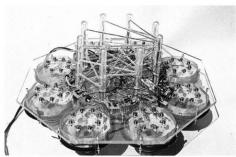
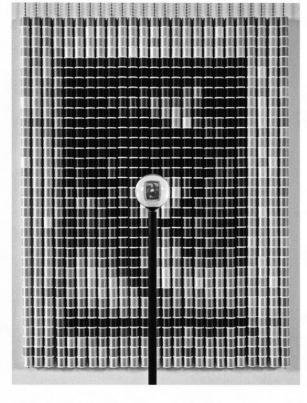
# Art in America

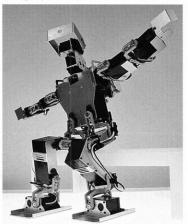


Jamie O'Shea: Alvin (detail), 2005, Plexiglas, audio electronics, metal filings, 18 by 30 by 30 inches.

Devorah Sperber: After the Mona Lisa 4, 2006, 875 spools of thread, clear acrylic viewing sphere, chains, mixed mediums, 41 by 31 inches on wall, 11 feet high overall.

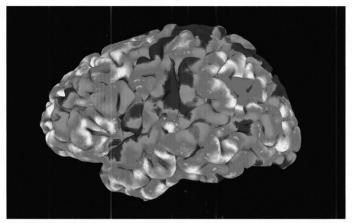


Fernando Orellana and Brendan Burns: Sleep Waking, 2008, Kondo KHR-2HV biped robot, electronics, software, wood, Plexiglas; robot 15 inches tall.



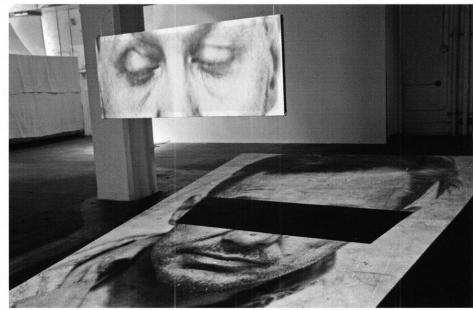


View of "Common Senses," showing (far left) SERU's Reodorant, 2008; Dustin Wenzel's bronze casts of whale brains (on pedestals in foreground); and Suzanne Anker's Rorschach (Butterfly Bat), 2001-08, on back wall, with her MRI Butterfly, 2008, left wall.



Daniel Margulies and Chris Sharp: Untitled, 2008, text and video with sound.

Phil Buehler: Windows of the Soul, 2008, high-definition video, screen 24 by 48 inches, projection area 24 by 12 feet.





### ART & SCIENCE II

#### Mind and Matter

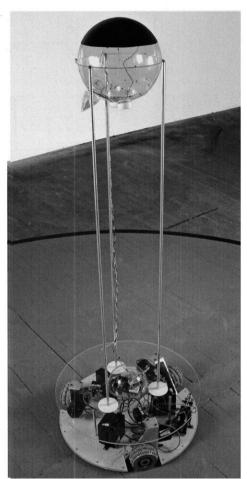
"Common Senses" brings together more than a dozen artists who have examined the mind-body problem using the insights—and imaging technology—of brain science.

#### BY ELEANOR HEARTNEY

66 common Senses" is the second in a series of three exhibitions organized by Exit Art to explore connections between art and science. ("Paradise Now: Picturing the Genetic Revolution," in 2000, examined genetic engineering, while the upcoming "Corpus Extremus (LIFE+)" will deal with biotechnology). "Common Senses" situates itself in the middle of contemporary debates over the relationship between brain and consciousness. This is, of course, long contested territory. Christianity finesses the so-called mind-body problem by holding that the soul is an intangible energy inserted by God into the physical vessel that comprises the body. In the 17th century, René Descartes attempted to resolve the issue by invoking the pineal gland as the place where mind meets body. The Victorian era saw efforts to measure the soul by weighing the body just before and after death and calculating the difference. In the 20th century, science became more confident of its ability to discover links between the physical organ of the brain and states of consciousness. Application of these discoveries sometimes had tragic results, as when crude models of brain activity led to practices like lobotomies. And the mind-body conundrum has inspired literature, art and science fiction from Mary Shelley's Frankenstein to Andy and Larry Wachowski's film trilogy The Matrix. Contemporary analogies between brain and computer compare the mind-body split to the distinction between software and hardware.

