

“Production First, Reflection Later”

An Emerging Methodology for Research in Cross-Disciplinary Groups

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ABSTRACT

This short-paper reports on an early attempt to formally describe the research-methodology for interactive media design ad-hoc named: “Production First – Reflection Later”.

Two key components are identified:

1. The necessity of not only building a ‘common ground’ of shared experiences, but of actively co-constructing these by discussing the experiences extensively.
2. The necessity of real world objects and shared events in the above discussions and as a ‘cognitive feedback-mechanism’ for reflecting on the design.

The emerging methodology gleaned from these experiences can be summarized as follows:

1. Separation of productive and reflexive phases
2. Ultra-fast prototyping/mock-upping and user-feedback providing both cognitive feedback and shared experiences
3. Communication must be integral to the process

The methodology was simultaneously assembled, tested and now (somewhat) formalized in the Project “Narrative Toys/Psst” (Programmable Sound Stage Toy) developed by ‘Interaktiv Institutet’, Malmö-högskola-section, led by senior researcher and artist Åsa Harvad.

Keywords

Research methodology, teamwork, cross-disciplinary development, rapid prototyping, cognition, constructivism.

1. INTRODUCTION

The project “Narrative Toys/Psst” was realized from concept to working prototypeⁱ in about 9 months and will conclude by October 2000 with an extensive user-testⁱⁱ, about a year after its inceptionⁱⁱⁱ. The Psstians and their ‘homes’ can be seen at the NordCHI2000 technology demonstration area.



However, it is not so much the progress in the project as it is the perceived level of new understanding amongst the participants, that has inspired this short paper on the methodology gleaned. The participants gained:

1. A shared understanding of what the project was *really* about.

Fig. Fel! Okänt växelargument. Two nestians on a so ndstaga-hov

2. A personal understanding of what and how the other participants on the project *reason and construe* of the shared experiences gained.

This in spite of, that conducting research in cross-disciplinary surroundings often is such, that the basic interchange of ideas and arguments becomes a challenge in itself.

To illustrate the problem: One of the basic claims of the Narrative Toys project is that “Toys are a medium for storytelling” – But, what is ‘a medium’ to an artist? a programmer? a linguist? It is an almost impossible sentence to understand in an even remotely similar

manner. And while we are at it, how do we construe of and go about designing ‘a toy’?!

So, how did it happen? On reflection, three main causes were to be found:

1. **Productive and reflexive phases were separated**

This, it turns out, is very close to what is taught at writers workshops to avoid writers-blocks (Rienecker, 1991. p. 81-86). Here, separating creative phases from revising phases is dogma so as to silence ‘the inner critic’ that would otherwise block the writing down of ‘less-than-perfect’ ideas. E.g. to get the speed of prototyping (a productive phase) up, decisions were taken immediately and without reflection. In addition, since the other participants they were not allowed to critically reflect on the sensibility of the decision (or lack thereof) all decisions were applauded. And since all decisions were applauded, everybody liked taking them. A synergistic spiral emerged. During reflexive phases all participants would reverse and be as critical as they could be, to find out what should be bettered in the next productive cycle:

”Short cycles of production, leading to evaluation and new production [...] Production leads to reflection: Tight cycles of reiterated designs [...] prototypes are vehicles to forward the knowledge and to spark off new ideas” (Åsa Harvard, personal communication)

2. **Ultra-fast prototyping/mock-upping and user-feedback made room for discussions as well as gave many iterations to the design process.**

It is easier to see, what can be bettered in a bad production, than it is to figure out how to make it perfect the first time around (Ong, 1989. p. 118, Rienecker, 1991. p. 51-87). Combined with the separation of productive and reflexive phases it gave a great sense of movement on the project, which was also a synergistic effect.

Just as important was the room for discussions that was created by sharing the experience of ‘small’ events rather than month-long processes.

Cross-disciplinary communications are made difficult by the fact, that there is very little overlap in the participants’ prior experiences leaving them at loss to make themselves understood by the

others.

In constructivist terms (Kelly, 1963), this is described in the “Commonality Corollary”:

“To the extent that one person employs a construction of experience which is similar to that employed by another, his psychological processes are similar to those of the other person”, (Kelly, 1963. p. 90).

Generating manageable experiences to construct was the tool used to bring into harmony the participants psychological processes – in the research-domain where the experiences were made of course.

3. **Communication was completely integrated in the everyday work-processes.**

Research can be construed of as ‘play with concepts and artifacts – in order to do so, we must construe of both using more concepts (and we must physically construct the artifacts as well).

Thus, to fully appreciate the essential nature of communicating we must realize that it isn’t quite enough to bring some degree of harmony to the psychological processes through sharing the construction of them. To some extent we must construe each others construction of reality, since we can’t turn into each other. Kelly states:

“To the extent that one person construes the construction processes of another he may play a role in a social process involving the other person”,

(Kelly, 1963. p. 95). In other words we must understand other people in **their own terms**, not ours and is known as the “Sociality Corollary”. Communication was the tool used to construe of each others construction processes to allow us to play a role in the ‘social process’ of conducting cross-disciplinary team-based research.

Through this co-construction of events as well as the active construction of the other participants constructions a shared language emerges, a project-dialect, which in the end may well be the most significant result. New knowledge and new ways of working with knowledge emerges as people from initially whole different planets suddenly find themselves not only understanding what the other participants are saying, but to some extent even understanding why they’re saying it.

References:

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ⁱ The Psstians and their ‘homes’ can be seen at the NordCHI-technology demonstration area. Also see: <http://narrativity.kk.mah.se/narrativetoys/>

ⁱⁱ 4 groups with 4 participants in 2 age groups using ethnographic interview-techniques and Digital Video to capture the action are planned.

ⁱⁱⁱ At which point a second round of fund-raising will begin.