IMPROV DESIGN TROUPE: DESIGNING IN AND OUT OF CONTEXT

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ABSTRACT

New constellations of professionals seek to combine their expertise in the exploration of unknown solution spaces in areas craving innovation. This increasingly demands the experimentation of approaches that attempt to include the expertise of the various knowledge traditions and professional practices of not only project team members, but also the various users, stakeholders, and subject matter experts. Rather than looking separately at research (inquiring into current practices and theorizing about new forms of practice), design (creating new materials and services) and evaluation (subject matter expertise for evaluating their value in practice), this paper explores an organizing metaphor that characterizes these practices in their productive collaboration when engaging various contexts, whether use practice or production practice. The paper draws on a case of a multidisciplinary team working to support second language learning in everyday encounters to explore the "improvisational design troupe" as an organizing metaphor for multidisciplinary innovation work.

Creativity is the ability to introduce change, whether that change is collective or personal or sudden or gradual. (Richard Schechner 1985:253)

INTRODUCTION

New constellations of professionals seek to combine their expertise in the exploration of unknown solution spaces in areas craving innovation. This increasingly demands the experimentation of approaches that attempt

to include the expertise of the various knowledge traditions and professional practices of not only project teams, but also the various users, stakeholders, and subject matter experts. In design and innovation, there has been increasing attention to the users and their contexts of use and techniques for bringing the use context into the design process. Conducting fieldwork to explore the context of use of products and services is commonly done on a project level to discover user needs as a basis for design (Wasson 2000), and in a broader sense to inform new ways of conceptualizing use practice and solution spaces (see discussion in Dourish 2006). On the other side of the development process, field techniques are also employed to evaluate products and services in terms of their value to their users.

The division of labour between ethnographic studies and design require some form of mediating objects and/or mediating activities to turn the output into a resource for design (Diggins & Tolmie 2003).

There are a number of techniques for such translation; some focus more heavily on the representational devices (Jones 2006) while others put the emphasis on the activity (Karasti 2001). Jones (2006) proposes *experience models* for bridging ethnographic fieldwork with design. An experience model, often accompanied by a catchy slogan, is a diagram that provides a theoretically informed accounting of user needs and experiences while pointing toward

new solution spaces for products and services. Karasti (2001) introduces bridging workshops as an activity between ethnomethodological studies of use practice and systems design. She uses tools such as the "video collage" to allow the designers to engage in prepared field material as a means for creating their own research experience in the workshop as a basis for design. Others have challenged the separation of research and design by providing organizational formats for users, designers and stakeholders to work together. Drawing on the merits of mutual learning in the Scandinavian tradition of Participatory Design, designers learning from users and users learning from designers, the workshop format has allowed facilitators to stage collaborative design activities.

The Collaboratorium is a classic example of a broad organizational concept for large companies moving away from stationary usability labs outfitted with cameras and one-way glass for objective observation, to a practice environment where practitioners with different competences, users and stakeholders can move in and out of more freely (Bødker & Buur 2002). A Collaboratorium is "at the same time a place and a process" for a wide variety of activities that bring users and designers together (ibid: 155).

Whereas the collaboratorium begins addressing the need for flexible activity formats (place and process) for a wide variety of mutual learning activities within a company's research and development department, the explorations into project work in context at a team level, are still rather limited. Halse et al. (2010), introduce the fieldshop as a combination of fieldwork and workshop, an activity where a facilitator guides users through a set of activities from problem identification to prototyping future solutions in context. The fieldshop emphasizes the user's identification of the challenge, and the final improvised scenario demonstrating their potential new practice.

In this contribution, we seek to focus on the multidisciplinary team as a working collective moving freely between the traditional context of use and context of production to get involved with various potential users and stakeholders in innovation-related activities. We introduce the metaphor of the *improv design troupe* to account for characteristics of the team's movement from site to site, the fluidity of roles, and the form of engagement with local settings, and participants.

