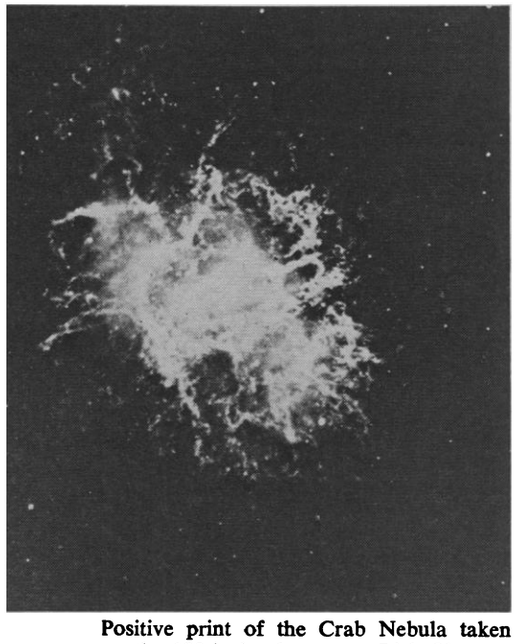
NOVA: Program Summaries of New Science TV Series

A new science television series now broadcast over the Public Broadcasting Service (PBS) will be of special interest to members of AAAS. The series, called NOVA, is produced by WGBH-TV, Boston, for PBS. The series has been created and produced with the advice and cooperation of AAAS, especially its Committee on the Public Understanding of Science and the Office of Communications Programs, as a major new effort at expanding the public's understanding of science and scientific processes. The series is financed by grants from the Carnegie Corporation of New York, the Corporation for Public Broadcasting, the National Science Foundation, and Polaroid. A list of program descriptions in the current series with network air dates follows. Consult your local listings for local times.

7 April: Strange Sleep

The discovery and development of anesthesia—which with asepsis totally changed the face of medicine during the 19th century—told from the viewpoint of the people involved. Anesthesia, by giving the surgeon time to perform his operations, turned that branch of medicine from hasty butchering into a science. The discovery of anesthesia was also the first major American contribution to medicine; and it is apt that roles of the 19th century participants in the drama are played in its 20th-century reconstruction for television by practicing doctors.



Positive print of the Crab Nebula taken on the 120-inch telescope at Lick Observatory. This is the subject of one of the new series of science television programs produced in cooperation with AAAS.

14 April: The Crab Nebula

Created in a super-oven that lit the sky for 3 weeks in A.D. 1054, the Crab Nebula is now the focus of active astronomical investigation. The reason is the pulsar that lies at its heart—by far the nearest pulsar to Earth, and without question the most studied. The Crab pulsar is the only known example of its species that emits at visible, x-ray, and gamma-ray wavelengths, and from it is being learned most of what we presently know about neutron stars.

21 April: Bird Brain—The Mystery of Bird Navigation

Birds can find their way despite all manner of experimental indignities heaped upon them by the scientist—including magnets and even opaque lenses for their eyes. Yet still there is no consensus explanation of the remarkable navigational abilities of birds, although all manner of possibilities—including the position of the sun, the stars, the direction of polarization of light of the earth's magnetic field—are being actively explored.

28 April: Are You Doing This For Me, Doctor, Or Am I Doing It For You?

The film explores the difficult ethical problems surrounding medical experimentation. While the advancement of medicine depends crucially on the ability to conduct clinical trials, how can the rights of volunteers—whether they be patients in a hospital or mental institution or inmates of a prison—be adequately protected? Indeed, can they properly be said to be "volunteers" at all?

5 May: The First Sign of Washoe

Only humans are capable of language, the dogma runs. And if the issue is restricted to spoken language, the dictum seems fine. But Washoe, the chimpanzee raised by the Gardners, can communicate in American Sign Language—and so too can an increasing number of other young chimps. The film traces the linguistic career of Washoe, from her first infant "babblings" to her ability to start inventing language for herself—such as "water bird" for duck, or "fruit drink" for watermelon. Can Washoe be properly said to possess language?

12 May: The Case of the Midwife Toad

In 1926, Paul Kammerer shot himself on a mountainside in his native Austria. It was the end of one of the most controversial scientific careers of the century, during which he claimed that his experiments with—among other organisms—the midwife toad, proved the heritability of acquired characteristics. Kammerer's suicide came on the discovery that his only remaining experimental specimen had been tampered with. Did he fake his experiments, or was he the victim of an assistant's overzealous cooperation? The film, based on Arthur Koestler's book, presents Koestler's point of view.

19 May: Fusion: The Energy of Progress

Fusion offers the potential of unlimited cheap energy, and the last year or two have seen remarkable progress toward that objective. Now under construction in the United States, Russia, and Europe are a number of experimental fusion reactors which in a few years will answer one way or another whether the 21st century will dawn on a fusion age.

26 May: The Mystery of the Anasazi

The Anasazi Indians lived in Southwest America for some 8000 years. In about A.D. 1300, they abruptly disappeared—ieaving behind them some of the most spectacular architectural achievements of the New World. The film explores the archeological research now being conducted to find out how they lived and why they left, perhaps the first North American victims of their own environmental mismanagement.