ABSTRACT

This paper explores the issue of how to establish an interactive setting in which a ‘storytelling mode’ may be triggered as a catalyst in a collaborative design activity. On the basis of an interaction analysis of a design project’s kick-off workshop the paper identifies four triggers for the storytelling mode: narration, drama, material and interaction. The findings suggest that the storytelling mode may be fostered by intentional facilitation that employs these identified triggers.

INTRODUCTION

In this paper we ‘would like to try out an idea that may not be quite ready’, as Bruner, the educational psychologist famous for his narrative research, starts his paper on Life as Narratives (2004). Our interest in storytelling and its potential applications in design and design research has taken us to experiment with it in various ways. A project named Spice - Spiritualising space forms the platform for some of these experiments. The kick-off workshop of the Spice project is analysed in the following paragraphs in an attempt to spell out some of the ways in which interaction in this multi-professional workshop is geared towards the storytelling mode.

THE SPICE - SPIRITUALISING SPACE PROJECT

The Spice project is an ongoing research effort in which storytelling is exploited as a design tool. The study focuses on urban spaces and metro environments that offer experiential contexts. The main objective of the project is to study how storytelling can be applied in the designing of customer journeys in public spaces. The customer journey is conceived as a story-like phenomenon, which includes features of spaces and services that establish a particular identity for the local setting in focus. One of the aims of the project is to clarify the notion of storytelling in a way that is fruitful in designing public environments. The project also aims to create alternative concepts that explore the aesthetic and imaginative experiences and the relationships between people and urban public spaces. At the outset of the project we had already identified three reasons for considering storytelling in space and service design:

- Storytelling is used in user studies for design. Stories or anecdotes of meaningful memories and spaces are gathered from users to inform and inspire design.
- Storytelling can serve as a design tool that connects various details together and creates and prototypes a complex entity.
- Storytelling may be employed to establish a specific image and identity that enables differentiating from others. (More on http://designresearch.fi/spice/)

The project’s objectives were approached with a case that focused on a particular locale called Otaniemi, where a new metro route was being planned. The focus of the hereby analysed design activity was around the future metro station of Otaniemi. Currently this location is mainly known as the campus of Aalto University's School of Science and Technology (HUT).

The project team consists of professionals from industrial design, scenography, screenwriting and sociology. The project also features five industrial
partners with their competences and interests. The project plan included aims that were perceived novel by the partnering companies and the project team. It was thus considered important to pay dedicated attention to establishing a common ground at the beginning of the project, which would enable and foster the industrial partners’ engagement in the project collaboration. A kick-off workshop, which will be analysed below, was organised for this purpose.

**STORYTELLING**

Storytelling is a basic form of human activity that is utilised to organise experience, to give it shape and to understand it (Ochs & Capps 1996). According to Abbott (2008, 13) the bare minimum of narrative consists of “the representation of an event or a series of events”. Already a depiction of an action, e.g. “I fell down”, is a narrative act. Narrative acts may add up to a story, a sequence of two or more events that are temporally bound: a chrono-logic. Conveying an event or events may take various forms of a narrative discourse: speech, drama, picture etc. (Abbott 2008, 1, 13, 18-19, 241.)

Bruner (1986) claims that there exist two fundamentally different modes of thought: the storytelling and the argumentation mode. These both provide ways of ordering experience and constructing reality, but the ways in which they convince and are constructed differ fundamentally. (Bruner 1986, 11-13.) Stories also occur in a dual interpretation and trigger imagination. It is open to allow for individual ways of ordering experience and constructing reality, but the ways in which they convince and are constructed differ fundamentally. (Bruner 1986, 11-13.)

Stories thus appears and can be applied in many ways, also in design. It is about communication. It is engaging. It is open to allow for individual interpretation and trigger imagination. It is about joining individual details together into larger entities. In design contexts the application possibilities of storytelling are vast, but understanding its potential requires sensitivity to the forms it may take, the matters it may address and the scale it may grasp. In the following we will attempt to explain a portion of the area of applying a storytelling mode in design. We focus in particular on a setting in which collaborative activity encourages the emergence of the storytelling mode.

**METHOD**

We claim that the storytelling mode does not happen accidentally but results from methodical work. More to the point, it takes methods and tools to trigger narrative events that illuminate design objectives. We have used various methods for this design purpose. These methods involve material objects (stuff), social configurations (people in relation to each other) and language (talk that unfolds in interaction). As we see it, innovation emerges out of the messy collision of people and stuff in interaction. This is why we rely on workshops.