We draw on a case of a multidisciplinary team working to support second language learning in everyday encounters. The Språkskap project1 focuses on how to support people in Sweden learning Swedish as a second language outside the classroom setting. Whereas language instruction and material support for language learning are commonly lodged in a "school-centric" approach that focuses on the individual learner acquiring knowledge through experts and expert materials, Språkskap embraces a "situated learning" approach (Lave & Wenger 1991) seeking to turn everyday encounters between Swedish learners and Swedish speakers into learning situations.

We have come to see second language acquisition as an underexplored arena for innovation. Over the last decades, a new paradigm has emerged in language acquisition, which argues that language learning is essentially formed by social practice, experience, and socialization (MacWhinney 1999, Tomasello 2003). This brings a shift from a focus on the linguistic aspects of language alone, to the social and interactional aspects. Once learning is freed from the isolation of a linguistic skill learned through the teacher-mediated classroom, there is great potential to explore new human, environmental, and material relationships to support learning outside the classroom. The project seeks to explore not only how to extend the classroom to everyday situations, but to explore how to support a learner in their everyday encounters, whether it involves forming new types of relationships with people, with digital media, or with physical materials brought to or available in different environments. This includes implicating Swedish speakers in the equation as unofficial "language coaches", and looking to public spaces and businesses as language learning arenas.

Despite having conducted a whole range of design and research experiments related to supporting learners outside of the classroom setting, it was not until we worked as a team in

everyday activities with learners and the Swedish speakers they engage with that we addressed the core aspects of the project. We had engaged in a wide variety of workshop activities with language researchers, learners, Swedish teachers, coaches, and those within the team, but we had not explored new ways of supporting people in action in their everyday activities. To do this, we organized an intensive work period for a language pedagogue, an experience designer, and a design anthropologist. Before we introduce more details about our project activities, we will review some key aspects of design and research relevant to our approach.

UNDERSTANDING THROUGH INTERVENTION

In the search for new forms of practice, design involves the process of moving back and forth between some form of design materials and the repertoire of experience of the designer (Schön 1983). Louridas (1992) draws on Levi-Strauss to explore the designer as bricoleur. Bricolage is neither a methodical practice of implementing plans, such as engineering, nor of breaking things apart and building concepts, but rather an eclectic process that brings about something new. The bricoleur is in dialogue with what is there in relation to his "inventory" in the working out of something new.

Bricolage is therefore at the mercy of contingencies, either external, in the form of influences, constraints, and adversities of the external world, or internal, in the form of the creator's idiosyncrasy (Louridas 1992:5).

There is something about bringing something new, but also about bringing into play what is available as the material to work with. We are keen on developing the tangible and intangible relationships engaging a learner as he/she moves around from place to place. We also wish to bring an ethnographic sensibility to the design inquire. To learn to support a learner requires "following the learner".

FROM ETHNOGRAPHER TO 'ETHNODRAMATURG'

Anthropological ethnography has long sought to explore not only what people can describe about their cultural practices, but also to explore what they do that they may not be able to describe verbally. Participant observation plac-

es the researcher, as a research instrument, in the position to witness and engage in the practices he or she studies. Clifford Geertz famously defined "culture as text", something that can be "read" by anthropologists through in-depth fieldwork (Geertz 1973). Victor Turner viewed "culture as drama". Turner's work (1957) initially focused on the revealing nature of the social drama as it unfolds, a sequence starting by some form of breach in social behaviour, that turns into a crisis, with side taking, and finally resulting in either resolve of the issue, or the dissolving of the community relationship. Later in his career, Turner became increasingly interested in performance as a form of communication. With great influence from Richard Schechner (1985), the father of performance studies, Turner was drawn to the revealing nature of performance and the transformational process he saw in rituals and social dramas.

Through the performance process itself, what is normally sealed up, inaccessible to everyday observation and reasoning, in the depth of sociocultural life, is drawn forth (Turner 1982:13).

