

'Talking' Rats Aid the Study of Human Speech

Rochester, N.Y. — (UPI) — Demosthenes, Galatea and Halvah, a trio of "talking rats," at the University of Rochester, may shed new light on the beginnings of the speech process in humans.

The three gabby rodents, whose conversation more properly may be likened to shrill barks and chuckles, have been trained by Dr. Stanley Sapon, director of the university's verbal behavior laboratory.

Sapon and his colleagues hope their project may one day help scientists understand how children first learn to talk and, possibly, how to improve the process.

Until Sapon's experiments, scientists had been unable to teach rats to vocalize. The animals are normally silent except when in pain.

Now, however, Halvah, a star pupil, and the two promising young novices, Demosthenes and Galatea, tell Sapon when they are hungry or thirsty by emitting sharp gurgling barks. Found 'Halvah'

Sapon's experiments first started in Palo Alto, Calif., when he was a member of the staff of the Britannica center for studies in learning. In his laboratory, he came upon Halvah, who was being used for his work on infant learning and who, unlike the other rats, seemed to produce faint gurgling noises.

By giving Halvah a reward of food or water whenever she gurgled, Sapon developed her special talents to their present stage.

To determine whether other rats could be trained to vocalize, he then tape-recorded Halvah's chuckles and played the tapes before and after his new subjects, Demosthenes and Galatea, were fed. They, too, proved apt pupils.

Sapon now hopes to add new sounds and meanings to the "vocabulary" of his three rats.

IT'S YOUR LAW

Respect for Law Makes Democracy Live

Editor's note: The following article was prepared by the Oregon State Bar as a public service and is not intended to be legal advice. Persons having a legal problem should consult an attorney.

FREEDOM OF THE PRESS

Can a judge hold a newspaper editor in contempt of court if the editor severely criticizes the judge for deciding a case as he did? Could a district attorney bar a reporter from the courthouse because the reporter wrote an unfavorable account of the way the office was run? Not in this country.

The right of freedom of the press is secured by the first amendment to the Federal Constitution, which says, "Congress shall make no law . . . abridging the freedom of . . . the press." The Constitutions of the several states likewise contain similar guarantees.

Why did the framers of New England, the planters of the South and the small storekeeper of Philadelphia, New York, and Boston insist some 160 years ago that the original Constitution be amended so that the people would be specifically guaranteed freedom of the press?

Abiding Faith
It was because the founders of our country had an abiding faith that enlightened citizens could be entrusted with the job of governing themselves. If they could have an unfettered opportunity to read the history and to learn the lessons of the past, to understand the never-ending clash of ideas, to read about what forces are alive in the world, to check on their government as to its activities, its successes, its failures and its abuses, and to write and speak unimpeded—then they could not be made slaves.

The framers of the Constitution believed that freedom of the press would aid in enlightening the people. The competition of ideas would point out the choices of the people. With this freedom, they could decide their own problems better, with more resulting happiness to themselves, their families and their communities.

Not Unlimited
Of course, all rights entail correlative obligations and duties. Freedom of the press is not unlimited. It does not permit license, libel, violation of the law, nor interference with the orderly running of the government.

With but a few insignificant exceptions, the press of the free world has admirably justified the faith of the framers of the Constitution. Through the Western Hemisphere, and in the free countries of the Old World, the "fourth estate" has fearlessly accepted its responsibility and has aided in preserving freedom and in checking tyranny and dictatorship.

STAR GAZER**		
By CLAY R. ROLLAN		
ARIES MAR. 21-20	1 You	31 Time
TAURUS APR. 20-19	2 Here's	32 Easy
GEMINI MAY 21-20	3 Here's	33 Easy
CANCER JUN. 21-20	4 Needed	34 Supported
LEO JULY 21-20	5 Don't	35 Are
VIRGO AUG. 21-20	6 Appen'ts	36 Can
LIBRA SEPT. 21-20	7 Wound	37 Is
SCORPIO OCT. 21-20	8 Check	38 Mountain
SAGITTARIUS NOV. 21-20	9 Take	39 Change
CAPRICORN DEC. 21-20	10 Don't	40 Support
AQUARIUS JAN. 21-20	11 Here's	41 To
PISCES FEB. 21-20	12 Here's	42 To
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	15 Here's	45 To
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Scientists Hope To Duplicate Nuclear Blast in Laboratory

Washington (UPI)—Government scientists hope to duplicate in a laboratory some of the effects of a nuclear explosion. If they succeed, the United States will find it easier to gain more knowledge on how to defend itself against ballistic missiles while still observing the new treaty which bans all nuclear explosions except those underground.

Efforts to develop a device for simulating nuclear explosions were begun before the treaty was signed. The chief purpose was economy. Actual nuclear explosions would be more expensive than

the simulated explosions which Army scientists hope to develop in a laboratory "pulse" reactor. The Army disclosed plans to build a pulse reactor before a House subcommittee considering its request for \$2.1 million to

construct the facility during the current fiscal year ending June 30, 1964. Transcripts of the closed hearings—held in June—were made public Wednesday.

Overwhelming Problems
While the Army is hopeful of numerous gains, there are still overwhelming problems involved in developing an effective anti-missile missile which have nothing to do with nuclear explosions. Among them is the ability of an anti-missile missile to choose an enemy nuclear warhead from the swarm of decoys which probably will accompany it. At present, U.S. scientists know little about a missile's electronic guidance system once it is subject to radiation from a

nuclear explosion—whether the explosion be detonated by an enemy offensive missile or by a defensive missile. Scientists do know that the accuracy and control of an anti-missile missile would be affected by such an explosion.

Army witnesses testified that no other existing or planned facility could do the job it had in mind, even though certain phases of an anti-missile system have been subject to laboratory created radiation.

Dr. Ed Minor, of the Army's ballistic research laboratory at the Aberdeen Proving Grounds, Md., testified that the special reactors were needed "to simulate a nuclear weapon burst accurately."

If this could be done—and the Army apparently believes it can—Minor said information could be obtained to develop a weapons system.

Dr. Harold Brown, the Pentagon's chief of research and development, said in a letter introduced into the hearings that "the pulse reactor is one of the new laboratory devices that is essential to permit us to develop weapons that can survive in a nuclear environment."

Another witness told the subcommittee that if Congress approved the necessary funds, the reactor could be completed in about 16 months. The Army wants to build the reactor at its Aberdeen facility, New York state, which is planning its own reactor, has offered to do the work for the Army at its facility and charge the government for the work. The Army, however, told the subcommittee that it prefers to build its own reactor. It said

that in the long run it would be cheaper and that the New York reactor may not be able to meet its objectives.

Lincoln, Neb. —(UPI)—The elderly often fail to eat properly. To boost flagging appetites as the years pass, Kathryn Cooley, foods and nutritionist specialist at the University of Nebraska, offered these suggestions:

Take a walk when the weather is good. If you must stay in-doors, do odd jobs that require light exercise. Try new foods and new seasonings. Include brightly colored foods for special eye appeal. Take your time, for a leisurely meal in an attractive setting makes eating a pleasure for anyone.

Seniors Are Advised On Eating Habits
ENROLLED
Pvt. Phillip L. Morris, son of Mr. and Mrs. Herbert F. Morris, 1211 East Jackson st., Medford enrolled recently in the U.S. Army Signal school at Ft. Monmouth for nine weeks' intensive training as an electronic instruments technician.

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