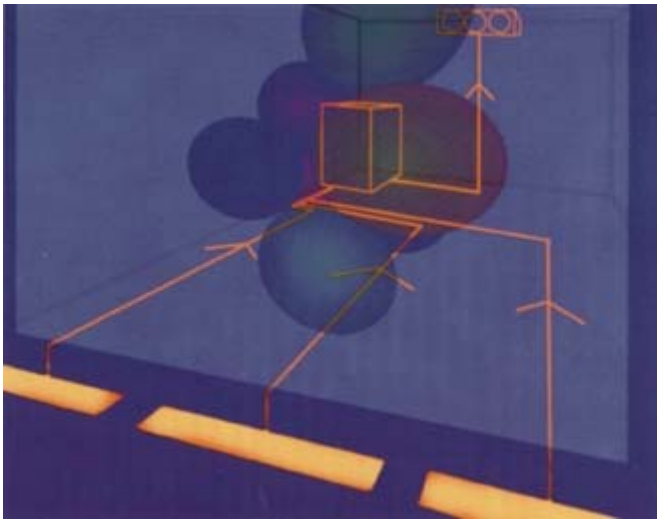
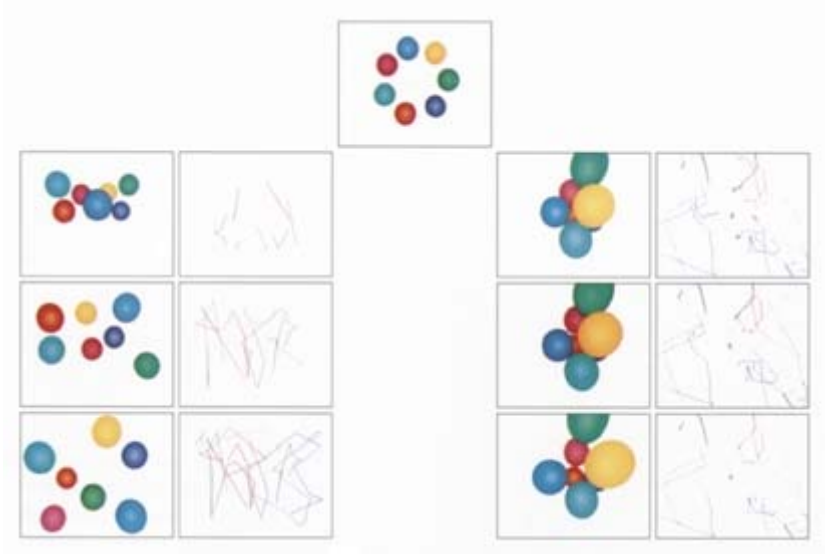
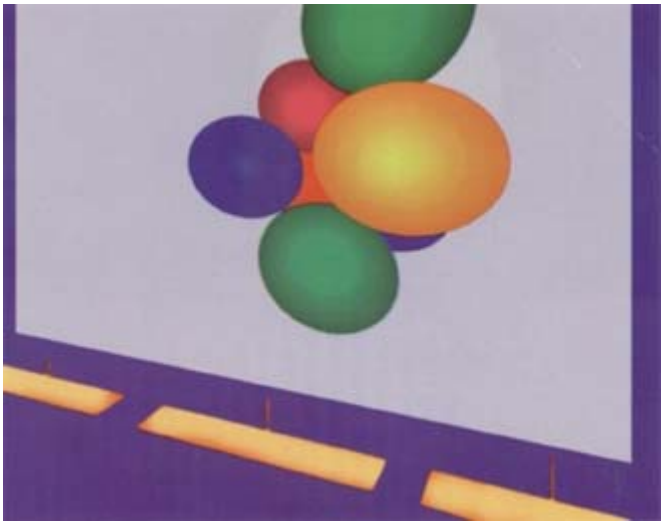
7 Objects meet
Akke Wagenaar

real-time program







The program "7 objects meet" is calculating the positions and movements of 7 objects as they move through a virtual space. The objects have several physical properties like mass, speed and acceleration.

The objects must obey all currently active laws and rules of the program.

The laws are of a physical nature, for instance acceleration caused by gravity, and elastic collisions. Parameters to these laws can be from earth or from any other world.

The rules are behavioural rules. They tell an object how to behave in reaction to its environment, e.g. other objects, limits of space. Several behavioural rules are implemented in the program, for instance avoidance behaviour, attraction behaviour and several group behaviours.

The program is interactive — both within its own world and with the viewer. During run time rules and laws are being modified, depending on events that have occurred within the object

world. When a viewer steps close to the projection screen he or she becomes an object and his or her movements become part of the calculations. The program is the result of an on-going investigation into the possibilities of motion control programming techniques and how they could be used as a tool for automated art production.

The artist implementing and using such a tool builds a virtual world with its objects, their properties and a set of rules and laws.

This way of working should be thought of as being conceptual, but in contrast to the conceptual art of the seventies its realization is not carried out manually by the artist andlor a group of assistants, but by a machine.

Inspiration for this work came from two books: Klaus Theweleit, "Objektwahl" and Valentino Braitenberg, "Vehicles, Experiments in Synthetic Psychology".

Technical description: A video beamer is projecting the graphics output of a real-time program which is running on a Silicon Graphics workstation. The image is projected on a transparent screen, where people can view it from both sides. On one side of the screen there are contact mats on the floor sending information to the computer when somebody steps on them. This information is then incorporated into the calculations of the program, causing changes in the output. The software was written in C, using SGI Graphic Library.

Software: Akke Wagenaar

Contact mats: Bob O'Kane

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