He saw performance both as a powerful means of communicating ethnographic studies (Turner & Turner 1987), and as a form of inquiry. Moving to performance as a form of inquiry demands a shift in interest from how people are able to formulate their perspective upon certain topics, experiences and activities, to that of their behaviours in specific times and places, what they are able to do themselves and with others. This is a shift from someone's point of view by interview to asking him or her to interact in a way that is observable. It moves from a classic "self-report" inquiry, to that of demonstration. The role of the ethnographer then shifts from that of asking questions, to providing the conditions for people to perform—provoking performances.

"Performances, on the other hand, although they can be asked for, are not really responses to questions. The ethnographer's role, then, is no longer that of a questioner; he or she is but a provider of occasions, a catalyst in the weakest sense, and a producer (in the analogy of theatrical producer) in the strongest. Victor Turner, pursuing a similar line of

thought, has called the ethnographer an ethnodramaturg" (Fabian 1990:7).

We would like to depart from the individualistic connotation of the designer and the researcher and begin addressing design and research as the practice the team engages in with other people in different contexts. We are interested in a set of field experiences working with multidisciplinary teams, instead of driving the process as an individual designer, ethnographer or any other person. We seek to bring forward knowledge in a way that is not dominated by any one agenda, but rather leaves room for collective *bricolage*.

FROM TEAM TO DESIGN TROUPE

The conception of improv design troupe is a reaction to the lack of nuance toward action and organization in the term "team". The improv design troupe is a traveling group of professionals with different competencies who explore solution spaces by providing people an occasion to perform through various props, cues, and provocations. Borrowing from theatre, troupe refers to a traveling collective of performers. Both improv and design draw on the characteristics of the bricolage. The "conversation" with what is present in relation to what is in your inventory. The troupe relies upon engaging the local circumstances in performance with the roles of actors, audiences, props, and cues in flux, possibly shifting from moment to moment, rather than fixed characters or items. While a design troupe may have someone who is more directive than the others, the catalyst or director traits of the ethnodramaturg arises and is co-produced by the troupe collective. The troupe activity instigates an audience from those present and a performance. The performances rely upon taking cues and getting reactions from those present.

THE SPRÅKSKAP CASE

We now return to the case of turning everyday encounters between Swedish learners and Swedish speakers into learning situations. The project was at a point that the team, especially the pedagogue and the anthropologist, had developed a strong theoretical understanding about learning in everyday contexts. We had explored through a variety of activities with language researchers, language users and teachers,

many aspects of supporting learning outside the classroom. For instance, we organized a series of workshops for learners and coaches that focused on the practicalities of engaging everyday encounters as learning situations. We held a "Twitter Day" where we organized a full-day of learners and coaches using Twitter. At the end of the day, we gathered and the participants reflected on the process and took a survey. We were at the point at which we had developed the contours of a model for language learning, driven by interaction in everyday activity. We were confident in our ability to support learners using their everyday interactions to stimulate learning. However, we faced doubts as to whether it was possible to provide more direct support to learners in their actual interactions with Swedish speakers.

We organized an intensive work period to test our model in practice in the design of a physical scaffolding kit. The idea was not to make a general test of many people, but rather to work out in the specific instances how to support learners in action. Over the course of a seven-day period, our team of a Swedish pedagogue, a designer and an anthropologist engaged in a variety of activities to explore with Swedish learners and speakers valuable supporting relationships for Swedish learning. The activities combined both the front stage of public spaces and businesses and the backstage of our working environments. They resulted in two main action-models for Swedish learners: (a) Sit-Talk-Sit; and, (b) The Encounter Dial; and a note-booklike physical support material we call a passport.

