

Johanna Stumpf - INF 9119 Midterm

- 1. “Doug Engelbart’s Unfinished Revolution – Program for the Future” is obviously a mouthful. What’s behind this title? What’s the motivation behind this seminar? Name at least 5 points of motivation.**

The goal of the seminar is to use Doug Engelbart as a symbol figure. We want to explore Engelbart’s core ideas and their contemporary extensions in order to create a perspective on the future of informatics and its potential for social impact.

As Engelbart said himself that only 3.6% of his ideas were implemented, the Program for the Future Challenge was created with three goals: Understanding what the remaining 96.4% is, creating demos and projects and orchestrate learning across the demos and projects.

Thus, we want to study Engelbart’s not yet implemented ideas and join an international project to complete them and possibly begin to develop projects of our own.

- 2. We began with “Thrivability Strategy”. What are the main messages of this book project? What is “Thrivability Strategy”? What relevance might this have to your life and career? What tactical moves might result from that strategy?**

“Thrivability” is a new concept, which has recently emerged to replace sustainability. The necessity of change in the world is seen as an opportunity to make profound changes. And by doing that, to lay a foundation for a new era of progress, toward universal thriving.

The main messages of the book are captured in the titles of the four sections “No solutions inside the box“, where current problems are shown, “And they told us so“, where pioneers like Engelbart and their ideas are introduced, “Outside the box“, where systemic thinking and programs like the Knowledge Federation are introduced and “We can thrive“, where systemic innovation is explained. This leads to the conclusions that by thinking outside the box / getting out of the box we can innovate systemically and evolve from homo ludens to homo sapiens.

Personally, I am taken with the positive attitude, hoping that I can make a positive impact on the world myself. But by now I was not able to extract any concrete tactical moves or strategies for myself.

- 3. Could there be a relationship between Doug’s history and values and his creative genius?**

In general it holds that one’s history influences one’s values and one’s values influence what one decides to work on. Engelbart’s goal to focus his career on making the world a better place could easily stem from him being a middle child. Middle children are in general hardworking and try to make people live and work together in peace, which is exactly what’s reflected in his philosophy.

4. While the people around him saw him as a technology developer, Doug was developing a paradigm. How would you describe this paradigm? What concepts did Doug use to describe it? What did Doug achieve? What remained unfinished?

Engelbart wanted to improve collective intelligence, the way how we can solve important problems together, via bootstrapping to accelerate our progress towards that goal. His belief was that when human systems and tool systems were aligned, such that workers spent time "improving their tools for improving their tools" it would lead to an accelerating rate of progress.

While a lot of his technological ideas got built and everyone uses them, the way people use them is completely different from what he expected and predicted. For example in "Augmenting human intellect" he writes about how having a device that enables us to look up words anytime anywhere would enhance our vocabulary. Now, this device exists but is used in a very different way, e.g. to communicate via emoticons, and linguist already predict the downfall of language and proper communication.

This shows very clearly how some of the things he was wishing for are not achievable in the way he expected, because humans react in a completely different way to his technology than he thought they would. Thus, what remains unfinished, needs to be newly evaluated in the light of the experiences of the last fifty years.

5. Explain these concepts (or tools or technical ideas) and explain their roles within the paradigm:

- *CoDIAK: Concurrent Development Integration & Application of Knowledge.* Name of the collaborative capability for a distributed community to develop, integrate, and apply new knowledge.
- *DKR : Dynamic Knowledge Repositories.* Provides the best possible understanding of the ways and means for improving the improvement capability.
- *ABC : Model of three layers of improvement.* A is the core activity, B improves A, C improves B.
- *Bootstrapping : Loop:* Get information, use NIC to improve on that, feed new information back into NIC. Use many NICs for improvement of different capabilities.
- *Augmentation :* With "augmenting human intellect" the increasing of the capability of a man to approach a complex problem situation, to gain comprehension to suit his particular needs, and to derive solutions to problems is described.
- *Collective intelligence:* A measure of how well people can work together on important challenges.

- NIC : *Network improvement communities*. Utilizing the best Collective IQ improvement knowledge .
- NLS : *oN-Line System*. Computer collaboration system.
- OHS: *Open Hyperdocument System*. Multimedia files for everything and links in between.
- Bootstrap Alliance : Former Name of the Doug Engelbart Institute founded to teach his ideas. The Institute promotes Engelbart's philosophy for boosting Collective IQ—the concept of dramatically improving how we can solve important problems together—using a strategic bootstrapping approach for accelerating our progress toward that goal.

Additional question:

6. Help us improve this seminar.

What would help me is to see all these concepts applied to one very simple and very specific example. This does not need to be anything new, even so it could be an interesting project to choose one very small problem and solve or improve it with the given methods. It could also be something that has existed for a long time, but where one can identify and point at each of the different ideas and methods.