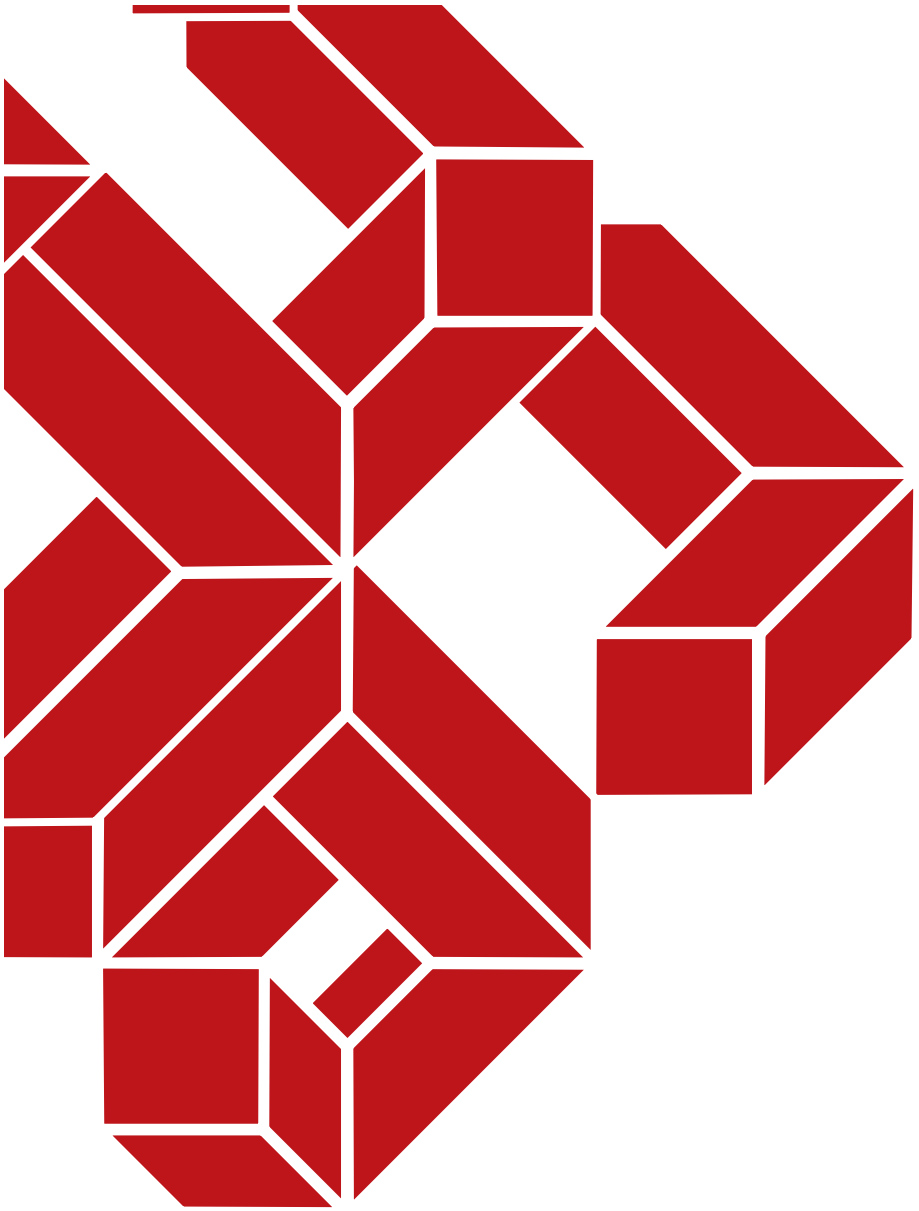

DESIGNS FOR LEARNING #2/11

Interview with Jonas Löwgren

By RIKKE ØRNGREEN, *Aalborg University, Denmark &*
STAFFAN SELANDER, *Stockholm University, Sweden*

Here we present an interview with Professor Jonas Löwgren, who is recognized for his work on both interaction design and communication design. We will present his interests and main questions, as well as his earlier work experiences, and how these have had an influence on his theoretical and practical research work today. One major question that Jonas puts forward is: Dissolution of the design object into a complex of communicative practices and services across media, pervading all aspects of everyday life, and the roles of interaction designers in this new landscape. With this interview, we would like to follow up these questions; to promote future dialogues between interaction and communication designers and people engaged in the design for – and in – learning communities.