Sit-Talk-Sit is a simple sequence for Swedish learners to structure their encounters with Swedish speakers during practical activities. The steps include three main actions: finding a place to sit down (Sit) and jot down notes about an upcoming encounter, whether preparing practical goals or preparing vocabulary and sentences for an upcoming interaction engaging in a communicative activity (Talk) by interacting with the Swedish speaker for the purpose of the task, whether the task is finding a safe toy to buy or ordering a pastry and finally, after the interaction, sitting down somewhere

(*Sit*), reviewing, write notes and reflecting upon the interaction.

The encounter dial addresses the actions a learner takes when he or she does not understand something in a communicative interaction. The dial has three actions: Easy Out, Step-Out/ Step-In and Full Press. Easy Out: upon not understanding, the learner takes the "easy way out" of the encounter by ignoring misunderstandings e.g., nods, says thank you and walks away. Step-out & Step-In refers to the learner stepping out of the immediate interaction and then returning to clarify misunderstandings. This can either be a very quick sequence of stepping out and stepping in, or can be thought of as over a longer period of time. Full-press refers to when a learner stays in the interaction and asks for further clarification until understanding.

The passport is a physical, note-book-like product that folds to the size of a passport. It has three main folds that open different "spaces" to be used, for instance, sitting to prepare, as reference when communicating, and when inviting others to write.

In the next section we will demonstrate through a selection of project activities how the team worked as an "improv design troupe" moving in and out of the use context.

PROCESS AND ORGANIZATION

The design troupe, with an anthropologist, a pedagogue and a designer, provides a solid basis for supporting the learner with a set of multidisciplinary expertise around the challenge of language learning in everyday activities. However, while the members shared some ideas, in many aspects of what we were doing our confidence level differed and the details that we focused on differed. Although we see the team as a collective that learns from one another through their collaborative actions, each member clearly brings a unique perspective to each issue that manifests differently throughout the process.

In our team, our roles of anthropologist, pedagogue and designer overlapped with our roles relevant to the project. In relation to Swedish language, one was a basic level learner (anthropologist), one an advanced learner (designer), and the other a na-

tive Swedish speaker (pedagogue). We therefore embraced these attributes when working as a group, and when in context engaging with others.

A performance is something that may be planned ahead of time, but at other times arises out of a situation. For our team of three (one freshly entering the project), we can draw on an early example during our second meeting as we took up the discussion of how to scaffold learning in context. The anthropologist played the role of convincing the two other team members of the value of improvisational performance in context. The designer had brought a first iteration of a paper "passport" (name given to the physical kit by the team). After discussing its value in relation to a scenario of going to the gym, the pedagogue challenged the anthropologist to act it out. The anthropologist responded by standing up as a learner and acting out physically and describing verbally an improvised sequence in which he used the new passport to support a task to stimulate use of his Swedish language skill. He imagined himself to be in a queue for his gym session, waiting anxiously to converse in Swedish with the gym clerk and relying upon the passport for cues. Using the body language, he explored the affordances of the passport (for example, whether it should have a strap). The learner (anthropologist) received other cues from the audience (the team members in this case), prompting him when he was stuck and introducing challenges. This is just as much a performance due to the designer's spontaneous video documentation of it, and now describing it as such, but also in relation to the spontaneous actions that put the learner on stage. Specifically, his blending of the past and future by use of props in the present is a way that thrived on an audience/performer distinction.

We would like, however, to emphasize the improv design troupe working in different contexts and providing occasions for the learner to turn an encounter with a Swedish speaker into a learning situation. The Sit-Talk-Sit model follows the basic performance sequence of *making*, *displaying* and *evaluating* (Schechner 1992). In this respect, when supporting the learner in turning an encounter into a learning

situation, we are interested in providing an occasion for the learner to go through such a sequence. At the same time, as a improv design troupe, we join in the performance.

EVERYDAY PERFORMANCES

We now focus on three episodes drawn from our visits to an iconic Swedish warehouse where we sought to use the structure and rhythm of the shopping experience as a potentially valuable language learning resource. They demonstrate the combination of inquiry, design and evaluation that contributed to the models above and the passport. The decision to go to the warehouse arose in an early workshop activity when learners identified situations that can be used for Swedish learning. We asked for volunteers from our earlier workshop to explore learning with us, and conducted our own team rehearsal two days before.

