



Art and the computer

Art has long been considered a creative mode that machines have no business being in.

Recently computers have invaded this field and have produced respectable results.

The budding artist-programmer starts with a picture the computer can produce variations on (above, left), The picture is drawn as a collection of line segments through points. The points are fed into the computer where they are randomly moved to different positions. Variations by the computer are shown above right, and at left.

There are limits to the deviation the point may have from the original position and the randomness is controlled so that most of the deviations lies close to the maximum. The end points of each line segment remain the same.

The points are now plotted by the computer and the same points connected by lines to form a picture.

If the maximum deviation is large enough, the result looks completely random but is nevertheless highly ordered.

Parts of the picture may also be moved as at whole, changed in size or rotated. The selection of "good" pictures from the many the computer turns out is done by the programmer.

One picture produced by a Toronto group headed by Dr. Leslie Mezei won a prize in a computer art contest. The University of Toronto computer was at the time the largest in Canada.

Also at the U of T grad student Jim Gaburra has produced some computer music. Starting from a basic melody, the computer produces variations on this by random distribution.

Computer music, used at Expo '67 and produced by many people on as many computers, can be only described as "weird."

Gordon Decker, a grad student at the U of A who worked on the U of T computer drawing project, said computer art was "either the ruination of art or the salvation of it."

Computer art aims to show there is order in disorder, he said.