Jonas Löwgren is Professor at Malmö University, Sweden, at the School of Arts and Communication (K3) and MEDEA Collaborative Media Initiative (www.medea.mah.se). MEDEA is a research centre for collaborative media design. Jonas has taught interaction design courses at universities and in companies since the early 1990s. Initially, he was more grounded in the technical aspects of design, but has since the mid 90's developed a platform in interaction design and collaborative media design. He is the co-author of the renowned book: *Thoughtful interaction design: A design perspective on information technology* (2004, with Eric Stolterman).

This interview was carried out by Rikke Ørngreen and Staffan Selander in early November 2011 at Malmö University. In the text below we refer to us collectively as the interviewers and to Jonas Löwgren as JL.

Interviewers: Could you give a short introduction your background and what led you to where you are today - your inspirations and aspirations.

Jonas Löwgren: Basically it's a very simple story. I have a first degree in engineering, learning to build computers and how to program computers. Also, I played around a bit with telecommunication. In my Master's project I did my first kind of excursion into HCI or human-computer interaction. It seemed reasonable to me, to try and make technology useful for people. Afterwards, I started to work in a couple of consultancies, and I got a PhD in

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HCI, though with a more technological orientation than where I am today. I made tools for years, on user-interface construction and that sort of things. That [user-interface construction] was actually a big research area then, which may seem hard to believe now.
After that, I more or less decided that I would primarily work in Academia, even though I would try to keep one foot in professional practice. I have tried to mix academic appointments with professional jobs for limited periods of time. I mostly apply and work within the research method that is today known as co-production, which is really nothing very new. The idea is that as a researcher you work together with partners outside the university, and you agree on some sort of shared core of a project, even though you also have different goals with respect to what you want to take away from the project. I did a bunch of those kinds of projects in the early 90s, in the area of usability engineering. I was focusing on how to make engineering companies start to take notice of the users and to apply usability-oriented techniques in the development processes as early as possible.

Then sometime around 1994–95, I realized that the reasons for why we see all these kinds of problems [when people try to use the developed software or technology] might be that we address it as an engineering process when it might in fact be more of a design process. So I started to talk about our field as a potential design discipline. I wrote a paper in -95 on the difference between engineering design and interaction design (even though I didn't use the term "interaction design" officially until 1996 or so). Since then, it's been 100% my focus: to try to learn the craft of interaction design, to try to learn how to teach it properly. One step in that direction was of course when I got the chance in 1997 to join K3 [School of Arts and Communication at Malmö] and to build the new department. We work with studio-based teaching methods, and on how to construct knowledge in this discipline. Knowledge that is academically respectable, that you can disseminate, share and build on.

I: What is your perspective on interaction design, and how do you work with it?

JL: These days, it is pretty much all about collaborative media. Again, the history actually goes back to 1997–98 when we started drawing up the plans for the K3 department. Our key idea was to combine interaction design with media and communication studies. As we saw it: computers were no longer just standalone tools; they were communication media. The best way to understand this new field as a designer would be to learn from media and communication studies.

I: Can you say a few words about how you see the relation between interaction design and communication design?

JL: I believe there is a trans-discipline or at least an emerging discipline of

what we may want to call collaborative media. Collaborative media lies in the extension of combining interaction design with media and communication studies. It is clearly distinct from the two mother disciplines in the sense that interaction design has a very strong heritage of HCI. HCI had a focus on more or less individual users doing individual tasks for individual purposes, in a social vacuum. And this was perfectly OK in the -90's, when people used computers mainly to do job things at the enterprise level, or possibly for playing standalone games. Today, it is kind of obvious that most people, most of the time, use computers to communicate, to do things together with other people. It is no longer only an instrumental, professional thing, but mostly leisure things. So that is how the new discipline sets itself up: for interaction design, it is about adding sociological and communicative perspectives on users to the traditional usability approach. From a media and communication point of view, the main thing is that you, as a researcher, not only work with studying and analysing the existing, but you also create anew. That's a huge difference from a social science point of view.

