Group 6 – Marc, Sjoerd, John

Responding to Group 3 on Krueger-Sutherland

Marc Stumpel

Group 3 has provided a good overview of the article *Sketchpad: a Man Machine Graphical Communication system.* It was written in the early sixties, which was an important time for the development of concepts of human-machine interaction. In reference to Licklider's concept on Human-machine symbiosis, I think the group could have mentioned that this was a good example of realization of human-machine symbiosis. It is interesting that Licklider mentioned a lot of technical hurdles in creating effective man-computer symbiosis. For example 'input and output systems'. The Sketchpad is one of these systems that facilitates the input of human-machine interaction for its output. I also think it's important to point out that the Sketchpad was able to store/recognize patterns and linkages while utilizing constraints. So therefore Sutherland has shown that he build upon Lickliders work. For that matter 'Man-computer symbios' is also included in the bibliography. Group 3 also gives good insight in Krueger's text. It's good that they point out that he's not fond of the techno-deterministic vs socio-deterministic debate, and his position in it is unclear. He doesn't seem to focus on problem solving in general, but he does point out that responsive environments could be applied to different fields, such as education and psychology to solve problems. Group 3 provides some examples of responsive environments, but I'd also like to add an example of an responsive environment where people have full-body interaction with their surrounding: The Cave, automatic virtual environment theater: http://www.youtube.com/watch?v=DxUTzT4a6aM (1993), which is a responsive environment Krueger envisioned.

Sjoerd Tuinema

Group 3 gives a clear view about what the aims of Sutherland were at the time, namely outlining the abilities and added value of the Sketchpad software and hardware. I don't think it's all that obvious from the response what the groundbreaking properties exactly consist of, but then again, this genealogy isn't fully explained within the text. It becomes a bit more essential when the group comes up with the comparison including the contemporary case of Indesign. I'm not sure how accurate this comparison is, especially what the similar properties are. Sure, when it comes to geometrical forms, this 'feature' is also implemented in the Indesign software. But for concerning input (so from a hardware) view, there aren't really that many parallels. I think Indesign isn't that a sharp example when it comes to 'sketch'-features, as its purposes are mainly for DTP purposes. There are probably more contemporary examples coming from the design field that implement the pen-input combined with computional spectacle in a more specific way.

When it comes to the Krueger text, the group does a good job on describing the authors' key ideas. Generally, I think the elaboration falls a bit short on applying those ideas to the present-day situation. As the group mentions (behalf of the author) the potential of interactive environments for the field education, psychology or psychotherapy. I find there aren't that many apparant examples described concerning these ideals. Many more could be said about where those ideals emerged and succeeded (or failed) to implement into different subcultures.

John Haltiwanger

I agree with situating Kreuger somewhere in between and/or beyond the technological versus social determinism distinction. (At least I think that is what you are saying.) In fact the questions arising from interactive interfaces, especially in the visceral form of Kreuger's art installations but also extending to the banal interfaces of individual applications, not to mention operating systems, keyboards, mice, etc., seem predisposed to consider such a distinction irrelevant, or at least nonsensical. Even if there are better options technologically, if they have not become available it is a result of a mixutre of the social (entrenched dependence on current interactive forms, resistence to new ones, business policies, monopolies, etc.) and technology (costs, reliability).

Kreuger clearly understands the tension arising between the computer and the human in his art installations and programs his environments to utilize this tension. Here the computer and it's interface are socially determined, being coded in ways that take into account and even cater to the fact that the interaction will be with humans. And yet the humans are also forced to cater their interactions to the computer. Not everything is possible for either the computer or the human in this exchange because both are constrained by presence of the other. In interactive installations the constraints are defined by the artist, but even here the artist cannot possibly exceed the capability of the machines. The interface is the precise point where "determinism" of either sort disappears, replaced by evolving modes (philosophies?) of interactions that bely that there is no interface that does not arise from a social (human) input while at the same no interface is created that is not bound by the existing capacities of technology