WHY IT ISN'T ART YET Kenneth Knowlton

For twenty plus years, I have participated in "computer art" as a developer/experimenter/inventor of languages/interfaces/techniques, as a collaborator/teacher/writer, and as a "computer artist." As a result of all this, I finally feel like an established practitioner in an enterprise that doesn't (at least not yet) exist. Here's why:

- 1. A work of *art* must answer at least some of these questions: For what technical or emotional problem is this an answer or a demonstration of a search? Of what monologue is this a continuation, of what dialogue a contribution? What does this work state, demonstrate, or ask? From what personal attitude and/or social culture does it come? By what syntax am I to parse it, by what semantics does it mean something?
- 2. Though not every work of traditional art is laden with deep human emotion, every traditional medium makes possible an occasional expression of, for example, anxiety, remorse, tenderness, or nostalgia. In contrast to this, the most evocative quality of computer art to date seems, to me, to be antiseptic otherworldliness.
- 3. Any given graphics system has a rather strong flavor because of what's permitted or excluded, and what's easy vs. hard. Even though many systems could be adapted to a specific person or to a particular artistic intent (because you "only" need to change the software), this typically isn't done because the artist doesn't know how or doesn't have the appropriate help or resources. A tool that is potentially very flexible is usually used in terribly unimaginative ways.
- 4. Art/technology collaborations seldom result in art, but rather in experimental designs, demonstrations, and in the education of the principals. There are exceptions to this statement (e.g., "words-and-music") in areas where the participants rather thoroughly understand, respect, and utilize each other's special roles and talents. But an artistic statement is not easily produced by a committee. It is hard enough for a right brain to express itself through its left neighbor — much harder through someone else's. Furthermore, the production of art involves simultaneous command of the processes — of all types and on all levels that are involved, including a full intellectual and intuitive grasp of alternatives. The worth or excellence of a work of art comes largely from the vastness of the realm of possibilities that were (even unconsciously) discarded in the process of choosing a sequence/combination/method that is special.

5. Typical person-machine interfaces are grotesquely constraining channels of expression (imagine playing a violin through a keyboard or painting a picture by means of a robot). And to the degree that the interfaces permit human expression, few people have spent anywhere near the amount of time developing facility-with-tools that artists normally do with brushes, or that pianists do with keyboards, etc.

Conclusion: We are not yet beyond the gee-whiz stage of cuteness, of stunts, and of novelty for its own sake. In order for the artist to get into serious art, he/she must have a more nearly complete command of the tools, including the understanding and ability to build, redefine and/or augment them. Similarly, because of the awkwardness of interfaces, the artist should have control over the mapping of human actions into directives to the underlying operations. These are not new ideas — in a computer environment such features and behavior are understood implicitly and expected. How to do the same for artists is not quite so clear because artists have somewhat different temperaments, methods and purposes.

At this point, it does not make much sense to me to be trying to produce better computer art. The more appropriate challenge is to create better environments for the development of art-making tools.