We selected the episodes out of a succession of events for their value in demonstrating the characteristics of working as an improv design troupe. Here we use the dialogue from video transcripts in relation to highlighting aspects of the two models, not as a basis for in-depth, conversation analysis. PERFORMANCE 1

During our first visit to the warehouse, the anthropologist as the Swedish learner attempts to use the structure and material of the passport to turn standard shopping encounters into learning encounters. The passport prototype had three main sections for writing and reading at different times, but was free of any text or visuals.

The first step is to identify a practical goal for this specific visit. In this case, the learner/anthropologist needs to buy a room divider for his living room to accommodate his mother in-law's upcoming visit or find a way to make one out of other furniture systems. It is likely that he will have to find a custom made solution – which means he has to inquire about the options from the store employees.

With the pedagogue filming and the designer watching from a distance, the learner walks toward the information desk and stops a meter away, looking down at the passport all-the-while.

The clerk behind the desk glances at him and then looks away. The learner Clerk: en skärmvägg? Clerk: Clerk: en skärmvägg, mm? Clerk: a room divider, mm? Learner: ja, precis Learner: yes, exactly då går du till gröna rummet Clerk: Clerk: Then you go to the green room [points in that directionl Learner: g-r-ö-na rummet? Learner: g-r-een room? ja, precis. In här, sedan höger, sedan vänder du Clerk: vid kassan. Det kommer finnas på lager. yes, exactly. Enter here, then right, then turn toward the counter. It will be there in stock. Clerk: Learner: okei, tack så mycket. Learner: OK, thanks a lot.

Example 1: Anthropologist's (Learner) initial dialogue with the clerk.

then steps forward approaching the clerk and begins asking where he can find a solution for dividing a room, or any related furniture. He jots down the information on his passport, thanks the clerk and walks away. The dialogue in example one shows how the learner did not at first register the word skärmvägg (room divider). He then painstakingly repeats gröna (green) upon hearing gröna rummet (green room).

When the learner walks away and the three of them walk in the direction of the green room, and the pedagogue asks the learner about the interaction i.e. if he was able to locate the department. It became obvious to the pedagogue that the learner did not understand much more than "green room", although he had just thanked the clerk for her help as if understanding and walked on. Through his confrontation with the learner ("you didn't understand") and the long conversation that ensued, the troupe identified how this situation typified a common pattern in language encounters: upon not understanding, the learner leaves the situation pretending to understand. In previous research activities, learners have given different grounds for their tendency to leave without understanding. For instance, their fear of bothering the speaker furthermore, feeling embarrassed, uncomfortable or feeling fatigue from always having to ask, and for the beginners, that there is so much that they do not understand, that they could never get it all.

The incident triggered a focus, during the subsequent encounters while looking for a room divider, on how to support the learner to ask for clarifications for important phrases and words he does not understand either during the interaction, or by returning to follow-up on misunderstandings. The pedagogue encouraged the learner/ anthropologist to ask for clarification. This involved asking the person to write-down the word on the passport. We became aware of the need for a more nuanced set of relationships to complement the general 'sit-talk-sit' sequence.

By the next visit to the warehouse with a learner, the team had communicated their notes and reflections via email and the designer created a few versions of a possible encounter dial to include in the passport.

The encounter dial as a physical and visual aspect of the passport sought to play the role of a reminder for the learner that there are different ways of interacting with the speaker, and to empower the learner by creating a license for moving from a passive opting out behaviour to a persistent pressure mode. The warehouse activity benefitted from fluid roles among the design troupe. In the first performance, the pedagogue assumed the role of the coach and the anthropologist, the learner. The designer was responsible for documenting. The roles changed as they began to discuss, analyse, and plan for improving the situation. The second performance sequence below, this time with a volunteer learner, involved identifying clearer roles at the outside. The pedagogue played a coaching role and was responsible for maintaining the wellbeing of the learner, a Swedish language student from Folkuniversitetet. The anthropologist was most active in the preparations before the arrival of the learner and in the analysis afterward, and the designer focused on the passport prototype and documentation. The preparation for the visit included a fresh iteration of the passport, a review of the task and a short introduction of the activity to the learner.