I: Are there other similar existing perspectives, something you could say looks like collaborative media, in other countries and universities as well?

JL: There are some sites and researchers around the world that are trying to develop this perspective. The most notable one, I guess, is Georgia Tech with Jay Bolter, who is originally a literary scholar. He has worked for at least ten years with people in computer science and interaction design, experimenting with this combination of analytics, social science, humanities, and media. There are couple of other places, one in Australia for example, but it is not mainstream. However, so far it seems to make sense to us, so we think it might be worth pursuing and see where it takes us.

I: These co-production research projects, it almost sounds like a type of participatory action research project. Could you expand a little more on the methodologies you use?

JL: In the set-up phase, you of course have many different approaches to choose from depending on what kind of task you are facing. For instance at this centre, we are sort of famous for something called Living Labs. That is really all about setting up participatory action research projects with a fairly diverse population of stakeholders. At other times, you work with a company, an IT company for example, helping them to develop new ideas for the products or

new ideas for their future strategies. It can never be straight consulting, mind you; the main difference is that, as long as you are a researcher, every project you are engaged in has to produce new academic knowledge, and that is why you do not just take any consultancy assignment. We are talking about setting up an education branch, here at the centre, to take care of those kinds of contacts. We are thinking about framing them in a Life Long Learning type setup, where participants from companies and other external partners would engage in learning processes within our field of expertise while connecting to their professional and extramural contexts.

The projects that we do engage in, as researchers, are the ones where we can see potential for new academic knowledge at the same time as the external partners reach their goals. So the trick is to realize that you have multiple and different intentions, but you need to define a core, something that you can all agree on. Then you approach that core task from very different positions and you engage in the practical work together. You share the goal of building this new thing, whatever that is. At the same time I have the intention of being able to write a research paper and the guy from the company has the intention of turning this into a product two generations from now, and we all respect each other's intentions.

I: Within these methods you apply a set of techniques. Have these techniques changed? You have in your research papers talked about sketching, for example. As the focus changes from individual use to collaborative media and communication, do those techniques – such as designing through sketching – change?

JL: Yes, they change dramatically. I mean, the simplest observation is that if you design for one user and one task, which you understand reasonably well, then you can more or less create a little universe of prototypes, which is fairly accurate. On the other hand if you want to design a new kind of collaborative platform for an unknown population of people to collaborate and create new things, then it becomes obvious that you cannot envision that not-yet-existing universe into one prototype.

What you have to do is to start getting out there and building a progression. From small experiments in core communities, to some sort of organically growing user population. You work a lot more with off-the-shelves type components. We tend to talk about ready-makes, in the sense of taking something from the shelves, using it for another purpose in a communicative setting. It approximates closely enough and more than anything, it provides

people with the props to start communicating, to start taking action.

I: That's kind of re-design?

JL: Yes, it is re-design and it is on-going design. The whole point is that there is no point in time at which you deliver a product and then sit back and do some kind of summative, usability evaluation. It is much more like: you catalyse a process, and then you are involved in that process for as long as you like and as long as you have the time and resources; you do your best to guide it, to intervene if you want and provide props and other things that you have the skills to provide; but you clearly do not have the same amount of control that you used to have as a designer.

I: You focus a lot on designers' competencies, and that the kind of competencies they need to acquire requires a sort of practice-oriented approach, like this studio-based teaching?