"Common Senses," curated by Exit Art directors Jeanette Ingberman and Papo Colo, poses the question: Can art, which deals in metaphor, help us understand the link between our inner and outer worlds? The show offers an intriguing collection of artworks that draw in differing degrees on current scientific thought and technology to offer visualizations of mental activity. Among the most interesting projects here are those that attempt to translate brain imaging technologies into art. Andrew Carnie's Magic Forest (2002) is one of the most esthetically satisfying. Set in a large room in the center of the gallery, walled off by black curtains, it consists of slide images of neurons projected onto three parallel hanging scrims. Successive slides follow the increasing complexity of the brain's development as it grows. A light at the far side of the installation varies in intensity, so the images also shift in visibility. The primary metaphor here is that of a forest; scatterings of the neural images, which do in fact resemble trees with roots and branches, suggest a mysterious wood that grows thicker as the brain develops.

Daniel Margulies and Chris Sharp use a different technology to map changes in the brain during an esthetic experience. Their untitled 2008 work uses fMRI (functional magnetic resonance imaging) to chart brain activity in a subject who, after meditating on a passage about knowledge and perception from Kant's *Critique of Judgment*, then listened



David Bowen: Swarm, 2008, houseflies, electronics, plastic, aluminum, 60 by 22 inches.

to Stravinsky's *Rite of Spring*. The work consists of a video that presents a cross-section of the brain (the Kant text hangs nearby); changing patterns of colors indicate the various areas of the brain that are activated by the experience. Viewers can put on earphones and listen along to the music, while watching imagery that represents activity also presumably occurring in their own brains.

While this project radiates the seriousness of a scientific experiment, other works take a more absurdist approach to the translation of scientific technology into art. David Bowen's Swarm (2008) confronts the viewer with a strange contraption consisting of a plastic globe propped up on long rods attached to a wheeled platform, which moves erratically within a black circle drawn on the floor. Its path, it turns out, is determined by the progress of a swarm of flies captured inside the globe. A sensor attached to a microcontroller at

the foot of this device translates the flies' aggregate movement into mechanical motion. It is a slightly demented visualization of how the brain converts electrical impulses transmitted by neurons into directions to the body.

Jamie O'Shea's Alvin (2005) has a similar madscientist quality. This complicated apparatus is composed of wires, exposed circuits and pulsing, soundemitting cells topped with metal filings that respond to their vibration. Based on technologies used in voice recognition systems, Alvin invites the viewer to lay a hand on a hand-shaped sensor; the action results in loud noises and flashing lights. One suspects that actual industry uses of this technology are more subdued both visually and aurally.

Equally entertaining is Fernando Orellana and Brendan Burns's *Sleep Waking* (2008), which consists of a little robot whose actions are determined by a program based on Orellana's rapid eye movements (REMs) during sleep. Since REMs are associated with dreams, the robot's motions are meant to evoke various dream scenarios—flying, for instance, or retreating in fear. The little robot, which is altered from a Japanese model, offers a surprisingly emotive performance, another reminder of the ongoing quest to create a machine that approximates human consciousness.

ther works attempt to provide models for the ways the brain organizes sense data to create perceptions. Devorah Sperber's After the Mona Lisa 4 (2006) is composed of a grid of spools of thread in various colors suspended from chains. At first glance, they appear to create an abstract pattern of earth tones. However, when one looks through a glass sphere positioned in front of the work, the image is condensed and inverted to create an approximation of the Mona Lisa. The work thus offers a graphic illustration of how the brain organizes sensory information to create recognizable images.

Naho Taruishi also deals with sight in *Close Your Eyes* (2007). In an exercise that borders on the obvious, viewers are asked to step up to a viewing box with their eyes shut. The point here is that the bright lights and colors flashing inside the box are visible even through closed eyelids.