As to the analysis of these data, we draw upon conversation analysis (for an introduction, see Heritage 1984; Sidnell 2010). This orientation has three fundamental assumptions as a starting point. For one, it is assumed that interaction is structurally organised. Secondly, every contribution to interaction is contextually oriented. Thirdly, structure and context sensitivity inhere in the details so that any detail may turn out to be (part of) a methodical way to accomplish whatever people set out to accomplish. (Heritage 1984, 241.) We can therefore assume that people do not simply happen to formulate their talk in certain ways, but they design (though often unconsciously) their utterances with respect to the context, recipients, and the things they want to accomplish.

Because this design is often beyond speakers’ conscious knowledge, analysis is based on naturally occurring interaction and audio and video records of it. These data are closely examined: transcribing is one way of putting the details under a magnifying glass. A key issue is to make pure observations (to see what happens) instead of jumping to conclusions. Starting from observation, the analysis a. traces for repeating patterns, b. describes the formulation, context and what is accomplished, and c. grounds analytical claims in other participants’ ways to treat the observed element (Sidnell 2010, 20-29; Schegloff 1996).

We take the workshop video document as a starting point, look into the details of workshop activities manifest in it, and determine whether and how some of these activities trigger stories. In doing so, we proceed from asking at any point of interaction, why this now (Schegloff & Sacks 1973), i.e. what the participants can establish and accomplish at a certain point of interaction by a certain kind of talk, gesture and use of tools.

**DATA AND METHODS**

Our findings are based on data collected in the Spice project’s kick-off workshop. The workshop was video recorded, and the findings are based on this documentation.

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Table 1: Differences between the argumentative and narrative mode (based on Bruner 1986, 11-13).
The workshop was organised along the lines of a project-in-a-day model developed originally in the ‘Luotain – Design for user experience’ project (2002–2006, http://designresearch.fi/archive/luotain/) in the University of Art and Design Helsinki. The model is a social design intended to overcome some of the challenges present in the early phases of collaborative design projects. These challenges include participants’ limited knowledge about innovation methods, the context of use or the domain of the project, for example “storytelling”. The members of a collaborative project team may not be familiar with each other, and they may have quite different expectations with respect to the project. Furthermore, the participating organisations often seem to have hidden agendas of innovation, and a collaborative project should provide new input to these. The project-in-a-day workshop has been proven to address these challenges (Mattelmäki et al. 2009, Hasu et al. 2009).

PROJECT-IN-A-DAY
The workshop’s outline was developed in several meetings attended by the research team, and the schedule of the day was as follows:
- 9:00 Introduction (15 min)
- 9:15 Warm-up drama (40 min)
- 9:55 Project plan instructions (15 min)
- 10:10 Forming project plan (20 min)
- 10:30 Project plan presentations (40 min)
- 11:10 Context study (incl. interviews) (3 h)
- 14:10 Review of context studies (40 min)
- 14:50 Envisioning the future (45 min)
- 15:35 Marketing plan (45 min)
- 16:20 Review of the results (40 min)
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ANALYSIS
WORKSHOP ORCHESTRATION
The project-in-a-day-model is a way of helping professionals from different fields to collaborate and plan how future collaboration proceeds. As to the story-telling mode, the model provides a playful narrative super-structure: the participants are placed in teams that only exist within the workshop, and they play roles that are not employed in officially. This brings an air of pretend play to their action. Therefore, the workshop resembles a Live Action Roleplay (LARP). Like a LARP, it proceeds along a temporal outline that is pre-written by a design team, and the workshop is managed by a game-master, the facilitator SY.

The facilitator orchestrated the collaboration through the workshop day. He utilised the outline as a scheme. It also contained reminders about what to say. The script was not absolute, but the facilitator could adjust the length of the activities according to the progress of the groups. Hence the facilitator was paying close attention to how the creative progress unfolded in the groups. However, much of the actual progress remained open and to be improvised by the groups.

Initially, let us look into the facilitation work in detail (Example 1, below). Obviously, it consists of talk. The facilitator, SY, is speaking. However, language is not the only semiotic mode upon which he relies. In what Goodwin (2000) calls a contextual configuration, an array of semiotic resources is added as the action unfolds in time.