JL: Well, in principle it has been my experience that the only way to learn a practice discipline, a craft, is to learn in a practicum. Not only learning-by-doing, but also reflecting on and being challenged by your teachers. I mean, the role of the teacher in a design studio is quite complex, and actually quite demanding. It looks completely different from the role of a teacher in, say, a law school or even engineering or film and media education for that matter. It is very much a question of being able to act on the spot, and to focus on the zone of proximal development; to find the right question to ask that would prompt this particular student to learn, based on exactly where she is at the moment, in terms of previous knowledge and in terms of where she is in the design project she is working on. That's the whole framing of a studio-based teaching setup. It is always about design projects, and the students' work on design projects. That is the only constant, basically. Generally, you just give them a brief introduction to the area and then it's really up to them to start. You work a lot with scaffolding. So in early courses you have a lot more in terms of process: here is one way of doing it, that tends to work. When they get more experienced, the scaffolds are taken away and they are supposed to stand on their own, more or less. But you always have the main task of finding the exact right intervention at every point in time. It is not only about mimesis; it is not only about the teacher as the master who shows and the student who learns to do what the master does. What they need more than anything else is to develop their own repertoires.

I: Would that be enough?

JL: It is not enough, but it's a good start. I think that at least here in Malmö, and perhaps in Scandinavia, we have always had this very strong element of

participatory design as part of the interaction design discipline. That means we do not have to shake off a lot of conceptual baggage in terms of the designer as the artist or the genius who locks himself in and comes up with the perfect solution.

I: Your work with Erik Stolterman is much cited. Can you elaborate a little bit on how your collaboration started and what were the main ideas that you wanted to put forth?

JL: Basically, the collaboration started just because we both noticed that we had similar interests, at a time when not many people in Sweden were thinking of ICT as a design discipline. He was way ahead of me in one sense, through his design perspective on systems development. He had studied systems developers and found traces all over that what they were doing was in fact designing, even though they didn't know it themselves. These people tried to rationalize the process, as in an engineering approach to systems' development, but then they came up against all kinds of dilemmas. That was basically his starting point. I came to the field via a different path, from building things. We wrote the first version of our book in Swedish in 1998, quite some time before it was published in English. Back then, it was a way for us to say: There seems to be something here, even if it would not immediately make sense for people with training in systems development, in computer science, in informatics. We cannot provide a method. We cannot tell you how to do things from step one to step 10. The best we can do is to try and provide tools for thinking about what to do, tools for articulating design aspects of your work, designing tools for reflecting on your work and coordinate with other people's work. That is really the only thing we can do.

That turned out to be a kind of a mixed blessing. On one hand, our approach really resonated with people who had some professional experience, or perhaps a Master's degree in informatics. At the same time, we found that lots of first year students felt that this was a fruitful book. It did not have a lot of complicated methods, diagrams and mathematics, just some nice words and some cute examples and all that is not so demanding. I have had so many e-mails over the years from Bachelor-level students saying: "I am doing this graduation project and I was going to use the Thoughtful Interaction Design method, so I wonder how do I approach this?" and I will go: "No you don't. Read this and this and this book first and then…."

So the main ideas [of the book], I suppose, were that you could provide some conceptualizations to help people reflect on, perhaps even articulate, practical knowing. I mean, we are both very deeply influenced by Donald Schön, which is kind of obvious in the book. What we tried to do is to pick up where he left off and to say: okay, so he has outlined the notion of practical knowing in a very clear way. What we think we can add is a layer with some concepts, some words, and some constructs that have a bearing on the digital

materials. So that you [as a designer] can actually talk about some of this knowledge that has traditionally been considered as a thing that can only be transferred from master to apprentice. And perhaps we could provide some intellectual tools for taking the discussion one level up, where it could be sustained even outside the studio, for example in academic communities.

I: If you reflect on that book today, are there areas where you would you say, this or that is more important now?

