Techniques in computer art were covered by Mutsuko K. Sasaki and Tateaki Sasaki of the Institute of Physical and Chemical Research. They classified the major techniques used in computer art to date, placing them in six categories and making evaluations of each. Their six categories were (1) wireframe, (2) data transformation, (3) patchwork, (4) function, (5) algorithm, and (6) fractal. They discussed the function method in detail, showing pictures generated by their system, ART-3, a small system based on what they term the function method. They explained that they were illustrating the usefulness of mathematics and demonstrating the enormous possibilities of computer art. Among the many examples they showed was the image shown in Figure 19.

Figure 19. This is Mount Fuji with Kokuryu (a black dragon), which was made in 1984. ART-3 accepts such hand-drawn figures as flowers or mountains, and it is equipped with hidden-surface elimination capability.

**Golden Eagle Award**

The Visual Communications Congress, sponsored by Media Horizons was held in the New York Coliseum on June 24 to 27, and the Golden Eagle Award was shared by two people: Robert Abel of Robert Abel Associates and Charles Csuri of Cranston/Csuri Productions.

Abel’s award was presented with these words: Ideas won’t keep—something must be done about them. This comment was Alfred North Whitehead’s, and the truth of it is what fuels the drive of innovative filmmaker Robert Abel. The need to explore an untested area, to push beyond convention, has characterized every phase of Abel’s extraordinary career. From his dazzling special effects commercials for Levi’s, 7-Up, and Transamerica, to his distinctive computer graphics for CBS, NBC, and ABC to full-length films, Abel’s work has both defined classic film traditions and invented some new ones.

Part of what has won Robert Abel his reputation is that people expect him to accomplish what they have been told can’t be done... and he does. The Museum of Modern Art has noted that the ideas of Robert Abel “have changed forever the look of American television.”

The tribute to Csuri was: One of the world’s pioneers responsible for the development of computer graphics, Charles A. Csuri and his work have taken a place at an internationally recognized computer animation house—Cranston/Csuri Productions.

Charles Csuri has been featured in magazines internationally, from Business Week to The London Sunday Times. He is a prolific contributor to professional publications, as well as a frequent speaker at all major computer graphics conferences. His art has exhibited in museums worldwide, including a piece in the permanent collection of the Museum of Modern Art in New York City.

As its executive vice president, Csuri oversees the creation of Cranston/Csuri’s three-dimensional, computer-generated animation used by ABC, CBS, NBC, ARD German Television, Australian Broadcast Corporation, major advertising agencies and production houses of international feature films, and independent television stations. Cranston/Csuri’s computer-generated animation is also used for medical, educational, and scientific applications.

**Medical sessions**

Information was presented on the 3-D display of X-ray CT images by Yasuzo Suto, Masao Kato, and Takeshi Ozeki of Toshiba Corporation. They told how, by using an interactive method, they had developed an algorithm that permits accurate 3-D displays after extracting images of the cerebral ventricle. They reported that their results were satisfactory.

Color blindness tests done with color graphic displays were explained by Giichi Tomizawa, Yooichiro Ban, Kooichi Takhashi, and Hiroshi Mieno of the University of Tokyo science and engineering faculty.