Several works explore age-old questions about physical mechanisms underlying the "unreal" images found in imagination, memory and dreams. Lucretius, the first century B.C. Roman Epicurean, hypothesized that objects give off films of atoms that meld in the eye to create fantastic hybrids. Something similar seems to be going on in George Jenne's Mechanism for Innocent Obscenities (2008), in which a set of bright green, cast plastic objects attached to gears rotate at different speeds against a black backdrop. They are all hybrids and many are slightly obscene—a cast of eyes and mouth has a hot dog protruding, for instance, and a set of men's

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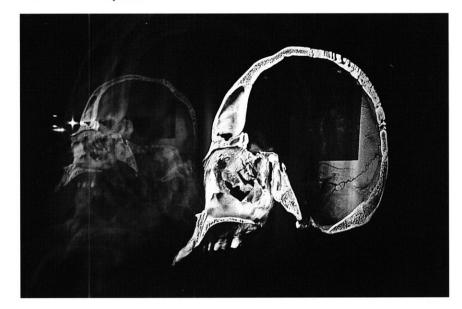
With successive slide images of neurons projected on scrims in a dark room, Andrew Carnie's Magic Forest illustrates the growing complexity of a developing brain.

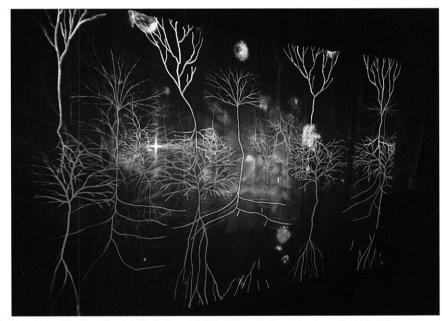
briefs extrudes a rod topped with a knob. According to the wall label, these are meant to represent "tokens"—mental images that cognitive scientists believe help us organize perceptions into memories and retrieve them.

In a less visually arresting presentation, the group SERU, consisting of Erik Carver, Howard Huang, Hisako Inoue and Yuka Yokoyama, contributes an installation titled Reodorant (2008). An attempt to stimulate the viewer's memory through sound and smell, it consists of cloth-covered speaker cones, anchored in the air with cords, that give off a series of sounds ranging from the natural (rain and bird calls) to the man-made (electronic, mechanical). Less evocative are several barely perceptible smells also emitted by the cones.

The remaining works take a variety of other tacks. Dustin Wenzel has contributed two bronze casts of whale brains whose lumpy, abstracted forms seem to make a point about the incommensurability of the physical organ to the job it does. Something similar is going on in Phil Buehler's Windows of the Soul (2008), a slide installation using photographs from the 1950s of patients committed to a state psychiatric hospital. Isolating the eyes, Buehler seems to be asking whether we can detect mental disorder from physical appearances. Suzanne Anker creates threedimensional sculptures out of the butterflylike forms of the standard Rorschach test. Placed in vitrines with casts of brains and bits of real coral, they seem to inhabit a territory somewhere between science and art.

Finally, there is Steve Budington, who seems the odd man out; he contributed three paintings in





Two views of Andrew Carnie's Magic Forest, 2002, slide projectors, dissolve units, 162 slides, three voile screens, 16 by 26 by 23% feet.



Steve Budington: Un-blink/Blink, 2006, oil on two canvases, left 24 by 22 inches, right 24 by 24 inches.



which figures' heads have been replaced by collections of ears or eyes. The Candidate (2008) presents an ear-headed politician speaking to an eyeballheaded group of constituents, and seems to be more about the nature of political rhetoric than about science.

Though the esthetic interest of the works on display varies considerably, "Common Senses" offers lots of food for thought about thought and other forms of consciousness. It may not have solved the mind-body problem, but it suggests why it persists as a theme in Western culture.

"Common Senses" is on view at Exit Art, New York, through Apr. 19. It is part of a six-venue program called "Brainwave," which includes performances, panel discussions, film presentations and talks, through June 1. Information is available at www.brainwavenyc.org.

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