JL: If I wanted to write a book today on interaction design, I think it would be a very different book, because when we published it, there weren't really any useful introductory texts. So we had to cover things like sketching methods and other stuff. Only superficially, obviously, but still we covered that, because we thought it could be a nice and comprehensive text. Also because we felt that it was useful to talk about those things from a design perspective. I think I would not bother so much with that today. One idea that I think actually has stood the test of time is the idea of use qualities, as we call them in the book. I now call them *experiential qualities*. It is just a different term, but to me the idea of experiential qualities represents exactly what the work is trying to articulate. To conceptualize something that you, as a designer, carry around more or less in your body as a result of your experience: I have designed ten different systems for this particular kind of user, domain or this particular genre of systems, and I have noticed repeatedly that: if the users feel this way, then they tend to do this and this and that. Those kinds of observations are exactly what you try to capture in an experiential quality. You can also talk about how it is desirable and what you may assume that it will lead to in the hands of the user.

Like the example of *pliability*, which is based mostly on the genre of interactive visualization. When you use a good interactive visualization, it feels like you are shaping some kind of almost physical material that is very responsive and very tactile, and that is pliability. It has actually been shown formally by other researchers that the more pliable we can make a visualization from the users' point of view, the more they explore the content, the data, the subject matter, the more they tend to turn it around and look for different kinds of relations. They explore more deeply, even though it is exactly the same content. So there seems to be an aspect of motivation that has to do with the pleasure of manipulating the data and the sensation of how the data is responsive and opens up to new discoveries, on a very very detailed level. This is detailed interface design that makes the difference between a more pliable experience and a not so pliable experience. I think my point is, if I can formulate that in a sort of concise way and show some examples of pliable and not so pliable solutions, then maybe I can use that as a teacher when I want to teach my students to make good interactive visualizations. I can try to encourage them to go for more pliable designs, because that will most likely have these kinds

of outcomes. I can hope that the concept of pliability becomes something that professional designers talk about. It is knowledge at the intermediate level. It is not a general theory, but it is more general, more abstracted than the individual design exemplars. Finally, I can also hopefully communicate it to the academic community. So far it seems that the community is actually somewhat interested in it, because I have been able to write about pliability and other experiential qualities in a few HCI journals. To me, this is one idea that we had that developed very well over time.

I: What are the major challenges in the field right now and that you see ahead of us?

JL: If I look at the big picture of the interaction design discipline, the biggest challenge is probably that the design object itself is dissolving. It used to be okay to say, I am designing this piece of computer software or this digital handheld device, which is nicely enclosed within its plastic shell. That is really not the case anymore. Of course this has to do with collaborative media at one level, but to me what happens is that the design object is really dissolving into the whole complex of communicative practices and services that cuts across different media, and that pervades more or less every aspect of life. What are the roles of interaction designers if this is the design object, how do you work with other professions and how do you uphold some kind of distinct notion of what interaction design is?

There are also short-term challenges for professional interaction designers, such as developing powerful idioms for new interaction techniques – multi-touch is a good contemporary example – and meaningful services for new infrastructures such as pervasive computing and the Internet of Things. Another short-term challenge is for engineering/HCI-based practices to come together with capital-D design practices.

For me personally, the answer lies very much in the core craft skills, but I can't really see how that would be a useful answer to the big challenge: As an interaction designer in the future, your main responsibility might be to facilitate collaborative processes, with users and other stakeholders. So I guess I am not able to predict the future of interaction design. What I can do, however, is to help shape it by doing my part: Building knowledge around collaborative media design.

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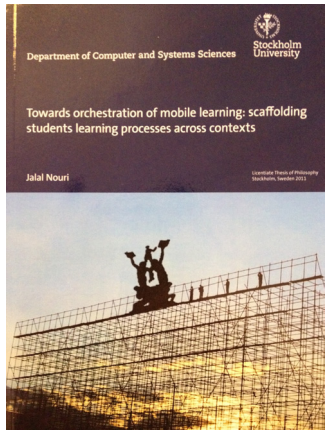
Designs for learning in an extended digital environment: case studies of social interaction in the social science classroom. SUSANNE KJÄLLANDER, *Stockholm: Institutionen för pedagogik och didaktik, Stockholms universitet (2011).*

In her thesis, Susanne Kjällander focuses on interaction, meaning-making and learning in the digital learning environment. Her theoretical perspective is based on a design-theoretic and multi-modal perspective, and she uses the model "Learning Design Sequences" to analyse and interpret the empirical data. The research highlights teachers' design of digital learning resources, pupils' interaction with the digital interface, pupils' design of their own paths of learning and, finally, what is recognized as learning. The first two articles investigate digital resources as tool and content, and the next two how knowledge in social science is transformed and represented in the digital learning environment. In the last article, Kjällander focuses on cultures of recognition and assessment practices.