PERFORMANCE 2

The next performance arises out of a visit to the warehouse with the design troupe and Gita, a learner who volunteered to join. Gita is a Swedish



Figure 1: Gita kneeling, taking notes on the passport prototype.



Figure 2: Gita walking back to the clerk.

learner from Poland, currently attending courses at Folkuniversitetet. As it was the first activity with a learner outside of the project team, we prepared by identifying the pedagogue as responsible for maintaining the social and pedagogic contact with Gita throughout the visit. She starts the day sitting with the pedagogue writing out the goal of her visit, she wants to buy toys for her niece. The designer takes on the documentation activity while the pedagogue assists Gita's encounter with the clerk.

Gita first walks up to a clerk and asks if the toy department is suitable for her niece, age-wise. She asks how safe the toys are, and the clerk replies that everything is safe, no risk of choking or pinching children's fingers and that everything is poison-free. Gita then walks away and kneels down next to the nearest table (see Figure 1). As she flips through the passport, when appearing to be looking for the correct spot to write, the designer intervenes

and suggests that Gita can write anywhere she likes on the passport. Gita then stands and asks the pedagogue to explain the meaning of a certain word. She gives an approximation of the correct word "klämskyddad" meaning pinch safe (See dialogue in Example 2).

ľ		are (ove anarogue in Emainpre =)
	Gita:	"klamskydda" nej??
	Gita:	"[approximation of the word pinchsafeno?]"
	Pedagog:	Kan du be henne skriva det?
	Pedagog:	Can you ask her to write that?
	Gita:	Ja.
	Gita:	Yes.

Example 2: Gita's confusion over the word "klämskyddad"

The pedagogue responds by suggesting Gita ask the clerk–enforcing the "step out / step in" principle. Gita, without hesitation says yes, turns and walks toward the clerk in search of the word she could not fully grasp.

The clerk welcomes Gita and accepts the request to write down the word for her on the passport (see dialogue in Example three above). The clerk completes Gita's sentence with the correct work, "klämskyddad" and then places

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Gita: Kan du skriva mig [approximation of the word pinchsafe]...?

Clerk: Can you write for me ..?

Clerk: completes the sentence

Clerk: ...klämskyddad? Ja...

Clerk: ...pinch-safe? Yes...

Gita hands the pen and passport to the clerk

Clerk: Kan jag skriva var som helst?

Clerk: Can I write wherever I want?

Gita: Ja.

Gita: Yes.
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Example 3: Gita asks the clerk to write down the word for her.

the passport on her right knee for support and asks for permission to write wherever she wants on the passport. Gita affirms. Gita thanks her and walks away. Not only did the clerk write the word, she also wrote a sentence in Swedish explaining the meaning of the word.

When we look at these episodes together, there are a variety of uses of the two action models, as well as design input into the models and the passport. They clearly demonstrate that scaffolding is possible, both with material support (our passport, in this case) and in the form of a personal assistant (the pedagogue) or both. Gita embraced the sit-talk-sit model in her actions rather effortlessly. Additionally, the pedagogue provided support for maintaining the step-out/step-in model. Rather than affirm the meaning of the word, he diverted Gita back to the clerk for clarification. The clerk willingly both repeated the pronunciation and in writing demonstrated the spelling and explained the meaning.