In the details of his relatively extended roles and setup
Based on our experience, each workshop participant was given a dedicated role. The workshop was run so that one person was responsible for the facilitation of the workshop and there were no additional roles: no one needed to ‘sit as a potential resource’. For example, two members of the local community were appointed to the context study and were available for the teams who interviewed them during that time. In addition, the teams were designed so that people with similar backgrounds, whether professional or organisation, would be placed into different teams. To engage the industrial companies in the project, the team leader role was always assigned to the company representatives.
speaking turn, SY accompanies his words with gaze, pauses, deployment of body, movement in space and handling of material objects. Moreover, the non-speaking workshop participants recognise his work and legitimise it by acting accordingly. This example is an instantiation of the methods used to achieve what is on the agenda. As a whole, example (1) instructs regarding the task. It consists of three functionally different parts. The first part is constructed as a directive turn-constructional-unit. (l. 1-2). Findings from educational settings suggest that a similar linguistic structure is a method for sequencing instructions but is not understood as the point to start working (Joutsenen 2007). The second part is formulated to specify the conditions for the assignment, a narrow time window. (l. 2-5). During the pause he fusses about with some material stuff obviously waiting for him behind the flipchart (Uppermost row in Figure 1). Turning away seems unexpected and is therefore possibly creating dramatic suspension. The second chunk accounts for his withdrawal for the benefit of the teams with a description of a past event. (l. 7). This turn part reads as a narrative event. The construction developed so far projects syntactically more to come, an object constituent. After yet another pregnant pause (l. 8) and having returned visually available, SY delivers (syntactically and materially) an object, the method cards (l. 9). As soon as the cards are introduced, SY starts to deal them out. First, he places the material cards is accompanied with an incremental (add-on) to the preceding, middle roll. Meanwhile, the workshop participants have been sitting around their team tables with upper bodies and faces oriented to SY, an embodied token of being an available listener. It is noteworthy that the participants do not display any activity while SY is turned away. As soon as SY finishes the card delivery, many participants start to withdraw from the listening position into taking actions within the groups. They grasp for the cards, they take notes, and they dig in their briefcases. These actions realise a change in the participation framework: the participants play along the workshop script and accomplish the participatory role to which they were assigned.

Example (1) illustrates the messy collision of people and stuff in interaction: how the workshop outline, the material tools (here method cards) and the teams become interwoven into a contextual configuration where a suspension plays a role. The workshop happens as an orchestration of various semiotic fields, not only because it was planned, nor because the participants came in, nor because SY is speaking, nor because there was a room for it and material objects brought to the room. All these are recognised and acknowledged only after pulling them together. It appears that talk-in-interaction is the social glue that has the capacity to join the forces.

NARRATION TRIGGERS

The clearest storytelling episodes during the workshop occur in the instruction and execution of the warm-up drama task that is facilitated and organised by professor of screenwriting JV. He relies on suspense in the instruction: the mystery or uncertainty that hooks the audience (c.f. Abbott 2008, 242). He first introduces codes “DP, CS and FP” (ex. 2, line 1). These codes are prospective indexicals (Goodwin 1996), i.e. “the sense of what constitutes the [in original: problem, here: the codes] is not yet available to recipients but is instead something that has to be discovered subsequently as the interaction proceeds.” JV hints to a link to the task (l. 2) (l. 4-6) thereby claiming their relevance but further postpones the decoding. Meanwhile, JV develops a narrative scene where the main character is a researcher who is arriving by metro to a conference at the Aalto University campus.
8-26), and the events lead to a conflict: the main character loses a key object, the laptop containing the winning presentation (l. 27-30). This is the situation, to quote JV (l. 31), that is given to the workshop teams to resolve by means of a collaborative drama. At this point JV decodes the codes: one team is assigned to work for a "DP", i.e. a dream project; another team sets off to a "CS", a catastrophe scenario; and the third team is assigned to develop an "FP", i.e. a functional plan to solve the conflict.

In this example, storytelling is a method JV uses to create a starting point for a set of collaborative story closures. In doing so, he plays with narrative voice and focalisation, i.e. the point of view (see Abbott 2008, 70-74). He starts with a third-person narration (l. 8-) "We have here a researcher and s/he is on the way to - -." However, JV soon slides into a second-person plural narrative (l. 13-19): "You are on the way here - -." The indexical te 'you' (plural) ties anaphorically to the fictional researcher (singular) but locally to the workshop participants (plural). This decision invites the workshop participants to empathise, to "try out the researcher's shoes". Stepping into these shoes, JV makes a further move to a first-person narration: he starts to recount for the fictional researcher's inner thoughts (l. 20-21): "this I get ('am privileged') to show or present or tell - -." JV's introductory narration is able to trigger continuation in narrative closures. All the teams replay the narrative and continue to resolve the story conflict according to their assignment. In doing so they exploit different ways to continue to resolve the story conflict according to their assignment. During the workshop a sense of suspension was identified as the previous example already demonstrates. A suspension exploits the methods of drama, one of the forms of narrative discourse that brings about the storytelling mode. Elsewhere, the drama aspects of the storytelling mode become visible in role-plays, a recurrent feature of the data that allows us to regard the workshop as an instantiation of a LARP.

