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COVER The rocky intertidal zone of central Chile during a spring low tide showing zonation pattern and dominant sessile invertebrates (*Perumytilus purpuratus* and chthamloid barnacles) and algae (*Lessonia nigrescens* and lithothamnioids). In this zone, communities of invertebrates are heavily modified by human predation on ecologically critical organisms, affecting dominance, population densities, and the network of species interactions. In spite of the dramatic changes produced by human intervention, the relation between body size of invertebrates and their population density remained unchanged. See page 1125. [Photograph by A. Larrea, Santiago, Chile]

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Exploration of Nature

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Many humans are eager to explore their environment, but circumstances of their lives tend to thwart them. Scientists are especially privileged. They can discover new facets, new beauty, and new subtleties in nature while being paid to do so. Unfortunately, only a few scientists have been imaginative about making it easy for the interested public to witness their efforts to reach new insights and their excitement in achieving them. Too often they describe their work in jargon and abstract terms. Scientists of a century and more ago were more skilled in communicating, and their illustrated lectures drew large crowds and heightened approbation of the enterprise.

A series of lectures and videotapes (*The Infinite Voyage*) is demonstrating that modern visual techniques combined with selection of important scientific topics can convey the spirit of adventure and exploration while leading to first-class educational and entertainment materials. The products reflect the skills of professional producers connected with WQED in Pittsburgh and the judgments and devotion of a committee and panels of the National Academy of Sciences. The series has been sponsored by the Digital Equipment Corporation.

To date, 14 tapes have been produced, including "Sail on Voyager!" which will be shown on public broadcasting television stations on 28 November. The new tape presents an hour-long skillful treatment of the Voyager missions to the outer planets. It contains an appropriate mixture of the photographic highlights of the missions together with comments that help the audience comprehend what is being witnessed. The presentation leaves the viewer with an impression of having traveled in the spacecraft to the distant planets and having personally viewed the spectacular scenes. Earlier the public was enthralled with the scenes displayed during each planetary encounter. "Sail on Voyager!" presents highlights of the encounters as well as early history of the mission and an epilogue. It also provides viewers with a glimpse of the splendid technology and of the people involved. The human touch is especially evident in a description of the discovery of volcanism on Io by a young woman who was on watch at a crucial moment.

The preceding 13 tapes deal with a broad variety of topics. Examples include "The Living Clock," "The Geometry of Life," "Living with Disaster," and "The Great Dinosaur Hunt." All of them run for about an hour. Each is made up of a series of related segments. It is not necessary to spend an entire hour to obtain benefits. Each segment presents an entertaining set of facts and impressions. The visual material, the dialogue, and the sound effects command attention. It is not possible for the viewer to engage in wool-gathering while viewing the tapes. The content is attractive to a very broad spectrum of audiences ranging from children to venerable scientists.

The Infinite Voyage series is a sequel to an earlier very successful treatment entitled *Planet Earth*. Planning for the new series began in 1986. A goal of the series was portrayal of "the great adventure of scientific exploration and discovery." It was to be a series "that takes us to fascinating places—to the far planets or to the bottom of the sea, to the intricate machinery at the heart of life, or inside electronic miracles that power much of civilization."

To a major extent the topics to be treated were chosen by a high-level committee of the National Academy of Sciences headed by Vice President James Ebert. The committee chose subcommittees for each topic. They also provided factual material and identified outside experts who could be particularly helpful. They interacted with producers connected with WQED. The producers obtained footage of existing films and created new films where desirable. For a given tape as much as 60,000 feet were accumulated. A grueling selection process brought the length down to 2500 feet. Then there was further interaction with Academy subcommittees and the committee. What struck the fancy of the producers was not always good or valid science. But by interaction it was possible to select material that is exciting frontier science while also being visually attractive. Further interaction occurred in selection of dialogue and sound effects that accompany the visual material. The results are products that Academy members can take pride in. A particular virtue of the tapes is their timelessness. They should continue to be broadly attractive to teachers, students, and the public at large.*—PHILIP H. ABELSON

*For further information about *The Infinite Voyage* series, call WQED, (412) 622-1367, or the film office of the National Academy of Sciences, (202) 334-2782. Tapes may be purchased from Invision, 1-800-523-5503.