ASSESSING PROCESS WORK

The assessment and validation of the relational support for turning everyday interactions between learners and speakers and the physical artefacts develops through a series of activities over time. These are not separate activities from the field experiences we have been describing. The tendency from industrial design or even more recently, user experience design, is to separate the field work process from the development, seeing the first as input—usually in the form of what the user says. The evaluation comes at the end. The voice of the user, understandably, is a celebrated voice and is taken literally to mean, what the user says about his or her experience. However, in the two performances above, we find that the anthropologist/learner

and Gita's actions when "in action" in relation to what that did directly before and afterward, provided a material basis for both evaluating and improving the tangible and intangible structures. We drew upon the mediating object, the passport, to support the iterative process of fine-tuning an orchestrated set of actions ("sit-talk-sit" model) for language learning in the wild. We have not only created structure out of a series of events, but also attempted to prescribe an ordering of activities. The anthropologist/learner's actions when actually performing an encounter with the information clerk revealed both a bodily display, physical and audible display that, when acted upon afterward and discussed, brought about a concrete need in the project. The exploration of the solution space resulted in Gita's performance. This provided us with the type of input about the tangible and intangible relationships important for both the physical passport and the two action-models for language learning.

Her engagement with the pedagogue, the Swedish speaker and physical material made it possible. Gita's actions of kneeling down to write, quickly returning to the clerk when cued, and sitting down at the end of the activities reviewing her notes and writing without cue, and looking at all her notes and taking more demonstrated what she needed not to attempt to articulate. While we would like to highlight these performances that combine a Swedish learner, a Swedish speaker, interaction with each other and physical materials, we are not excluding other forms bringing about understanding.

At the end of a series of Gita's encounters throughout the warehouse, the pedagogue and the designer sat with her at a café and asked her to describe to the anthropologist, who was not present during the last hour of the activity, via video recording, what she had written in the passport and to reflect upon the passport's value. They asked her opinion and challenged her with new ideas and so on. The dialogue then diverged from the physical object to necessity of the communicative talk. In this case, however, witnessing the encounters overshadowed the details of Gita's descriptions.

Additionally, by timing each activity,

we do see that throughout the activities, the duration of "talk" increased from interaction to interaction and the amount of time Gita sought to discuss language matters with the pedagogue increased as well. More precisely, the amount of time Gita talked with the clerk fluctuated from seven minutes the first time to up to twenty-two minutes later in the day. This trend toward longer periods of both pure talk and discussion triggered by the talk is precisely the type of change we are after in the Språkskap project in general. We do draw on the perspective and the words of the participants as well. But the material of performance provides high quality material for the explorations into what could be possible in this new arena. We did get a thrill when in the evening after her visit to the warehouse with us, Gita tweeted to the other learners what translates to "Really great way to learn, open to others. I did not think I could overcome my boundaries. Everybody are our coaches. In all places".

We have found out that scaffolding language learning in the context of everyday life is possible. The learners can use cues from their surroundings as materials to build upon and create a learning experience. Improvisation allows us to experience in context and gives us the ability to design on the fly, in a very rapid, generative and evaluative way. The team creates a safety net around the challenge, and with the diverse expertise enables rehearsals, liveacts and prototyping to converge. This pushes forward what is possible and demonstrates possible support.

DISCUSSION

The design troupe metaphor is an attempt to combat the division of labour among user research, design, and subject matter expertise in innovation work, and maintains a focus upon drawing on multiple contexts and knowledge in action and interaction. Drawing on "improv theatre", where the actors use audience cues as a basis for improvisation, relying



Figure 3: The clerk writing in the passport

on their own techniques and a bag of prepared props, here we look at how three project members engaged in design activities in a variety of settings over a seven-day period. In this case, we highlight the important roles of the ethnodramaturg rather than ethnographer alone, the designer and the subject matter expert, the pedagogue, the natural setting and the interaction between learner and speaker.

But there are points where we differ from bricolage: a bricoleur reorganizes events as opposed to scientists and engineers who break down and analyse. A design troupe does more than analyse the events. Like bricolage, as accounted by Louridas, the design troupe also "creates structures in the form of artefacts, by means of contingent events" (Louridas 1992:5) and it incorporates analysis of the events afterwards as well as points during. As the nature of design implicates, we are interested in disruption and change.

