Computer graphics research at the University of Tokyo includes the Raster Technology Project, begun in 1968 by Tosiyasu L. Kunii in cooperation with H. Takahasi and E. Goto. This early system included a 12-bit, 4096-color frame buffer and software for interactive fashion design; pictured at right are a portion of fabric and a "cutout doll" dressed in a similar fabric. Recent work at the lab includes a solid modeling project that involves octrees for visible surface determination. An example of this work appears at top right.

The picture above, from a film titled "Origami," was produced by NHK (Japan Broadcasting Corporation), the state television network. It depicts the ancient oriental art of paper folding. (Copyright 1983, NHK)

The realistically rendered solid model of the Chubu Nuclear Power Plant (right) is part of a television commercial produced by Japan Computer Graphics Lab, or JCGL, a leading Japanese animation company. The director was Masa-aki Taira, the 3-D designer was Nobukai Hosoda, and the 3-D artists were Seiich Tanaka, Toshihiro Komma, and Shinji Yamamoto. (Copyright 1983, JCGL)
Texnai, a design firm specializing in computer graphics, generated this picture, "Functional Image." It was programmed by J. Kannuki using an LSI-11 computer and an AED 512 frame buffer. Takeo Fukazawa is the director and Norie Hiraide is the producer. (Copyright 1983, Texnai)

The images and information on these two pages were gathered and contributed to this special issue by Judson Rosebush, president of Digital Effects, Inc., a New York-based production facility specializing in computer animation and graphics.

This image by computer artist Yoichiro Kawaguchi of Nippon Electronics College is an example of his animated simulations of plant growth. To generate this and other complex morphological processes, Kawaguchi uses his own "growth algorithm" and an algebraic surface algorithm by James Blinn. (Copyright 1983, Yoichiro Kawaguchi)

Far East Laboratories, a video production facility that uses a system from Acme Cartoon and a Scanmate system from Computer Image Corporation, created this opening title for a cable TV program. The director is Kinji Odaka, the animator is Midoria Yamada, and the programmer is Yoshitomo Sako. (Copyright 1983, Far East Laboratories)

This image is from the theatrical film, "Golgo 13," produced by the Toyo Links Corporation, whose Links-1 systems were developed with the cooperation of the Department of Electronics at Osaka University. The skeleton is made up of thousands of "metaballs," i.e. density spheres. (Copyright 1983, Toyo Links Corporation)