, biotechnology and the physical well-being of people. He became more interested in how people and technology would relate to one another.

"In the late '70s," a very specific event occurred," says Hasland. The Minneapolis Foundation sponsored an international "human consciousness" convention. It was there that Hasland met many of the people who are now on the staff of MindSong or sit on its board of directors. Some have invested up to \$50,000 in Hasland's venture, he says.

Although Wendell King worked with Hasland on the Apollo project for Honeywell in the '60s, the two didn't become friends until they were both at the Northern Research and Development Institute at the University of Minnesota in the late 1970s. They quickly learned that they shared interests in what King today refers to as "brings" science. King went on to become a staff scientist for MindSong, then director of Research and Development, and hit the company as a vice president and general manager in 1985.

Today King is a venture capitalist. In addition to funding the start-up of a couple of medical-device companies, he also has helped build Rave Sports, a company that makes trampolines and water toys for adults. He is also the vice president of development for MindSong.

King has explored his own psychic powers, but it is his trust and respect for Hasland that motivated him to work with his old friend.

"If I only had to have conversations with one male for the rest of my life, it would be him," says King. "He is one of the most creative, most intelligent, most well-read people I know."

Hasland's business partner and life partner of nine years, Susan Groh, 43, had so much faith in Hasland that she quit her job in 1995 to work full time for MindSong, developing written and online materials.

"He's not much into material things," says Groh. He continues to run the Rice Street Taekwondo Center where she first met him, even though it barely breaks even. "He does it for the love of it," she says.

Hasland himself is built as if he could walk through a brick wall but has the visage of a gentle elder in a "Star Trek" episode. He says that he once had a violent streak but has not lost his temper since he attained his black belt in 1978. Instead, he focuses his intensity on his explorations of the unseen.

"Science that is still in an . . . exploratory stage is always going to be controversial," he said.

Newton, Jung, Einstein — they all explained unknown forces with new theories.

Beating the odds

To explain how ShifterCell works, Hasland is betting on theories from two areas of science: statistics and quantum mechanics.

Statistics, because there's a 50-50 chance that a light is either illuminated or not.

Quantum theory is trickier. In quantum mechanics, simply, there is thought to be a form of energy that defies traditional physical laws. It was developed

by the German atomic physicist Werner Heisenberg, whose "uncertainty principle" holds that events on the atomic level cannot be predicted exactly; only the statistical probability of such events can be determined. This has been used to explain seemingly unrelated events having a relationship because the energy and light produced by the first movement can scatter, and the results cannot be quantified. In layman's terms, a frog that jumps into a pond in Minnesota will cause ripples on the pond, but it can also emit subatomic transmissions that simultaneously cause a coconut to fall in Bali.

This quantum leap, which Einstein called "spooky action at a distance," can travel faster than the speed of light and has been appreciated by psychic research advocates as proof of forces that can operate from "non-local" positions.

In other words, one object can affect another object without visible means of force, and without regard to time or space. Which could mean that not only could a person give a mental command to turn on a driveway light from the upstairs bedroom, but he or she could do it from the office and even send the command hours before the light needs to be switched on.

In an article written for Skeptical Inquirer, the magazine published by the formidable Committee for the Scientific Investigation of Claims of the Paranormal (CSICOP), Victor Stenger points out that quantum theories work only in tiny spaces, and have never been proven to operate on a human level.

"It's very easy to get people to believe that things are significant," says Charles Geyer, a statistics professor at the University of Minnesota. Geyer says there is "a possibility" that the psychic software is legitimate, but he is "not convinced." He says that two much more pedestrian forces are at work. The statistics, he says, may be handled by an amateur or may be falsified. Even professionals can get misleading results. Geyer warns, and the use of scientific methods to quantify psychokinetic research results makes it "extremely hard to debunk this stuff."

Regardless of any skepticism, Hasland and King already have a meeting scheduled with a Chinese subcontractor who manu-

facturers "Star Wars" action figures for LucasFilms. The result would be a Yoda, for instance, that would move and respond to children's thoughts, milking even more money from the catch phrase, "May the force be with you." King says the Chinese executives are "really into it."

In the years that have seen the development in American technology of such things as motion detectors, Invisibile Fencing and other devices intended to interact at a much greater level with human activity, it is possible that Hasland is in the business of changing "the paradigm of the society we live in," as King puts it!

Asked whether he would mind being ridiculed like the now-infamous scientists in Utah who a few years ago claimed to have discovered how to produce energy through cold fusion, Hasland rapidly declares, "I would love to be laughed at publicly if it gets people to buy it." Besides, says the man with the infectious grin, "I'm a martial artist and I like a good fight."

— Sari Gordon is a Minneapolis freelance writer.

Aero®

Ann

60% OFF



Plus Lightlines® also

Visit Our New Store at
Maplewood Square
777-2100

Celebrate