With the introduction of the *improv* design troupe, we celebrate action over description when exploring an unknown innovation space to work out new possible tangible and intangible relationships. At the same time, we celebrate creating a collective that engages with people in their natural settings of "use" and of "production". But we also reserve space for the collapsing of these distinctions in practice.

The Språkskap project's agenda of exploring new tangible and intangible relationships for supporting Swedish learning in everyday situations benefits greatly from a flexible, mobile, multidisciplinary working constellation that fluctuates between and blurs inquiry and intervention. Our interest in bringing about innovations in this area has only just begun. We embrace the improv design troupe as a successful metaphor for demanding that people explore these spaces in multidisciplinary groups that include learners and speakers and the setting of their encounters.

Moving forward, we look to explore further the new arenas for supporting language learning in everyday activity. We are interested in continuing to work with the improv design troupe to not only *follow the learner*, but to challenge ourselves to *follow the Swedish*

speaker, as well as to occupy different spaces for longer periods to explore the tangible and intangible relationships for supporting a learning environment as learners and speakers come in and out. In the formulation of the improv design troupe, we see greater potential for incorporating new actors or forming new troupes.

NOTES

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REFERENCES

Bødker, S. & Buur, J., 2002. The Design Collaboratorium: A Place for Usability Design. ACM Transactions on Computer-Human Interaction, 9(2), pp.152-169.

Diggins, T. & Tolmie, P., 2003. The 'adequate' design of ethnographic outputs for practice: some explorations of the characteristics of design resources. Personal Ubiquitous Comput., 7(3-4), pp.147-158.

Dourish, P., 2006. Implications for Design. In CHI 2006. Montréal, Québec, Canada, pp. 541 - 550.

Fabian, J., 1990. Power and Performance, Madison & London: The University of Wisconsin Press.

Geertz, C., 1973. The Interpretation of Cultures (Selected Essays), London: Fountain Press.

Greenbaum, J. & Kyng, M., 1991. Design at Work: Cooperative Design of Computer Systems, Hillsdale, New Jersey: Lawrence Erlbaum Associates.

Halse, J. et al., 2010. Rehearsing the Future, Copenhagen: The Danish Design School Press.

Jones, R., 2006. Experience Models: Where Ethnography and Design Meet. In Ethnographic Praxis in Industry Conference (EPIC 2006). Portland, OR, USA: American Anthropological Association, pp. 91-102.

Karasti, H., 2001. Bridging Work Practice and System Design: Integrating Systemic Analysis, Appreciative Intervention and Practitioner Participation. Computer Supported Cooperative Work, 10, pp.211-246.

Lave, J. & Wenger, E., 1991. Situated Learning: Legitimate Peripheral Participation, Cambridge: Cambridge University Press.

Louridas, P., 1999. Design as bricolage: anthropology meets design thinking. Design Studies, 20(6), pp.517-535.

MacWhinney (eds), B., 1999. The emergence of language, Mahwah, New Jersey: Lawrence Erlbaum Associates.

Schechner, R., 1985. Between Theater and Anthropology, Philadelphia: University of Pennsylvania Press.

Schechner, R., 1992. Drama Performance. In R. Bauman, ed. Folklore, Cultural Performances, and Popular Entertainments. Oxford: Oxford University Press, pp. 272-281.

Schön, D., 1983. The Reflective Practitioner: How Professionals Think in Action, London: Ashgate.

Tomasello, M., 2003. Constructing Usage-Based Theory of Language Acquisition, Harvard: Harvard University Press.

Turner, V., 1957. Schism and Continuity in an African Society: A Study of Ndembu Village Life, Oxford: Berg.

Wasson, C., 2000. Ethnography in the Field of Design. Human Organization, 59(4), pp. 377-388