Assessment discourses in mathematics classrooms: A multimodal social semiotic study. JALAL NOURI. *Department of Mathematics and Science Education, Stockholm University (2010)*

Jalal Nouri investigates mobile learning in his licentiate thesis. In his first article Nouri analysis mobile devices in an experiment of learning mathematics. The following article discusses more widely scaffolding and formal outdoor learning activities. The last one explores challenges for supporting effective collaborative learning. In spite of the partly diverse theoretical perspectives – for example socio-cultural and design-theoretic approaches as well as a activity model – this work contributes to the understanding of contextual and collaborative learning with digital devices, and how learning across contexts can be orchestrated.



Human Mobility and Social–Cultural Diversity. sEdited by Debora Mazza and Olga von Simson, *University of Campinas, São Paulo, Brazil (2011).*

The main presumption of this book is that migratory movements significantly affect the course of cultures at both local and global level. The book makes it clear to us that, in turn, culture itself turns "migrant".

The book advances the study of the plethora of texts produced by a number of scholars who tackle questions of culture in the context of migration. They do this in a variety of ways. Relevant aspects of this synthesis of migration and culture include questions of dislocation, travel, borders, diasporic identities, transnational contacts and cultures, cultural memory, the transmission of identity across generations, questions of hybridity and cultural difference, the material and oral histories of migration, and the role of new technologies in bridging cultures and fostering cultural cross-pollination. The collection of articles is divided into two main parts.

The first part gives an excellent account of how the study of migration involves numerous potential disciplinary routes and research methods. Migratory studies are a field usually found within the social sciences. Indeed, in Brazil the ANPOCS (National Association for Postgraduate Studies and Research in the Social Sciences) and the ABEP (Brazilian Association of Population Studies) have working groups that deal with international migration, whereas humanities and the arts do not seem to acknowledge a distinct interest in the field. This dividing line is removed in the book by uniting scholars from both the social sciences and the arts, and in the first part the authors present a rich interdisciplinary collection on human mobility. While some of the articles take a more fashionable social-sciences approach by bringing in elements from media studies, sociology and social psychology, including rather unusual fields such as the literary analysis of Albert Camus' social– philosophical conceptualization of foreignness and otherness by means of a semiotic and post-colonial analysis. In addition, giving a voice to children as protagonists of their lives shows the capacity of the book to bring innovative elements and sophisticated analysis to migratory studies. The use of cinema as a way of portraying migratory experiences and the closing article on the new forms of internationalization involving intellectual migratory trajectories enriches our understanding of contemporary human mobility as a lived experience.

The second part of the book focuses on and reconstructs international migratory movements to Brazil, highlighting the importance of migrant women in these contexts: Italians, Portuguese, Germans, Japanese and Latin Americans. In this respect, the book is timely and innovative, in that it gives visibility to immigrant women and their importance in the constitutions of historical and contemporary migratory phenomena. The presence of immigrant women is depicted in an exemplary manner in the book through the lived experiences of families from the Portuguese colonial period to the modern-day prevalence of Hispanic immigrants in the city of São Paulo. The collection traces and portrays the presence of immigrant women from different perspectives: through music, immigrant family life, various generations of immigrants, gender relations, education, the identity formation of immigrant women, and other aspects. Most importantly, this book makes us understand how human mobility brings endless challenges and difficulties that are lived by all migrants. It seems to echo Hemingway: "The world breaks everyone, and afterward many are strong at the broken places."

By
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Rosana Baeningerb, PhD in Social Sciences and lecturer at the University of Campinas

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