In the following, the project leader plays the role of the MANAGER. In this scene, she wears a black gentleman's hat that represents power. Her task is to review the groups' presentations. She goes out of the room, takes the hat, is invited to enter by the facilitator and enters the stage as the MANAGER. In addition to wearing the hat, she speaks in the pretend voice of a MANAGER. These cues are taken up by the presenters. They start to play along. This too is observable in the use of a pretend voice and in the dialogue that is presented in the formal and literal register (high and standard language) (example 3, Figure 2).

**Example 3. The manager roleplay.**

**Drama Triggers**

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**Example 3. The manager roleplay.**

**Material Triggers**

Most of the time storytelling does not occur as clearly and straightforward in a workshop. This is due to the multitude of goals addressed to it; the workshop is not purely about telling (see section Spice - spiritualising space project above). Still, we argue that storytelling is central to the forms of interaction and collaboration that take place. The workshop strategy is built on the idea of designerly reflection through making (Mattelmäki et al 2009). Many of the material elements in the workshop were considered and planned beforehand. Maps and CDs with photos of the location and templates for reporting and presenting were provided to all the groups. Tinkering materials such as papers, wire, cardboard and crayons were provided to allow experimenting. The participants were also asked to bring along their laptops and cameras. Some of the materials had application potential in them. Wearing hats were used to support the role-taking and -playing and to create improvised stories, scenarios and comments as anticipated.

Method cards (see ex. 1) introduced in a nutshell a variety of methods that the groups could apply in the project, either in the field study phase or in the interpretation and designing phases. They gave a common focus to the participants when creating a project plan. The participants studied them by pointing at them and addressing questions on how they are or can be linked with storytelling, e.g. collages work well in storytelling or ‘Could we ask the children to close their eyes ... or could we ask them to draw and tell?’ According to Melander and Sahlström (2010, 153, 172-173; Sahlström in press) a longitudinal orientation is constituted when participants make something relevant from situation to situation, be it a procedure, a content or a tool. In the formation of their activities, the participants are repeatedly geared towards storytelling. They collect narrative events and fragments and try to create stories around their collaboration. Therefore, stories and narrative events constitute a longitudinal orientation in the workshop and project. Some of the materials had more open potential: e.g. the maps, photos, collage materials and cameras were taken along but they were used in ways that were created more or less on the go. These materials were applied in the user study phase for gathering stories, memories and metaphors from the local people about the location in a rather improvised manner.

A Chinese furry hat also triggered tangible concept ideas. One group started touching the hat. ‘If we could shut the lights off... We could make a corridor..."
out of those two white boards. ‘We need to stretch the fur hat... and make them walk through the corridor.’ ‘What about a fur-covered corridor... ‘a metro with walls that grow hair would be an international attraction’. Finally, a more or less accidentally found hairy carpet and movable white boards were used to create an experiential corridor mock-up for experiencing an environment with tactile qualities. The carpet’s structure gave a strong contrast to the smooth surface of the white board to be experienced by the participants. The mockup as such was not a story, nor did it illustrate a story, but aimed at experimenting with a connection between physical design elements and imaginative experiences.

INTERACTIONAL TRIGGERS

In everyday interaction, stories are not fixed products but emerge from systematic interactional practices (Lerner 1991). Prototypically, knowledge asymmetry between participants is a prerequisite for telling a story: it takes a knowing teller and an un-knowing audience to have a case for a story (Linell & Luckmann 1991, 4). Entitlement also plays a role: first-hand knowledge is a teller’s ace whereas someone with second-hand knowledge is not likewise entitled to act as the (main) teller (Drew 1991, Sidnell 2010). Nonetheless, in multi-party situations (more than two persons), it is common for different participants to compose stories collaboratively as consociates (Lerner 1992). In the Spice workshop, the situation is even more complicated. The workshop aims at future stories nobody owns at present.

Our next observation is lodged in collaborative information gathering. The workshop organiser has invited two members of the local community to join in as interviewees. Designers, especially within participatory design, value members’ insight and are trained in an empathic approach to users’ experience. However, the users are not trained to imagine non-existing future worlds. Moreover, it may be difficult for them to share their experiences and feelings with an interviewer they do not know. Sometimes the designers’ interests and interviewees’ understanding of the expectations build a gap. Design probes provide one solution to bridge these difficulties (Mattelmäki 2006). To serve the Spice workshop, narrative fragments are made to emerge – not out of the blue – but out of an experience elicitation technique based on talk-in-interaction. The point is that instead of simply asking questions, the interviewer develops a scene where the interviewee is the entitled, knowing participant. In (4) the ‘female user’ FUS is interviewed in one of the teams. Professor of screenwriting JV is interviewing her. In example (4), JV combines questioning with describing possible conduct. His turn is constructed of chronological elements: taking the metro, coming to work, being at the station (l. 2-3). He does not allow FUS to answer until in the end of what is constructed as a statement: sää tuut duuniin ‘you come to work’ (l. 3). We will be considering what JV is doing with this statement in this interactional context.

(4) Spice-05-02
01 JV: to work
02 ku sää siirryt m metrolla kulkemaan mitä sää sää
03 tuu duuniin

Example 4. Trespassing interviewee’s conditions.

First, FUS approves JV’s statement with ‘a stamp of approval; a continuer mm ‘uhtm’ (c.f. Lerner 1991). Second, she confirms JV’s vernacular phrasing duuniin ‘to work’ by repeating it. Thereby she comes to accept his formulation. This is of particular interest, because he, as a strange interviewer, has stepped into an area of knowledge where she is the entitled person who has access to her daily routines. The shared word, duuniin, appears to legitimise trespassing. The shared formulation manifests the interviewee and interviewer as consociates with respect to the description. Third, we may notice that JV’s statement has evoked a setting: a possible starting point for a story. Into this setting JV suggests the possibility of missing something (l.6) and candidate responses as possible events on a narrative line (l. 8). It is tempting to make yet another observation. Earlier in another team FUS answered very shortly and formally to questions. In (4), JV uses an alternative, more imaginative interviewing technique. Although he starts with an interrogative turn structure he reformulates and offers candidate understandings for experiences owned by FUS. In (4), JV’s series of syntactical reformulations give an air of trying to tease out the interviewee – and as if he would monitor very sensitively when FUS is ready to respond. Indeed, she responds to JV’s formulations of her experience without a gap. In addition, she confirms them, and they lead her on. During the course of interaction, a change of state occurs in FUS’s behaviour. Her voice becomes more animated and her speaking tempo accelerates. Obviously, she becomes more talkative and involved (in 3, lines 9-10).

As to the story triggering techniques, example (4) shows that sometimes the most obvious interviewing technique, i.e. posing questions, may not be the ideal way of getting answers. Instead, playing with access and entitlement, teasing with candidate formulations, may do the trick. What we see here is a method of fishing fragments of imagination and experience. Moreover, depicting a scene may be a point of departure for a story.

DISCUSSION

Storytelling takes form in many ways. The Spice project was initiated with a loose definition of how storytelling appears in the design context. The aim was that through a process of experimenting a better view on the notion is gained. Bruner’s view on the storytelling mode that contrasts with the argumentative mode has been useful to elaborate the understanding in the ongoing project. In his view the storytelling mode includes lifelike, imaginative, experiential and dramatic elements. In this paper we have attempted to develop an understanding on how to establish an interactive setting in which storytelling mode emerges. For this purpose we have analysed video recordings drawn from a collaborative design workshop. Although a general picture of the workshop setting existed
before the analysis it was only through a process of investigation that a more clarified understanding of the details was gained. To illustrate these findings, we were able to point out four phenomena in the workshop conduct. First, storytelling triggers storytelling. As pointed out by Bruner the argumentative mode and story mode differ. The line of thought in story mode does not follow logico-scientific reasoning but takes imaginative and experiential routes. This line of thought is triggered in the given example.

Second, we realised that the project-in-a-day model constitutes a live action roleplay. It appeared in various dramatic and pretend play scenes. We learned that aspects of drama can even be found in minor details of interaction and creation of suspension. Third, the material supported the emphasis in stories and story mode. The data show that the participants have a longitudinal orientation towards storytelling. They relate their collaboration to it in many ways, such as in how they approach the given tasks as well as how they, with the help of the material, try to empathise and become engaged in the envisioned situations.

Fourth, in the section on interactional triggers we made observations on how participants can collaborate in constructing imaginative lifelike visions that supported the dialogue. We were also exhausted by the richness of the data. For the purposes of this article we have focused on only a few phenomena. In future research we aim to dig into how the seeds that were planted or that emerged in the workshopping grew to blossom as the project-in-a-day model constitutes a live action roleplay. It appeared in various dramatic and pretend play scenes. We learned that aspects of drama can even be found in minor details of interaction and creation of suspension. Third, the material supported the emphasis in stories and story mode. The data show that the participants have a longitudinal orientation towards storytelling. They relate their collaboration to it in many ways, such as in how they approach the given tasks as well as how they, with the help of the material, try to empathise and become engaged in the envisioned situations.

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REFERENCES


